

Summit for the Future Report



Summit for the Future Report
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Welcome



FELIX B BOPP

Chairman, Club of Amsterdam

Dear Friends of the Club of Amsterdam,

The Club of Amsterdam presents its second "Summit for the Future Report".

This year we focus on the subject of **risk** and the role of risk in **innovation** and **global growth**.

Living with risk requires a trade-off, a vision of the good-gamble as well as the nerve to take that gamble. The complexity of modern life, the proliferation of new forms of communication and the deluge of available data makes this more difficult than ever before. This Summit is about the role of risk in our lives as individuals, as members of organisations and as a society.

This year we had 300 attendees from more than 30 countries - a truly global event!

Personally I found observing the cultural differences when dealing with risk most interesting:

"The tolerance for risk is higher in North America and Scandinavia, while Japan and continental Europe tend to avoid uncertainty."

"It became obvious that the Dutch culture is driven by fear of risk on almost all levels."

"Youths in China are behaving quite differently from youths some 10 or 20 years ago. Chinese youths today are optimistic and more confident. They are more willing to take risks, change jobs for a better future."

... or as Sir Paul Judge puts it: "The basics of business and competition have not changed. Darwin was right. The fittest survive. In evolutionary terms, risk-taking could be said to have arisen as a response to the harsh environment. Species that took risks survived to propagate."

We would like to thank the delegates, speakers, knowledge stream leaders - simply everybody who helped making this Summit for the Future a memorable and inspiring event!

Special thanks go to all of our partners - especially to HES School of Economics and Business and its students, the Institute for Media and Information Management and the University of Amsterdam!

My best wishes,

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Summary



PATRICK CREHAN

Chairman, Summit for the Future 2006
CEO and Founder, Crehan, Kusano & Associates

Summary of the Summit for the Future 2006

Seeing Risk as a Chance

Healthcare

The prevailing approach is 'curing the disease' through a proactive way of looking at health issues: 'From curing to caring'. Looking beyond the body - and looking at the being. Going from a fragmented view of healthcare to a more integrated view of the individual, that combines the physical health with the psychological, mental and emotional health of the patient.

Innovation Experience

We had discussions on entrepreneurship, innovation; these are all part of the human experience everywhere in the world. People have needs, and parts of those needs are to plan, to care for their families, to build and construct, to change the world. Our most basic biology demonstrates the fact that we are driven to embrace change, and to be vectors and factors of change. This is how we are anticipating the world's development. The downside of our investment is that we are fighting these changes as if they were dangerous risks.

Politics of Fear

Another thread was the 'politics of fear' as associated with risk. People manipulate people. Communication is a form of manipulation, and one of the things we do is invite force. It's a form of violence, the way that we propagate politics of fear to influence how people behave. We need to understand what is

real in terms of our perception of risk. Risks to business, risks to the environment, risks to the planet, risks to ourselves.

Money

Money is not a map of the world, but it is certainly a partial one. And if it is the only one we use we will not navigate this landscape of risk very well. The idea is to move beyond money towards something that is more value-based and includes money. After all it is one of the most powerful tools ever invented, and it is the most powerful cause for change in the world, but so is communication, and knowledge.

Media

Media and entertainment is driving communication, connectivity, and the diffusion of knowledge, thus creating new forms of the economy. Peer to Peer sharing, Open Source, all of those things are already movements beyond a mere money-driven society towards a broader, more value-based economy.

System

Another thread is the whole idea of systems. It is so easy to blame the system. On the other hand, it's not easy to make changes. If you feel the need to blame, you can instead look at the system and recognize that part of the way the world is to-day is in the system, so to speak. But you mustn't forget that it does come down to individuals – individuals matter, they can make a difference.



SUMMARY

But they must want to make a difference, they need to know that they matter, and they need to give themselves the freedom to participate in the world in that way. There is movement from the system, where you delegate re-sponsibility away from yourself towards the individual, which has led towards those wonderful emerging ideas about the collective ideas, a collective consciousness, collective intelligence, and the idea that the system as such is a form of life.

Part of the evolution occurs in this early phase of thinking, where the system changes and then moves on. But this emerging collective consciousness is a very positive image, the idea that we are part of that system that decisions do come down to individuals and they can make a difference. Our attitude to governance and leadership – we all are leaders in some way - changes in the way people lead. People become more affluent, more educated, and more free. Leadership and governance systems are changing. There are a lot of interesting concepts emerging from this. In terms of our perception and the meaning of risk, rather than seeing risk as something evil, unnecessary, and the basis of the politics of fear, to see risk as something corresponding to opportunity, see it as a challenge, see it as a force for good. Instead of thinking in terms of problems, give yourself the freedom to do something about it. Maybe having a new view on risk, on your life, on health, happiness, the meaning of money and so forth. This would give you a new freedom to undertake risks and to live with the consequences.

Illustrations



JOB ROMIJN

Artist

Member of the Club of Amsterdam Round Table

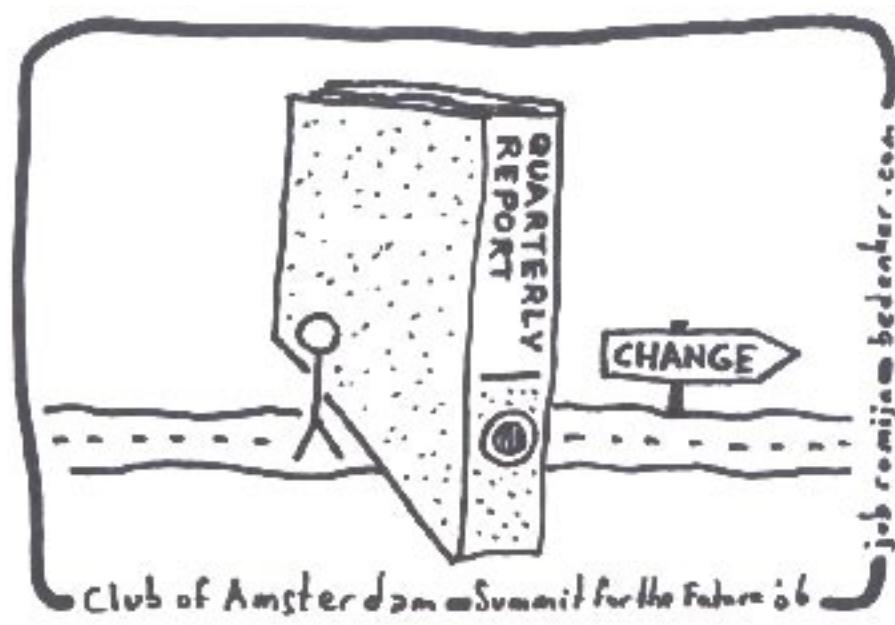
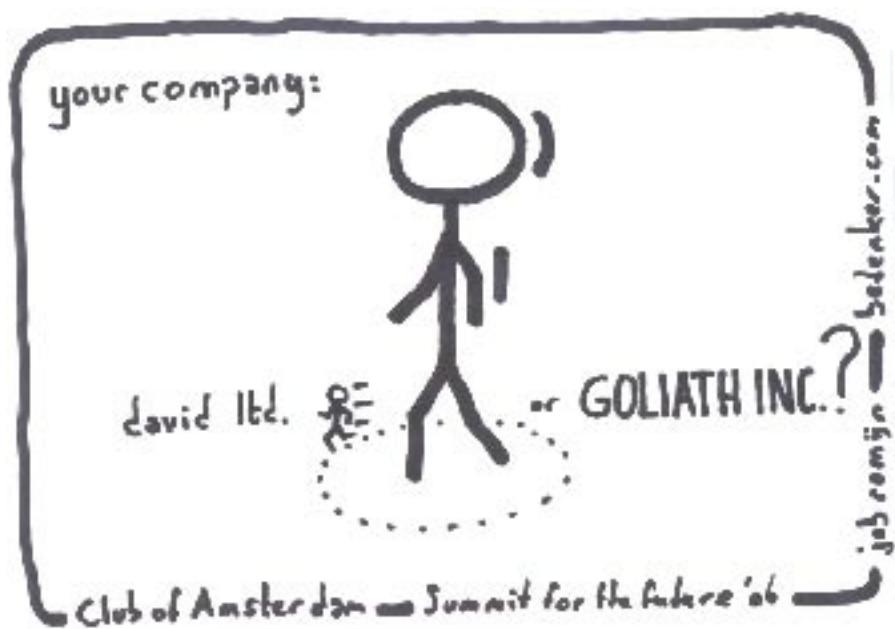
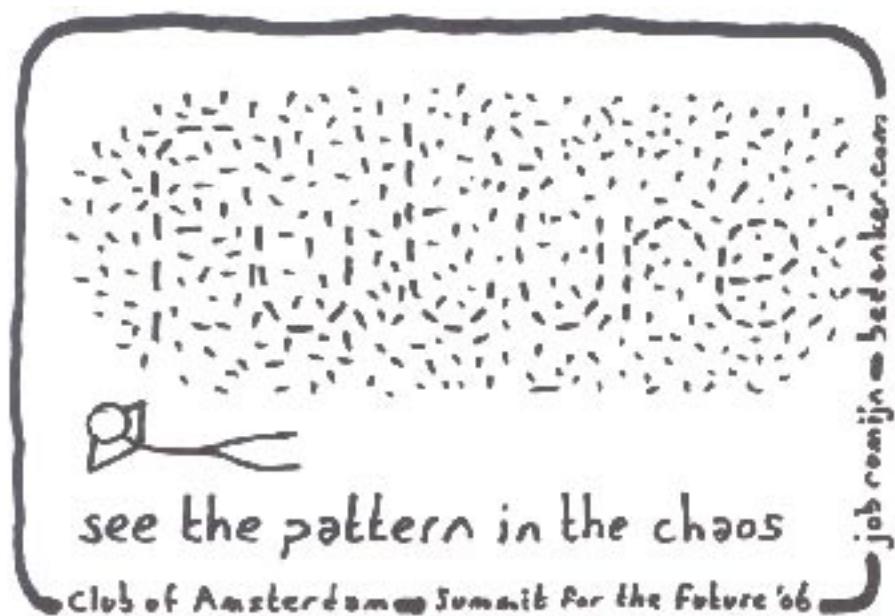
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Opening



SIR PAUL JUDGE

Chair, Royal Society of Arts

Risk and Enterprise: How new endeavours are shaped by perceptions of risk

Risk and Enterprise

I am very pleased to be here to open this conference. I believe that an understanding of risk is vital not only to commercial success but also to the way in which our societies operate.

Many people have a distorted sense of personal risk. This has a damaging effect on the government of our society and on our personal attitudes to risk and enterprise.

Objectives

I would like you to feel that your time at this lecture is well spent and therefore I hope that I can offer you two benefits. The first is a stress reduction therapy for each of you. I trust I shall make you a little less worried about the threats in your daily lives. Secondly I would like you to feel liberated by that better understanding of risk and to want to go out into the world and be even more enterprising in your life than before.

Let us start with the ultimate risk. Death may have no dominion but, like taxes, it seems to be inevitable. We can use it to gauge the accuracy of our perceptions of risk.

Number of Deaths

I would like you to consider three questions:

How many people will die today?

How likely do you think it is that you will die in the next year?

How much more likely is the average person in India to die in the next year com-

pared to people in Europe?

World Death

The answer to the first question is that 150,000 people have died in the last 24 hours. That is equivalent to two Hiroshima atom bombs or 50 World Trade Centre atrocities. I confidently predict that another 150,000 people will die in the next 24 hours. Interestingly, in the same period about 350,000 women will give birth. This means that the world's population will have increased by about 4,000 people during the 30 minutes of this presentation.

Country Comparisons

The chances of dying do of course vary across the globe. The most dangerous country is Mozambique where you have a 2.9% chance of dying in a year.

Western World

In the Western world, the chances of dying in the next year are 0.7 to 1%.

Great Room

The Great Room of the RSA in London holds about 200 people. It is therefore likely that of those who come to one of our many lectures only 2 of them will not be around a year later.

Developing Countries

Most people answer the question about the likelihood of dying in India in the next year by saying that perhaps there is a two or three times greater chance than in the UK.

However interestingly you are less likely to die in many developing countries than you are in



Europe. For instance in 2002 Iraq had one of the lowest death rates. The main reason for this is of course the lower average age despite the much lower level of medical care.

Please now think about the main causes of death. There are firstly horrific car accidents, plus the dangers of traveling by rail and air. There is the danger of assault on our streets and even the terrible acts of terrorists. There are freak accidents of people parachuting or SCUBA diving. It is not surprising that we are anxious. Death is not the only risk we all take, and serious injury is also terrible, but public policy tends to be driven by deaths rather than injuries.

Number of Deaths

I would now like to look at the death statistics for England and Wales which are typical of Western Europe and North America. You will have seen on the earlier chart that about 535,000 of us will die this year. This is about 1,500 a day or 30 during the time I am speaking.

Let us now consider a few facts about mortality which may help to put risk into context.

Now think carefully about how you and those close to you are most likely to die? May I ask you to ponder on the risks which you have thought about recently. Have you worried about going on a train or a plane, about terrorist activity, about what might happen to a child or grandchild being run over in the street? Well let us look at some statistics to see how valid are your fears.

Causes of Death (1)

I hope that when you thought about my last question you all remembered that the two largest causes of death are problems with the circulatory system and with cancer. These

together account for almost two-thirds of all deaths. That is why 75% of all deaths are of people over 70. Only 5% of deaths are of people under 50 so many of you here can feel very content.

In fact all diseases together account for 96.9% of all deaths. As doctors say, the best advice they can give you is to choose your parents carefully. After that it is up to you how you look after your body because it is from within that you are most likely to die.

Causes of Death (2)

All reasons for death which are not internal medical ones are not surprisingly called external causes. Only 3.1% of all deaths are from these external causes which are the only ones where action other than medicine, surgery or lifestyle can be applied to improve the situation. This was a total of just 16,693 deaths in 2003 out of the total 535,000.

This means that although each year we have about a 1% chance of dying, we have only about a 0.03% chance of dying from external causes. This means that on average only 1 in 3,000 of us will die from external causes in the next year.

Great Room

Put in the context of the RSA Great Room this means that we would have to assemble 15 similar rooms and fill them with people and then on average only just one person would die from external causes in the whole of next year. Think how safe you are.

External Causes

This slide shows an analysis of the external causes of death. You can see some perhaps unexpected figures with your being more likely to kill yourself through self-harm than you are to die in a traffic accident or be



killed by somebody else.

Chance of an Incident

We accept many risks because of the benefits they bring. It is part of our human makeup that what we see repeatedly we begin to accept as normal.

This slide shows some comparative risks. We use stairs and steps even though we have a 1 in 75,000 annual chance of dying on them. We have many drugs and household potions but there is a 1 in 64,000 chance of being poisoned accidentally. Driving in a car has a 1 in 40,000 risk every year. Being a motorcycle user increases that risk to 1 in 2,500. This is 4,000 times more dangerous than being a train passenger, but those using motorcycles seem to think it acceptable for the benefits it brings.

This analysis shows that humans are not particularly good at estimating risk. Research shows that we have a tendency to underestimate risk over which we have some control, and to overrate risk over which we have no control.

Age of Death

Another key question is "How much more likely do you think a child is to die from external causes than an adult?"

This graph shows that children are by far the safest. Each 5 year age range up to about 60 has the same total population but you can see that 0-14 year olds are over five times less likely to die from an external cause than are those aged over 20. They are usually well looked after and rarely exposed to any real danger. This is of course not the picture you get from reading much of the media which seems to want to sensationalise any child problems.

I hope this analysis about the causes of death has led to you realize that your own perceptions may have been distorted.

These are the facts, but they are not our usual perceptions. However we know that these statistics become meaningless if the person killed is someone we know.

Carrie Taylor

This is particularly poignant for us at the RSA because we did lose one of our staff members, Carrie Taylor, in last year's July terrorist bombing in London. Our great sympathy was expressed to her family and friends, we opened a book of condolences and we are planting trees in her memory. However we all realize that nothing can bring her back to us.

Public policy has to balance the national statistics with the personal tragedy of loss of life. This is however increasingly difficult with the distortion of public understanding of risk.

It is important for the public to understand that there is a level of risk in any activity. Government and others may do everything they can to mitigate that risk but it is not going to go away past a certain point. There are no perfect systems. There is always going to be an irreducible residue of risk that cannot be removed.

Life is safer than it has ever been but we seem less prepared to accept risk in anything we do. We need to make sensible decisions about what really is dangerous, formed on the basis of weighing up the facts, rather than on public hysteria. By making everything appear life-threatening, we are in danger of crying wolf once too often.

Media

Historically we learnt about risk



from our community: the village or district where we lived. We observed that death largely stemmed from natural causes.

Nowadays we all live much less of a community life and get our news not from our neighbours but from the competitive broadcast, print and electronic media.

Many journalists are good writers but they often do not have an equally advanced facility with numbers. Many of us who have read a newspaper article will have observed that it is often the numbers, which are wrongly quoted. I believe that any serious media channel should have a sub-editor who is numerate as well as one who is literate to make sure that any numbers presented are factually correct and provide a balanced view of the subject.

Air Crashes

You will have noticed as an example that aircraft accidents are prominently covered in the media. You do not often read, as a balancing factor, for instance, that more than three million people around the world fly on commercial aircraft every day. There are about 25,000 commercial aircraft worldwide and they each spend about a third of their time in the air. This means that at any time there are about 8,000 planes flying around. This is the real miracle. However it is the small number of planes that crash which reach the front page and give people their concern about flying.

Indeed we need to tell people that newspapers only report the unusual. If you read something in a newspaper you should not expect it to happen to you.

Indeed the grief can become the story as it did in England with Princess Diana and vari-

ous other poignant stories. Politicians join in to provide the most heartrending soundbites. The awful visibility of things that go wrong is intense compared to the private unpublicised benefit of the vast majority of successful human activities.

There is a real possibility that a necessary interest in safety may degenerate into a damaging and restrictive panoply of fear.

Even the dying do not get equal billing. Each year in England about 50 people die in their bath but none of those tragedies appear on the front page of our national press. I suppose we should be grateful that nobody has yet started a campaign to inspect all of our baths and how we approach them to make sure that they are safe and that we are properly trained for the task of using them.

Law of Unintended Consequences

We must guard against government or other authority trying to reduce risk too much. This normally leads to the Law of Unintended Consequences, which is that actions of people - and especially of government - always have effects that are unintended.

Sometimes we need to pause for a moment and think whether we will not do more damage with a hasty response than was done by the problem itself. We cannot respond to every accident by trying to guarantee ever more tiny margins of safety. We cannot eliminate risk. We have to live with it and manage it.

There is usually a seductive logic to any new regulation. There is almost always a case that can be made for each specific instrument. The problem



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can however be cumulative. All of these good intentions can bring unintended restrictions with suffocating effects.

What is Risk?

The consideration of risk is a personal matter. The dictionary defines risk as being exposed to hazard or danger. We look at the costs and the benefits and the likelihood of a successful outcome.

To accept any risk is to accept a possible loss. Risk taking is inherently failure-prone. Otherwise, it would be called "sure-thing-taking."

Mathematically risk is seen as the variability in the distribution of the possible outcomes. There is a whole literature showing that the higher the risk you take the greater the most likely return but also the greater variability in what you will achieve in any one attempt.

With hindsight it is apparent when tragedies occur what was the level of risk that was accepted but not responded to effectively. However understanding what the benefits might have been often gets lost. We must understand this as well if we are to have a sensible debate.

Risk is rarely given a balanced review. It is not just negative. It is a balance of potential outcomes in terms of both the positive and the negative. For instance the Chinese character for risk is a combination of the symbols for both threat and opportunity. Whether to stay in and avoid the dangers of the night, or to go out and enjoy company? To test one's skills, either succeeding or failing, or to never know? To try the untried and invent something, or to accept what has gone before?

Risk and Learning

Why then do we take risks? The key reason is to expand our level of experience. This may be taking a journey to see other places or people, it may be an exploration to discover new mountains, oceans or planets, it may be to give ourselves a thrill or it may be the risk of spending time or money on pursuing an idea to see whether it is valid.

Taking more risk means that one samples from a larger pool. While there is an increased chance of there being a problem, there is also a probability of finding something new and innovative.

Risk taking increases the probability that one will achieve something of value despite the search cost. It creates the possibility of a large gain in experience, capacity or knowledge. Those who do not take a risk cannot expect such benefits.

Over the course of human history every major advance has occurred because of the temerity on the part of human beings in trying to understand more and to do something that has not been tried.

This works similarly in artistic endeavours where Norman Foster, the architect, has said: "Creativity and arts are troubled by aversion to uncertainty."

Thousands of artists have historically explored their medium. They took great time and often lived in poor conditions as they tried to find a truly step change in creativity. However we know that only a handful of those thousands have actually left a lasting impression and their validity can only become clear with hindsight, often after they are dead. However when artists stop experimenting then



Entrepreneurship requires taking a view of the future, generating a vision around an idea, and then mobilising resources to achieve it.

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their work becomes repetitive.

Even that most creative person Picasso felt the same sort of problem. He said "success is dangerous, one begins to copy oneself. It is more dangerous than to copy others, it leads to sterility".

The human spirit and its evolution therefore require risk taking. The greatest risk may be not to explore at all.

We must recognize that we must not get so risk-averse that we just do not go out and seek new horizons.

We know from history about the consequences of forsaking exploration. In the 15th century, China had the opportunity to be the world's foremost maritime power. The Chinese ruling class, nonetheless, decided that the sponsorship of the fleet was an indulgence. As a result it became inward looking and failed to maintain its cultural and scientific superiority for the next five centuries.

Risk of No Risk

Theodore Roosevelt once said: "The only man who never makes a mistake is the man who never does anything."

Similarly Mark Twain opined: "Twenty years from now you will be more disappointed by the things you didn't do than by the ones that you did do. So throw off the bowlines, sail away from the safe harbour. Catch the trade winds in your sails. Explore. Dream. Discover."

I believe that life is best approached in a spirit of exploration and enterprise. People need to recognize that bad luck and unforeseen circumstances are inescapable aspects of life and that absolute safety is unachievable. They also have to understand that without tak-

ing some level of risk our society would stultify and cease to advance. We need sensible education and balanced information to allow people to strike their own appropriate balance between risk and safety and between achievement and opportunity.

The basics of business and competition have not changed. Darwin was right. The fittest survive. In evolutionary terms, risk-taking could be said to have arisen as a response to the harsh environment. Species that took risks survived to propagate.

In his famous book *The Naked Ape* which compares humans to animals the author Desmond Morris demonstrates the importance of our evolutionary origins. He describes how for millions of years life was really tough as we were living in caves. He says that "we needed to stay alert, to look out for the main chance and to seize upon any opportunity we could find". This is unwittingly a remarkably good description of a creative entrepreneur. As it is a basic result of human evolution, creative and entrepreneurial drives can be found across the globe.

Entrepreneurship requires taking a view of the future, generating a vision around an idea, and then mobilising resources to achieve it.

In a watery analogy, Robert Heller has stated that swimming with the tide, and landing on whatever shore it chooses, is a legitimate strategy. For some it may achieve excellent results with relatively little pain. They may well do better than the heroic navigator who heads off hard for his own choice of destination. That entrepreneur takes more chances, which include the possibility of drowning en route. On the

Entrepreneurs think the unthinkable. The thing which differentiates them from other people is that they actually then go out and do it.

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other hand, if the destination has been well chosen, and if he reaches the promised land, the heroic explorer may well find the returns that are denied to the bureaucrats.

Entrepreneurs think the unthinkable. The thing which differentiates them from other people is that they actually then go out and do it.

We should remember that most of the major advances have been made by small entrepreneurial companies, not the existing giants. The railway companies did not invent the aircraft industry and IBM did not invent the Internet.

Entrepreneurship is exciting. There is the potential for huge emotional and financial rewards. The future is however uncertain. None of us can know whether an idea will succeed. Any new venture requires a whole series of elements to come right: the idea itself, the marketing strategy, the management team, the finances, sales and distribution, and the ability to stay ahead when competitors try to follow. Each of these has to be right so the chance of being successful is what is known as a multiplicative probability.

Witnessing companies growing quickly is like watching a rocket blast off. There are those that blow up on launch, others make it part of the way before being destroyed, but some do make it to the stratosphere.

Gates

To take a very simple example, who here would invest in this management team? They have all the bravado of being the leaders of tomorrow. In fact some of you may know they are the leaders of today. This is the Microsoft team photo of 1978 with a young guy called

Gates in the bottom left hand corner. If you had been on the spot at the time with Euro 10,000, you would now be a billionaire.

Risk and Enterprise

It is clear that nobody can easily predict likely success. Who would have backed a company that wanted to sell mobile phone ringtones, now a multi-million pound business, or to sell coffee retail at £1.50 a cup. As with artists it is only because thousands of people will keep taking the risk to try out new ideas that a few of them will become great successes. Many are called but few are very successful.

Enterprise is like exploration in that we cannot know at the start whether it will be successful. We may do all of the things we can to make it work but only time will tell if all of the ingredients are right.

This does not only apply to new companies and to entrepreneurs. We need to apply the same objectives in all of our activities. New ventures and exploration are as much needed in the charitable and social sector as they are in business. There are multiple good ideas for starting charities and seeing which ones will find a viable model of success. If we are all to push forward the frontiers of knowledge then risk must be taken and resources allocated even if there is no certainty of success.

Gates

Remember that not even Bill Gates gets it all his own way.

Theodore Roosevelt

The importance of enterprise was vividly described 95 years ago by Theodore Roosevelt:

"It is not the critic who counts; not the man who points out how the strong man stumbles,



We believe that an understanding of risk is fundamental to living in a modern society ...

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or where the doer of deeds could have done them better. The credit belongs to the man who is actually in the arena, whose face is marred by dust and sweat and blood, who strives valiantly; who errs and comes short again and again; because there is not effort without error and shortcomings; but who does actually strive to do the deed; who knows the great enthusiasm, the great devotion, who spends himself in a worthy cause, who at the best knows in the end the triumph of high achievement and who at the worst, if he fails, at least he fails while daring greatly. So that his place shall never be with those cold and timid souls who know neither victory nor defeat. "

RSA

The RSA's first objective was to embolden enterprise. As I have set out in this lecture we have identified that an understanding of risk is vital if our population is to remain enterprising in both business and other walks of life.

Ten years ago I was at the UK Cabinet Office. We thought about creating an independent commission to advise the government on the level of risk of different public policies. However it became clear that it is politically impossible for a government to do this because it quickly has to begin debating topics such as the value of human life which are impossible for politicians to stand up and defend.

The RSA is however independent of government and receives no government money. In addition it has a long history of courageous intervention and can attract people from a wide range of disciplines to contribute to its deliberations.

We have therefore set up an RSA Risk Commission, which

I shall be chairing, to explore these issues in more detail and to determine ways in which a better public understanding can be achieved. We shall be looking at total risk and at sectors such as transportation, childhood, healthcare and employment. Our advice will cover a framework for government in setting public policy, guidelines to the media on producing a balanced story, and information for the general public about how to evaluate risk.

We believe that an understanding of risk is fundamental to living in a modern society and we would welcome input from anyone here about the issues I have described in this lecture.

Conclusion

I therefore hope that I have been able to fulfil my two objectives this morning. I have attempted to give you some comfort about the risks you face in your daily lives. I hope that you will feel a little safer and less under stress when you next get in your car, go on a train or have to look after some children.

I would also like to think that I have been able to motivate you to allow a little more risk and excitement into your life. I hope you will have a slightly more sprightly spring in your step. You will approach the daily round with more of an appreciation of exploration and discovery. You will embrace risk in order to achieve even more. May you all be lucky when you take a chance and may it bring you a good return. Remember that the more you practice the more likely you are to succeed. Luck favours the prepared mind.

Thank you.



SIMON JONES

Director, HCS, University of Amsterdam
former Managing Director, M.I.T. Media Lab Europe

Innovation and Risk: The New Media Perspective

... in the high-tech and consumer world where product life-spans are short and consumer interest is increasingly fickle, an approach based on innovation may be the only effective strategy for long term prosperity.

INTRODUCTION

Most people are in favour of innovation. Fewer are in favour of risk, unless it is with someone else's money or time. New Media is an area where innovation is particularly fruitful and fortunes and reputations can be won and lost in a matter of months. New Media is therefore a useful area to study when seeking to understand the rules and rituals associated with successful innovation in high-tech and the management of its associated risks.

This paper gives an overview of my own perspective in New Media innovation arising out of my time leading the MIT Media Lab's European operations and from founding Ictinos Innovation Ltd, a company that assists regions and SME's and corporations in making innovation work.

WHY INNOVATE?

So why should we innovate? After all if something is not broken why try to fix it? Shouldn't we maximise our return on the investment? Shouldn't we 'sweat the assets' or 'stick to the knitting' or a hundred similar phrases heard routinely in meeting places all across the developed world?

Well it is reasonably well agreed that an approach based on innovation offers the best opportunity for maximising the use of resources both old and new. Furthermore, in the high-tech and consumer world where product life-spans are

short and consumer interest is increasingly fickle, an approach based on innovation may be the only effective strategy for long term prosperity.

Globalisation adds its voice to the need to constantly innovate. China is rapidly becoming the world's factory and India its' services centre. For Europeans, like me, who have become accustomed to an agreeably affluent and secure lifestyle, working for low wages under difficult conditions is an unattractive and politically infeasible approach to countering this challenge. Specifically in New Media, if we are to avoid a future of US content playing on Chinese technology we will need to be more innovative than our competitors. And remember, the Chinese and Indians are not going to be content with the poor-paying jobs; they too are trying to climb up the innovation ladder as quickly as they can.

Perhaps our best hope for a prosperous future is to rely on the culturally rich, design-centric and highly-educated characteristics of European society and ally it to processes and infrastructures that permit continual change, flux and interaction between technologies, networks, consumers and content. This is a major economic and political challenge indeed.

Already the 'creative' sector (to use an already inexact term rather loosely) accounts for 10% of the EU economy. As factories ship out to China and software centres relocate to In-



dia, the creative sector is likely to assume an ever-growing importance to our financial well-being.

While in the high-tech internet-enabled consumer sector there are agreeably low barriers to entry and markets are world wide, this applies to the competition as well. In this sector there is always a start-up waiting to invent a new market (www.youtube.com for video sharing, for example) or steal an existing one away from established competitors (www.skype.com, taking away significant voice traffic from the Telco's). So whatever current innovation you have, you better have a subsequent one as well before the first one gets taken away or bettered.

NEW MEDIA

We live in a world where generating new forms of content, for entertainment, business or a social aspect is increasingly important. The generic term for this is New Media. It's more than TV or Radio Programs. It's more than Web pages and SMS. It is fundamentally about interaction and a move away from the old, single sender, multiple receiver models of TV/Radio and a move towards a world where most people contribute as well as receive content and where multi-person real-time interaction is omnipresent. Already significant activity exists in this area, with blogs (57% of US teenagers have uploaded material to the web) gaming (5M subscribers to World of Warcraft), video sharing, interactive services, a plethora of 'adult' applications (curiously, the porn industry has been responsible for many more application advances than the music industry), interactive massively-multi player games. These are all delivered using the Internet Protocol for

transmission, a mixture of cable/glass fixed networks and UMTS (3G) mobile networks. In conjunction with the diversity of delivery mechanisms, this material can be received on TV screens, PC's, laptops, PDA's and mobile phones. The hackneyed words of ubiquity, personalisation and asynchronicity all describe well an emerging world in which where and when you are on-line is not an obstacle to accessing the world of New Media content.

ECONOMICS OF NEW MEDIA

We now live in a world where bits matter more than atoms. A DVD player can be purchased in Wal-Mart for around \$20. A DVD will cost you \$25 to buy or zero to download via a file sharing site.

We have built for ourselves a worldwide unconstrained data copying machine, we refer to as 'The Internet'. This makes the selling of bits a much harder proposition than the selling of atoms. Indeed, the attempts by the music and video industries to constrain duplication are hilariously reminiscent of the Soviet Union's attempts to limit access to photocopiers. It's hard to resist an unstoppable force. Furthermore, to consumers, sharing content does not seem like stealing. In the 17th Century in parts of Europe the process of enclosure occurred where land once held in common, was fenced off to the bewilderment of peasants who wondered how you could own land, when God had made the land and resisted vigorously such moves. Similarly in the content world, the music and video industries are trying to erect their own fences around their material. Only this time, the fences are too weak to control things and they are not trying to keep our people but keep in a substance that



It is not about the idea it is about the proposition.

OPENING

leaks and spreads easier than water. It seems an enterprise intrinsically doomed to failure. Indeed, the only technical advance the old content industries seem to want is a time machine to take them back 30 years.

So in our Internet world, the barriers to entry into the marketplace are low and the markets are world-wide. It would be hard to imagine a better landscape for innovation to flourish. Indeed, they flourish for me and you but unfortunately they flourish for any competitor large or small worldwide.

Innovation generally occurs in this area when an innovator usually with no money has a demonstrable idea he or she can use to persuade investors to support.

From the innovator's viewpoint the preferred solution is to use his or her innovation but for someone else to take the risk. From an investor's perspective, they would wish for no risk and to acquire in return the innovators' business. Clearly there is a conflict of interest here and part of the initial process of launching a new media enterprise is to understand and resolve these tensions.

Many New Media start-ups have unrealistic expectations about

- ✓ Why they are doing it
- ✓ How to succeed
- ✓ What it is worth
- ✓ Who wants it
- ✓ How much they have to invest in terms of time and money
- ✓ How much they have to do

All these have to be resolved and aligned with market reality if it is to succeed

Lesson 1: It is not about the

idea. It is about the proposition. Even if you have the best idea in the world, if it is not aligned with the market and consumer wishes, it will fail. This is hard to come to terms with if you come from an organisation that prizes ideas.

Sometimes people start New Media Enterprises for different reasons from above. These include

- ✓ To continue or R&D adventure, this time funded by the private sector
- ✓ To have fun and become famous
- ✓ To play at being business people and add that line to their resume

They often also think they can do it without their own money. Sadly none of these reasons really enable success. If we leave ego and hubris aside, the only real reason for entering this arena is to build a business that can realise monetary value.

Lesson 2: It is not about you, it is about the business. Check your ego in the cloakroom when you enter and be prepared to share control with the others who will be necessary to deliver success

DIGITAL CONTENT MYTHS

It is not about the idea it is about the proposition. It is not a question of being smart enough; it is about being well aligned with the market and consumer need.

The best technologies do not win. If a technology is good enough, that's good enough for success.

Don't wait long to generate income. In your new media en-



terprise, you will need to start generating income within 1 year or you will find it hard to get investors.

When you do get investors, they will want a lot. In return for investing in an enterprise with a roughly 1 in 5 chance of succeeding they will request a significant return. If they put in \$100K-200K they will want 35% of your business and a 40% CAGR.

There is no such thing as a passive investor, like it or not you will have acquired an active director for your company. Be sure to choose an investor who adds individual as well as monetary value.

TRYING TO MAKE IT HAPPEN

You have to have an exit strategy, ideally 3 or 4 different routes. The purpose of the business is to make money for your investors. They will want it back and typically within a 2-3 year timescale.

If you start to be successful you will have to cope with legal attacks (people will claim you infringe their patents – be sure to have some of your own to claim back). You will also create a number of copycat systems if your idea is succeeding. All these are signs of success but need to be handled carefully.

You might be another Bill Gates and have all the skills to grow your business into a major corporation. On the other hand you probably will not. Read Shakespeare's King Lear, when the time to let go comes, let go and don't try to hang on. You have done your bit and perhaps have the compensations of being a successful entrepreneur and millionaire.

New Media Morality

Since the goal of New Media Innovation is to make money, it is interesting to think about what an Innovation is worth.

A typical New Media start-up has some ideas, maybe a demo of the concept, ideally some Intellectual Property and the inventive team. With the best will in the world, it is hard to see this as worth more than \$1M. If you need \$500K to start the business up then you may be relinquishing 50% of your equity straight away. If you want to take it to the next stage without giving so much equity away, you either have to invest your own money and time or use salami slicing techniques to fund something by using small amounts off other budgets (if you have access to any of course).

So the morality tale is having a good idea isn't worth much it's having that idea, access to the resource to develop it that is the first of a number of iterative steps to generating value.

Lesson 3: Unless you get to income quickly or have very low costs you must be prepared to give away significant equity and cope with the practical and psychological strain of this.

Selling bits is hard. iTunes claims to have a billion downloads – close to \$1B a year. However, there are 50M iPods and hence have around an average of 20 iTunes songs per 1000+ track machine. Whatever people are putting on iPods it generally isn't acquired from iTunes.

People are more prepared to pay for Adult downloads (a \$2.5B/year) industry. But even this is dwarfed by the overall \$30B/year Forbes has quoted the overall Adult industry.



If selling bits is hard, selling services is easier. Google Ads is the major income element of a now phenomenally successful business. There are 5M subscribers to World of Warcraft each paying \$15/month to participate. The lesson seems to be to give the product away for free but pay to interact with other users of the product. Skype takes a slightly different route – it provides free internet telephony but charges to reach outside the Skype community.

If selling bits is hard, selling services is easier.

The music industry may eventually go this way, giving music away for free and charging for services like preferential material or access to concerts. It's a sobering thought for a business that has partied for a long while, but people believe for good or bad bits are for free and that has to be faced up to.

WHERE NOW?

New Media Innovation lives with a double-edged sword: A worldwide market and low creation and distribution costs. However, anyone anywhere can steal your business model. Costs are not really the issue, fashion style, brand and association matters more in driving profitability. The customers are fickle and easily taken from you, but the market is large and the demand for compelling content grows unabated.



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The group dynamics of dirty feet

How to prevent old patterns to be used on new realities? This years summit was (for me) all about our transition to a new way of "handling". How to handle change.. and the risks that become more apparent? Will old way (analytic) thinking help us to adapt to our turbulent future? A question raised by many contributors to the Summit for the Future 2006.

Cognitive handling of information

Being in the luxury position of an observant I was able to experience how persistent our patterns of behaviour are. Whilst creative destruction or intuitive thinking was preached by speakers, moderators and visitors it was preferably done traditionally by powerpoint, information was gathered and distributed with some time to reflect. And fair to say it was an excellent row of speakers from a wide field of perspectives. But 'handling' to me is an active word. And although the speakers made the mind 'boggle' and my synapses could hardly keep up bridging the fields of knowledge in my head, the methods that were used to convey the messages implicated its cognitive handling.

New ways to convey a message

It was nice to see that Club of Amsterdam is experimenting with new ways to draw the visitors into the subjects of the future. Interdisciplinary streams that practiced socratean rules, introduction of sisomo (sight, sound, motion), think-clouds and a pitch competition

for emotional appeal. Admittedly not everything went smoothly, but still if you were there you can reflect on what it did with your transferring capabilities.

The role you play at interpretation

The persistence in patterns of behaviour showed itself to me where you would expect a repositioning from passive observers to active players that usually evolves when we accept that reality is something we generate ourselves. Although speakers elaborated on the connectedness of interpretation and explanation and showed new ways of interpretation of reality (both in the virtual and evolutionary and physical field), the audiences responded to these new realities with cautious curiosity and reluctance to accept that they themselves were part of the process. Traditionally we try to understand the parts and place them in the chain that constructs an entity (the big picture). When the big picture is extremely complex to comprehend we are inclined to 'give up' and concentrate on smaller nodes in the chain. This natural behaviour makes it harder to see the vicious circle that is created unconsciously. You can notice this when the questions asked are 'who has to do something' instead of 'what can I do myself'. Instead of accepting your own part in creating the problem and the consequence that if you change your part you can change the play, you start searching for external cause. You should not only ask the question 'what is necessary' but immediately

direct this to how you yourself can contribute to it.

Teamwork and intrinsic motivation

In modern education teamwork is extremely popular. The assumption is that groupwork will raise the level of thought since more brainpower is brought into action. In reality it is rare that a group of students alights above the average. We always evaluate the team-cooperation with the students and it usually starts with 'fingerpointing'. When you redirect the question into what they themselves could have done to influence the way of working together they often bring forward that they tried but nobody picked it up. If you are persistent and ask how they tried and what caused them to give up, you will enter the mysterious field of group-culture. The fact that group-culture is something that they created themselves because they (unconsciously) managed group boundaries is always hard to get across. Especially since they hold believe in the uniqueness of each person and the freedom to be unique. I am usually already happy if they abstract the influence of this 'rule' for their own motivation to contribute to the project.

Reflection on alternative contributions

We learned to be rational beings, if a thought is brought into play we usually gather to break it down in parts and question its consistency to pinpoints its use. Preferably we find out what fails or why it is not rational. Seldom do we engage in 'free flow of thoughts', withhold our comments and verdicts and just elaborate on what is there. Even more rare is that we disregard the present context, let loose of our comprehension and just

follow the stream of our wondrous amazement and be surprised by its miraculous power. In our counting culture we're inclined to measure our individual in- and output and calculate the effectiveness of it. But sometimes a very small and maybe by the look of it irrelevant contribution can change the setting which creates the right balance to get from good to great.

Positive intervention takes personal gut

If you research these interventions they generally thrive on the emotional setting, and the ones that bring the click have to do with positivity. In other words how you behave (or not behave) in a group creates a group-culture that makes or breaks the way thoughts are perceived. Each group-member has the power to intervene on that atmosphere, it just takes a minute of reflection on how you say what you are saying and how this influences the way of interpretation by the group. If from the start you elaborate on the good and add personal positivity to that others will take over. If you do this you will be vulnerable, because if the group-sense is not open for it they will attack you on your personal point and try to minimize it. It takes guts to ask a positive contribution without being defensive. It's hard to still see the good point in minimization and adding positivity to that. But if you are consequent and able not only to persist in seeing the good but also persist in adding a own point of positivity you will be able to shift the balance in the group. The reason why this is so hard is not only the guts to be counterbalancing but it also takes a 'barrel of great thoughts from your personal life' that you share with the other group members. The risk you take is that others will add



their ideas and actions and you might have to change what you already thought was great. In other words you might have to get your feet dirty if you will enable change.

From good to great

If you reflect on the contribution you made yourself to the summit and ask yourself how many of these were subconsciously made to drive positive energy, did your own behaviour follow the patterns of a traditional conference visitor or did you involve in the creation of solutions because you dared to be vulnerable by showing how your personal positive action should add to a more valuable world?

This 2006 Summit showed me the power of alternative conferencing, how you can break the chain of cognitive interpretations by changing the way of interacting. I experienced the energy that comes from a different way of 'handling' information and I will now have to get my feet dirty to use that insight in my (work)life. If I'll succeed a new breed of managers will enter the business arena, educated to thrive on positive energy. If we all succeed in conveying that message the students will encounter an environment that rewards the energy and not only the in/output of interaction.

I look forward seeing you all at next years summit to share the positive outcomes of my dirty feet and look forward to hearing yours.

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Recommended reading

A Brief History of Decision Making (HBR, January 2006 Issue)

Leigh Buchanan, Andrew O' Connell

Sometime around the middle of the past century, telephone executive Chester Barnard imported the term "decision making" from public administration into the business world. There it began to replace narrower terms, like "resource allocation" and "policy making," shifting the way managers thought about their role from continuous, Hamlet-like deliberation toward a crisp series of conclusions reached and actions taken. Yet, decision making is, of course, a broad and ancient human pursuit, dating back to a time when people sought guidance from the stars. From those earliest days, we have strived to invent better tools for the purpose, from the Hindu-Arabic systems for numbering and algebra to Aristotle's systematic empiricism to Friar Occam's advances in logic to Francis Bacon's inductive reasoning to Descartes' application of the scientific method. A growing sophistication with managing risk, along with a nuanced understanding of human behavior and advances in technology that support and mimic cognitive processes, has improved decision making in many situations. Even so, the history of decision-making strategies has not marched steadily toward perfect rationalism. Twentieth-century theorists showed that the costs of acquiring information lead executives to make do with only good-enough decisions. Worse, people decide against their own economic interests even when they know better. And in the absence of emotion, it's impossible to make any decisions at all. Erroneous



framing, bounded awareness, excessive optimism: The debunking of Descartes' rational man threatens to swamp our confidence in our choices. Is it really surprising, then, that even as technology dramatically increases our access to information, **Malcolm Gladwell** extols the virtues of gut decisions made, literally, in the **blink** of an eye?

Life Sciences



SIMON JONES

Knowledge Stream Leader Life Sciences

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Risk and Life Sciences

The 21st century is said to be the century of the Life Sciences; a strong statement, given everything else that is happening. However no-one would deny the pressures to improve health services as the population ages, the investment now available from globalised capital and the marked capabilities delivered by inventive interaction of ICT and the Life Sciences.

In the sessions we were fortunate to have a diverse set of speakers address the fundamental issues of risk, risk assessment and risk management in the industrial and research elements of Life Sciences.

Our first speaker was Leif Edvinsson who addressed the challenge issue of assessing and valuing Intellectual Capital. He took a rigorous and numerical approach that provided a close analogy with conventional accounting methods of assessing traditional forms of capital. His well-argued and example rich analysis stimulated much discussion about the topic.

There was little doubt that the method was sound. The issues for discussion centred on how you measured the inputs to the system. Some argued that counting publications to assess value was like saying a CD was good because it had a large number of tracks on it. However, the peer assessment and reputational issues of certain journals offered a good means of qualifying any value ascribed and many in the audience considered his approach to be a significant development in as-

sessing R&D value.

Nol van de Mortel spoke on the role of small specialised companies in Pharmaceuticals. In an environment of huge development costs, smaller specialised companies had a much greater chance of success due to lower overheads and in-house knowledge. He gave a clear overview of how his own company could succeed in such an environment.

Ahmed el Sheikh was one of the outstanding speakers of the summit. He had an extraordinary grasp of the challenges facing the pharmaceutical industry and articulated the ways in which new developments in biotech will impact both the lives of consumers and the pharmaceutical industry itself. His talk addressed 21st Century Bio-Tech covering lifestyle drugs, the diseases of civilisation, and the emerging area of drug-device combinations. The biotechnology sector is just 30 years old and grew 18% in 2005 and raised nearly \$20Bn in the USA that year with an overall valuation of over \$63Bn.

In its purest form the term Biotechnology refers to the use of living organisms or their products to modify human health and/or the human environment. The talk went on to discuss the wide range of areas that Bio-technology addresses including human healthcare (therapeutics, drug delivery, diagnostics), wellness which is particularly important market for the developed world, agriculture, environment, bio-based industrial processes, bio-

based energy and supply. All these applications are driven by a new wave of enabling technologies such as genomics, combinatorial chemistry and proteomics).

Overall these sessions provided a fascinating and high-quality insight into risk and opportunities in the life sciences. It was particularly successful in engaging the audience in a stimulating discussion



AHMED EL SHEIKH

Scenario Planning, The Pharmaceutical Strategist

21st Century Bio-Technology: Novel Perspectives on Scope, Risks and Rewards

Towards the end of the 20th century we added recombinant DNA technology that gave us the ability to produce any protein we desire in any biological system we choose. So we started shifting production of proteins and other bio-derived products to more economical biological systems.

LIFE SCIENCES

In the movie the army of the 12 monkeys, Bruce Willis was sent from the future to prevent a slightly disgruntled scientist from disseminating a deadly genetically engineered man-made virus in 12 strategically located cities around the globe resulting in the death of 5 billion people. He failed.

At the end of the movie we see the scientist going through airport security to embark on his historic trip.

Airport Security Officer:
 "What do you have in this bag?"
 "Biological samples. I have all the proper paper work"
 "It looks Empty to me"
 "Yeh, it looks empty. But I assure you it is not"
 "Sir, I may have to ask you to open it"
 "Open it? Sure. Look, it is invisible to the naked eye. It does not even have an odor. See."
 "That will not be necessary sir. Have a good flight"

If I was Bruce Willis and I've come from the future to try to save you. I too have already failed. According to publicly available scientific data we are already struggling with man-made diseases. This year 5 million people will die of AIDS. That is Risk with a capital R.

We are the first species on this planet to develop the ability to both see into and alter its genetic programming. This ability has given us the power to change who we are as well as to redefine the meaning of life in our universe. Theulti-

mate risk lies in the fact that this power is not coupled with a new understanding of what "LIFE" really is or even of the fact of who "WE" really are.

After a long career forecasting the future I came to the conclusion that the future is not there to be forecasted. Instead, the future is enabled through the collective actions, or inactions, of the current active participants. That is all of us, here, today and now.

For all of us to be able to first envision and then enable a participatory, sustainable and pleasurable future we need to collectively share our knowledge of the "NOW" and how we see the "MORROW". The following is my two cents worth.

In its purest form the term "bio-technology" refers to the use of living organisms or their products to modify human health and human environment. If we agree with this definition we will realize that biotechnology has actually been with us for millennia. Ten thousands years ago the Ancient Egyptians used cows as bio-factories to convert plant carbohydrates into proteins and used yeast to ferment plants into wine and beer.

Towards the end of the 20th century we added recombinant DNA technology that gave us the ability to produce any protein we desire in any biological system we choose. So we started shifting production of proteins and other bio-derived products to more economical



Now, more than ever, it is important to develop a vision of how we want to collectively advance into the future as a species.

LIFE SCIENCES

biological systems.

During the early 21st century, biotechnology evolved into a complex of industries that we currently refer to as the Life Sciences Industrial Complex.

The most profound achievement of this complex is a new world view rooted in the bio-informational paradigm that Watson and Crick unleashed when they told us that our genetic code is simply information; information that can be decoded, coded and encoded.

Recent decipherable topology of this complex shows a value chain of interlinked industries rooted in system biology where platform technologies, like genomics, proteomics and cellomics are utilizing the increasing computational power that is made available to us thanks to silicon-based intelligence to decipher the vast amount of information that the new bio-informational paradigm has unleashed.

The resulting knowledge is fueling innovation in a growing number of life-related industries like health and wellness, pharmaceuticals, medical technology, agriculture and food processing.

The interactions among the different components in this value chain have resulted in a dynamic where ICT and Biotech are co-evolving each other and the venture capital industry and government funding agencies are acting as catalysts.

This dynamics is powering a long cycle of wealth accumulation which follows the laws of increasing return economics where money is converted into knowledge and knowledge is, in its own turn, is converted into more money.

Finding opportunities for wealth

accumulation along this cycle is easy and the only risk lies in missing out. All we need to do is look at technological trajectories and match them to emerging market needs or simply combine different available technologies to come up with new innovations. In this field we are only limited by our imagination.

With good decision making money is assured in the field of bio-technology and financial risk is virtually non-existent. Each dollar invested is converted into knowledge capital we simply need to change our accounting paradigms.

We need only worry about the risk associated with the immense power that these technologies offer us at such an early stage of our spiritual development.

Now, more than ever, it is important to develop a vision of how we want to collectively advance into the future as a species.

Of the top one hundred economies on our planet fifty four are for-profit supra-human social forms or corporations rather than geographically circumscribed supra-human social forms or countries.

Life science and biotech companies are many of such borderless supra-human agencies that are gaining increasing powers in determining the future of life on earth. Many of them have economies that surpass that of medium size countries.

Currently, the whole life science industry is focused on micro-organisms like bacteria, yeasts and viruses and macroorganisms like plants, animals and humans. During the 21st century we see a shift in focus to supra-organisms or societies,

habitats or ecological system.

For risk to be more manageable, it is imperative that the life science industrial complex moves into the realm of human ecology.



MATHIJS VAN ZUTPHEN

Philosopher Catalyst in the Knowledge Stream Healthcare
Philosopher, educator, artist and creator of VISH

Dispatches from the Frontier

*Heaven and Earth abolish
the old and bring about the
new,
Then the four seasons com-
plete their changes.
Tang and Wu abolished the
old and brought about the
new.
They obeyed the will of
Heaven
In accord with the wishes of
people.
The time and meaning of
abolishing the old is truly
great!*
(I Ching, commentary on
Ch. 49)

This year's summit for the future provided once more a powerful and intoxicating cocktail of intriguing people and exotic idea. Risk was the central theme to the proceedings, and it provided an effective thread integrating the myriad ideas and opinions brought to the conference. We live in a challenging era, characterized by rapid change and an unprecedented increase in possibilities, not all good. Traditional systems and long established habits are being swept away by wave after wave of novelty. We face ever faster technological change, a stunning rate of increase in complexity - stupefying most ordinary citizens -, and a rapid dissolution of boundaries: between actual and virtual reality, between countries, continents, cultures, political and economic interests. Add to this a number of worrying and potentially disastrous threats like global warming and an ever increasing gap between rich and poor, and you face a pretty daunting reality, a

vision of chaos.

The upheaval created by these chaotic conditions at the beginning of our new millennium is exacerbated by the fact that the institutions and systems currently in place to organize and regulate our global societies are proving to be inept. They are the product of an industrial era that lies behind us. Profit driven multinational entities proclaiming a message of "bigger is better", who measure value only in dollars, and defer social responsibility to governments, are no longer where it's at. Innovation and technological breakthroughs are the domain of small specialized companies who exist in a dynamic network of partners where trust and collaboration are the name of the game. Your competitor might be your client tomorrow, your business model may become obsolete overnight (something about which the music industry is in a strong state of denial). Centrally managed control driven hierarchies don't stand a chance in this new context. We see the reality of this in the fact that the bottom-line of large corporations is all about optimization, profit is produced by outsourcing and cost cutting, and there is an absolute limit to the amount of costs you can cut.

The Life Sciences represent a context where the rapid rate of technological development creates truly complex dilemmas. Ahmed El Sheik presented us with a compelling vision of mankind; its past and its immanent future. "Evolution through Acquisition" ex-



presses the great conceptual leap forward that occurred in some early hominids and that has been driving the development of our primitive ancestors towards Homo Sapiens Sapiens trapped in its current condition. There is something unique about the human ability to acquire external objects and use them as extensions of our own capacities. Certain animals use tools as well - chimpanzees catch termites with a stick, sea otters crack mussels on a small rock they rest on their belly -, but this behavior is ad hoc, and the tool is discarded as soon as the goal is reached. Humans don't discard their tools, we cherish them and keep them around; we develop and improve them; we combine them and integrate them into vast systems capable of tasks that transcend the ability of any biological life form.

Simple tools are extensions of simple functions. We have been developing our tools gradually throughout the evolutionary timeline to fulfill ever more complex functions for us. We invented chariots and swords, sailing ships, gunpowder, taxation, non-linear mathematics and jetfighters. We have now reached a level where even our most complex functions, those related to perception and cognition, are performed by tools and machines external to us. Telescopes extend vision, as do satellites; computers extend our memories and our ability to perform calculations. We exist in a symbiotic relationship with this technology, and this symbiosis is becoming ever more explicit. We have started to integrate technology back into our physical systems: artificial joints, pacemakers, synthetic organs. We are experimenting with integrating electronic circuitry in our neural system. Soon there will be no physical impairment that

will not have a technological solution.

As more and more parts of our bodies can be turned into machine; as the symbiosis consolidates itself; what does this mean in terms of who we are? What will happen to Homo Sapiens Sapiens? The moral implications of all this are as yet unclear. As usual technology moves much faster than our theories of ethics, leaving us rather empty handed in the light of these dilemmas. We lacked the time to delve into them, it is a big subject, deserving a conference of its own.

This discussion emphasizes a crucial point. Rapid and complex technological change is not an abstract issue, it is not something that happens far away from your living room in the ivory towers of corporate R&D departments. It is going to affect your own personal integrity, your daily life; it is going to change your human identity, it may mean the end of the human race.

Nietzsche wrote "Man is something that has to be overcome", but are we willing to give up on physical self? Are we ready for our incarnation as cyborgs? Not science, not ideology, not government, not religion are going to help us answer these questions. Some may find the cyborg vision appealing, entice by a profound expansion of our abilities and the potential to eliminate human suffering. We can become magicians: turn a normal cell phone into a tiny implantable micro system and telepathy is a reality. The risk is of course in the technology itself. All technology is subject to technical failure. When technology is master you reach disaster faster. Who is to judge which changes are good and which are bad?



We have no choice but to re-connect to our own internal compass: our. Each and everyone of us will have to address these fundamental questions and come up with unique and personal answers. This resonates strongly with the appeal to self- empowerment that several speakers emphasized. Futurist Glen Hiemstra told us that one of the greatest threats to a sustainable future is the lack of positive visions for the future. That then is what we need to address here. It is true that incumbent systems overshadow the power of the individual, it is true that many of us feel powerless against these Molochs of established power. Yet the only effective way forward is through a process of reflection that starts with the realization that each individual has the power to change our reality. We ourselves are the center of the new world. We have to stubbornly create this mental image of what we desire, and strengthen our conviction by aligning this vision with our deepest values. Our own personal vision is what will guide us as we start identifying new patterns, which are emerging out of the current chaos. Our own values will drive this process.

Risk was the central theme. So what is risk? Risk is not a numbers game about expected ROI (return on investment) within a limited period. Such limited conceptions are dangerous because risk is a matter of perception. A perceived risk is a product of our own personal predilections, a mere bias. We fear the disasters that happened to us in the past, and through our focus on this fear we invite the same disasters to strike us again. We should ignore our obsession with the particulars of our own personal past. The true risk is in engaging the future with the same disposition and the same

limited values that have defined our past.



... a way to increase our chances of success or survival is to change our behaviour, our way of thinking: to raise our awareness.

LIFE SCIENCES

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Life Sciences

At the Summit for the Future on Risk I got a deeper understanding of what risk could mean for us in different fields, in different industries, and of course in different cultures, countries. Now, I also have some great ideas of how to deal with risk; and what innovation can bring for us in the future; however, what I couldn't take out of my mind was the importance of approaching challenges, issues, problems – let's call them risks. If unconsciously we (or our brain and neural system) really decide in fragments of a second on how we behave and what role we take in different situations, our success is highly determined without being aware of it and before we could do anything. Thus, a way to increase our chances of success or survival is to change our behaviour, our way of thinking: to raise our awareness. Observing ourselves within the environment, focusing on the dynamics of the "whole", trying to understand its underlying structure – the real source of our behaviours –, thus developing systems thinking is a key factor in understanding what is going around us and what is really happening to us. Improving systems thinking we can find more efficient ways to influence situations and whole new sets of opportunities open up. We "just" need to make decisions and act upon it, and others will follow us if we seem to be successful. The interaction and communication of agents and their own individual decisions based on it would result in better collective decisions and actions.

From a different point of view the future is uncertain that, depending on the issue and the time frame, brings risk into our life. Which is a great thing. Has anyone imagined life without risk? Without loans? Without uncertainty? With knowing everything that happens to us in advance? I think life would be boring. One of the best traits of human beings is that we can imagine difference, things that don't exist; we can link things together that obviously don't belong to each other, thus we can create change, we can advance. Risk comes from this difference, from creating something new that influences others' perception on the world; and others do something else that we are not necessarily prepared. Thus, we generate risk by not being aware to what others do or plan to do. Since everybody looks at the world from his/her own perspective the source of new is unlimited; there always will be a different way to think, to act, to live; so will there be always a way to innovate. From this perspective, risk is great and it is an essence of life, but taking too much risk is a huge risk for all of us. On the Summit, most participants, at least whom I talked to, agreed in that risk should be considered as opportunity for innovation instead of a threat.

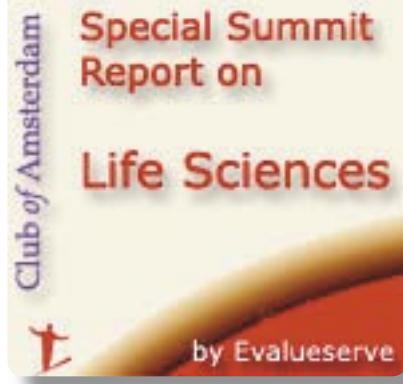
Thus, my main questions about risk changed to how much of it is reasonable to take, and how do we know that we considered all the possible risks before we make a decision. For example, in the Life Sciences knowledge stream we spent quite a lot



time with discussing what risks are in biotechnology and in medicine researches. What we heard in the presentations were really high-level innovative ideas, but to what extent can we say that we are aware of their consequences? What do we know about the possible impacts of biotechnology or genetic engineering, especially if we combine its results with other emerging sciences, such as information technology or nanotechnology just to mention two of them? Will these new technologies solve only the problems what they are made for? Or will a totally new era been born as Ray Kurzweil wrote in his books, such as "The age of spiritual machines", in what he presents a few scenarios about what can happen if we invent Artificial Intelligence and we apply it with other scientific results? We don't know it yet, but I think it doesn't matter. What matters is that we continuously think about the possible long-term impacts of what we do today. It is not a solution, but identifying the possible problems is the first step, it helps a lot if any of them comes true. Today we focus on solving problems with our linear worldview: there is a problem and we need to solve them. But we don't know what other questions will emerge as the consequence of our solution. What we lack is long-term perspective. Thus, I am especially happy that I heard several times on the Summit from successful business leaders that we need to take into consideration different values at decision-making, not just short or middle term profitability. I know we are somewhere in the beginning, but I believe that more and more businesses will change how they approach their business, their way of thinking. We all participated on the Summit to see how others do/ did this that can make a big

difference in the future since "luck favours the prepared mind" as Sir Paul Judge said. And we all want to be prepared ...

Thank you.



SPECIAL REPORT

Biopharmaceutical Outsourcing – Moving to Center-stage

By Smita Shree, Induja Sridharan, Jyoti Baweja, Aditi Singh, Shashi Kukar, Hedda Pahlson-Moller, Evalueserve

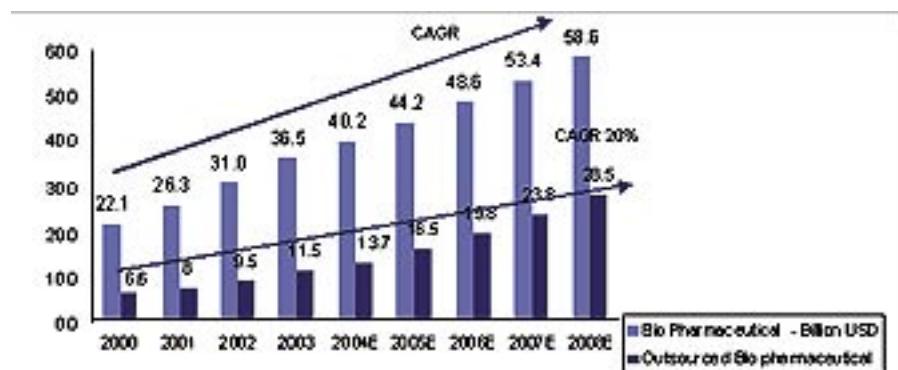
Introduction

The article talks about the growing importance of outsourcing in the field of biopharmaceuticals. It throws light on the way the sector has changed over time as well as the evolution of new technologies in this field. Biopharmaceutical companies today are focusing on their core activities by outsourcing non-core activities, which they find is a strategic option to increase efficiency. Outsourcing in this sector has led to the emergence of contract bio-manufacturing organizations (CBMOs), which provide clinical or commercial production services to other companies. The industry, at present, faces certain safety and technological concerns, but will experience greater growth once these issues are addressed.

Content

Biopharmaceuticals¹ is an upcoming segment of the pharmaceutical industry and is expected to grow at a CAGR (Compound Annual Growth Rate) of approximately 13 percent in the coming years. It is characterised by increasing costs, complex regulatory issues, high prices, tremendous competition etc., making the environment very competitive. This forces biopharmaceutical companies to improve their operational efficiency and productivity. Hence, outsourcing has become a strategic imperative for biopharmaceutical companies in their quest to improve their efficiency and productivity.

Figure 1: Outsourcing in Biopharmaceutical Market (USD billion) – (2000-2008)



Source: Source: BBC, Inc. IMS Health & EVS Analysis

¹ Biopharmaceuticals refers to any products/agents that are produced using biological processes, organisms, or products for the purpose of pharmaceutical consumption.



Outsourcing is a not just a way of cutting costs but is considered a strategic option, which provides an opportunity to establish and foster long-term, strategic relationships with partner companies ...

According to Figure 1 the biopharmaceutical market is forecasted to grow at a CAGR of 10 percent reaching USD 58.6 billion in 2008 from USD 36.5 billion in 2003. Outsourcing in this sector, however, has been increasing at a rate of 20 percent per annum. The coming years will witness an increasing proportion of biopharmaceutical activities being outsourced

Outsourcing in biopharmaceuticals started in the 1980s with manufacturing and gained momentum in the next decade to include areas such as R&D, clinical trials, marketing, sales, and packaging. Biopharmaceutical companies are cautious about abdicating full control of their prime functions. Activities that can be outsourced include several steps in the drug discovery and development cycle, starting from lead and target identification and analysis through devising the delivery mode to early- and late-phase clinical trials. The most commonly outsourced R&D activities include bioavailability and bioequivalence studies, analytical/bioanalytical activities, clinical trials, clinical trial monitoring and management, biostatistics, licensing and regulatory affairs related to clinical research. Other than R&D and manufacturing, companies also outsource activities such as primary, secondary and sterile packaging of biopharmaceuticals. Some firms also employ a contract sales force with ample marketing ability for some of their products.

Contract manufacturing represents the most attractive segment in biopharmaceutical outsourcing. It includes various expression and fermentation technologies (to produce cell cultures, proteins, antibodies

and enzymes), and transgenic animal production. Microbial fermentation, which is a standardised and mature technique, accounts for approximately 46 percent, while mammalian cell culture technique, a relatively new technique, accounts for another 33 percent of the biopharmaceutical manufacturing market. According to the Second Annual Survey (2003) of the Biopharmaceutical Manufacturing Capacity (BioPlan Associates, Rockville, MD, USA), 35 percent of biopharmaceutical companies were expected to outsource their activities in 2004 and approximately half of them would be outsourcing by 2008.

Many companies prefer not to invest significant time (for example the five years for a facility to become operational) and significant capital for building a bio-manufacturing facility (ranging from USD 300 to USD 900 million to build, equip, validate and get the facility approved).

Outsourcing is a not just a way of cutting costs but is considered a strategic option, which provides an opportunity to establish and foster long-term, strategic relationships with partner companies, thereby making them more efficient and better prepared to match their capabilities and offerings with market and demand dynamics. Also, outsourcing allows these companies to concentrate and expand their core competencies. For example, Genentech has outsourced the manufacturing of Rituxan (rituximab) to Lonza so that it can concentrate on its own competency.

Another major reason for companies to outsource is to reduce their time-to-market, with lower fixed costs. Eli Lilly had outsourced the development and manufacturing of Activated

Protein C (APC) to the Lonza Group to incur relatively lower development and manufacturing costs for launching the product.

The biopharmaceutical industry has come a long way from a shortage of manufacturing capacity in 2001 to the prospect of bio-manufacturing capacity supply outpacing worldwide demand in 2005-2011. Most tier-one and tier-two contract manufacturers in the last few years have undergone capacity expansion to keep up with the growing biopharmaceutical outsourcing market. Boehringer Ingelheim, the largest CMO in the world, nearly doubled its capacity by setting up its new facility in Biberach, Germany, in September 2003 – it later inaugurated another plant at its existing facility in Vienna, Austria. Similarly, Lonza Biologics, the second-best CMO in terms of reactor volume, increased its capacity fourfold at its facility in Portsmouth, New Hampshire (USA), to include three 20,000-liter bioreactors that became operational in 2004.

Some companies adopt the inorganic route of mergers/acquisitions to add to their capacities. For instance, Cangene acquired Chesapeake Biological Laboratories (CBL) in February 2001 to utilise its 71,000-square-foot manufacturing facility in Baltimore.

Some CMOs are focussing on increasing capacities at locations that offer cost-competitive quality production with lower labour, land, construction and maintenance costs. For instance, Lonza entered Asia through a joint venture agreement with Singapore's Bio*One Capital to capitalise on Singapore's strengths in process development and clinical manufacturing of biopharmaceuticals, as well as

its capabilities in GMP (Good Manufacturing Practices) manufacturing of bulk actives for global pharmaceutical companies. Similarly, Celltrion (Incheon, South Korea) plans to set up and operate the largest bio-manufacturing facility in Asia – which is one of the largest in the world – by 2006. Bristol-Myers Squibb (New York, NY, USA) has entered into an agreement with Biocon, India, for commercial manufacturing of its recombinant insulin.

Companies enter into marketing collaborations with other companies that are already present in the market in order to reach new markets. For instance, Cangene's marketing collaboration with BioGenerix AG of Mannheim, Germany, which started in October 2003, has given the company significant access to the European market.

CMOs enter into strategic collaborations and agreements to acquire expertise in a new area or add products to their discovery pipeline. Laureate Pharma entered into an agreement with Discovery Laboratories Inc. in January 2004 to provide manufacturing services that support Discovery Laboratories' product requirements. It has also expanded its technical expertise and provided additional value to its customers by entering into a partnership with EMD Chemicals Inc. in March 2005. The collaboration enabled Laureate to utilise EMD's expertise in packing and testing large-scale ion exchange chromatography columns.

In order to strengthen its pipeline in the upcoming area of biopharmaceuticals, Lonza Biologics entered into an agreement with Y's Therapeutics, a privately held biopharmaceu-



... large pharmaceutical companies have spread out their biopharmaceutical manufacturing and research arms to carry out R&D and sales functions in order to optimise their capacities, support internal activities and cater to external clients.

tical company, to collaborate on the cell-line construction and production of a humanised monoclonal antibody for the YSCMA program in April 2004.

Apart from the CMOs, large pharmaceutical companies have spread out their biopharmaceutical manufacturing and research arms to carry out R&D and sales functions in order to optimise their capacities, support internal activities and cater to external clients. These include GlaxoSmithKline (GSK) Biopharmaceuticals, founded in 2000 by GSK, and Abbott Bioresearch Centre (ABC), founded in 1989.

Today, biopharmaceutical companies are moving away from the strategy of keeping bio-manufacturing 'in-house' towards outsourcing some of the manufacturing activities, because it has been proven that the benefits of outsourcing outweigh the associated risks. Many firms now rely on contract bio-manufacturing organizations (CBMOs) for clinical or commercial production of their products. This has led to rapid proliferation (and a concomitant surge in revenues) of small and midsized CBMOs.

Contract bio-manufacturing organizations have also been making substantial investments in downstream activities (purification, refining, etc.) to improve their expression systems and decrease the yield loss. For example, Abbott Bioresearch Center has multiple suites, with a fermentation capacity of up to 6,000 litres (mammalian and microbial). The Abgenix facility includes four 2,000-litre and two 12,000-litre bioreactors (mammalian). This has resulted in a reduction in their manufacturing costs, thus increasing their value for their client companies.

Technological advancement, such as the use of disposable, single-use bio-manufacturing systems, is likely to bring down costs, thereby increasing the number of companies outsourcing their activities. Disposable apparatus are less expensive than conventional equipment. For instance, a disposable bag costs approximately USD 20,000 per year, compared to stainless steel vessels that cost around USD 40,000 per year, on the 20-litre bioreactor scale. Such equipment is cost effective and also leads to the reduction of certain steps, such as cleaning, validation, etc., and elimination of much of the documentation work and the risk associated with insufficient cleaning. The advent of such equipment has resulted in a faster changeover, simultaneous manufacturing of many products, and prevention of cross-contamination.

Many challenges faced by the clinical research market, such as widespread trials at multiple sites, fragmented CRO market, and the speed required for the process, have created the need for management service companies, which organize and manage the clinical trials (SMOs). In 2002, there were only 4 companies in the SMO market, but now there are 33 companies competing with each other, resulting in high growth and expansion of the market. It was estimated in 2004 that the growth rate of these organizations would be 43 percent in the next few years.

There has been a sea change in the industry, which is characterised by as many drivers as challenges. Upstream processes, which are generally development- and engineering-related, are driven by technology development and are moving at a high pace. On the other hand, downstream

processes, such as purification and refining, are not able to keep up due to bottlenecks such as efficacy, quality and safety concerns, high costs and cGMP requirements of a bio-manufacturing facility, stringent regulatory authorities, and the technological constraints. These processes should be integrated to overcome these challenges.

The financial strength of large biopharmaceutical companies may facilitate the acquisition of smaller biopharmaceutical firms. This may result in processes remaining in-house due to the capability enhancement of large companies. Top vendors would be preferred for outsourcing of any processes. This could result in a fall in opportunities and a rise in competition, considering the fact that the top eight service providers dominated 60 percent of the market in 2004.

The increase in biotechnology products may result in an increasingly outsourced manufacturing market. It is estimated that approximately 240 new biotechnology medicines would reach the market by 2007. This may see demand for bio-manufacturing outpacing the supply, resulting in outsourcing of manufacturing.

The increase in the number of patents expiring in the years to come may also lead to an increase in outsourcing. According to some estimates, biologics patents worth USD 10 billion will expire by 2006. Companies will have to focus more on their core competencies to develop newer products and outsource the manufacturing of generic products and also patented products to reduce costs. Also, the biogeneric products require more trials as compared to other products in the non-biotech sector in order to meet

safety issues and address the problems of bioequivalence. A slight variation in manufacturing processes, such as change in the culture media or growth conditions, can significantly impact the safety or the immunogenicity concerns of the product. This may result in a requirement of new clinical trials to validate the process, which will entail high costs.

The development of guidelines in the field of biogenerics will take time since it is subjected to considerable legal interpretations on safety and technical concerns. In the US, there has been mounting pressure on regulators from the US Biotechnology Industry Organization (BIO), insisting that safety concerns be addressed and debated before any guidelines for biogenerics were issued. Biopharmaceutical and biotech companies seem to be uniquely positioned to adopt outsourcing, both at home and offshore, but to some extent the potential benefits will be overshadowed until the safety and technical concerns are addressed. At present, one will have to wait and watch to learn what the future holds.

Summary

The biopharmaceutical industry is very competitive and therefore the players need to be highly efficient and cost effective in order to survive in this competitive environment. The focus on increasing efficiency and productivity is forcing many existing players to move towards outsourcing of some of the activities. Outsourcing started with activities like manufacturing, which is considered the most attractive segment of the industry, and now companies also outsource other activities like R&D, clinical trials, marketing, sales, and packaging. Outsourcing is no



longer considered a tool for just reducing cost; it is also seen as a strategic option to increase quality and reduce 'time to market'.

Contract manufacturing organizations (CMOs) are adding on to their capacity in order to meet the demand of outsourcing. Most of these companies are adding capacities at cost-effective locations to get maximum benefits in terms of cost and pass on the benefits to their clients. Large pharmaceutical companies are not too far behind to reap the benefit of low-cost destinations and many of them are spreading out their biopharmaceutical manufacturing and research arms to carry out R&D and sales functions. New technologies, such as the disposable, single-use bio-manufacturing systems, have further enabled lowering of costs in this field.

All these factors have made outsourcing in the biopharmaceutical industry a very attractive option. However, the industry also faces many challenges. The downstream processes, such as purification and refining, are growing at a slower rate as compared to the upstream processes. Large biopharmaceutical companies also act as a threat to the outsourcing industry as they can afford to have all the processes in-house.

Despite the challenges, the outsourcing industry will continue to grow due to the growth in the biopharmaceutical industry. Approximately 240 new biotechnology medicines are expected to reach the market by 2007, along with biologics patents worth USD 10 billion expiring by 2006. This will lead to an increase in the outsourcing activities such as clinical trials and manufacturing of generic drugs.

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Media & Entertainment



JONATHAN MARKS

Knowledge Stream Leader Media & Entertainment
Director, Critical Distance BV

Summary: Media & Entertainment

Marc Canter got a great conversation going with a presentation entitled **Lifestyle Leadership**. He pointed out that the public in Europe and the US sees no difference between audio and video on PCs, game machines, TV/Radio and cell phones. They regard them all as digital and are just not interested in how they work. Yet, those in the business, still regard these devices as representing completely different industries, few of which are even talking to each other.

Even though some devices are converging, there is still a huge challenge in trying to make various technologies in our lifestyles fit together. Entertainment is part of many aspects of life. So we need to connect the living room with: fixed and mobile devices in school and the office, as well as maintain the conversations going on within our circles of friends, families and groups. The statistics for TV viewing in the US and parts of Europe are dropping quite significantly. Newspaper circulation is well down and will probably never recover.

We are all time poor and Marc argues that the attention people are willing to put into television is actually dropping faster than the pundits and networks would have us believe. People are spending more time online – having conversations and generating their own content – whether it is text, pictures on Flickr, or uploading videos on to Our Media or Youtube. The entertainment industry is still having problems realizing that entertainment doesn't neces-

sary just come from Hollywood.

Marc pointed out that everything we do involves taking risks ... whether it is driving to a conference like this to meet people, investing your time in building up a collection on the web (what happens if the provider goes bust?) Innovation without some risk isn't possible and the community needs to take on some leadership roles when it comes to reducing risks to our private information (identity theft is a growing problem). Digital technologies are becoming more and more part of everything.

Few of us keep written diaries. All of us need conversation – without it we don't survive. It is not for nothing that the worst form of a prison sentence is in solitary confinement. But more and more are using video, audio, text and images to tell stories. All of this must be created, edited, mixed up, managed, organized, and stored. Blogging has empowered millions. Now media blogging (podcasting and vlogging) is expanding the blogging scene and structured blogging is helping to establish standards, both within the blogosphere and maintaining better standards within the traditional broadcast industry.

Marc gave his views on how social networks are evolving and the need for more open standards and interfaces. Social networks include your private content (text, audio, video) and list of friends. People have invested in relationships with other people but hate being locked in to one site. It is easy

Open standards can act as a bridge to inter-connect these Islands together into an Archipelago of functionality which at least equals what the Big Companies are doing or will do but also leaves room for small players to participate in the eco-system.

This is the ideal model for internationalization and it is truly scalable.

MEDIA & ENTERTAINMENT

to start an account at Blogger, Flickr, etc, but have you ever tried to move your data from host to a competitor? There is usually no import/export option and if it does exist you need to be a geek to figure it out.

Marc is trying to encourage the big data silos to open up. He is betting that among the big players, Apple, Google and Microsoft will stay closed, but he is holding out hope for Yahoo and AOL to be more open. However, it is not clear yet how Yahoo or AOL (a client of Marc's company Broadband Mechanics) might make data accessible and portable for users. The same questions need to be posed to MySpace, Facebook, Xanga, Bebo and other start up social networks. Marc is an evangelist for a level playing field and thinks the market will decide who gives the better service. Loyalty is no longer just a matter of price points – those who give a better, more open service will build a loyal fan base very quickly - the lock-in approach is pure Web 1.0.

Marc also touched upon his company's PeopleAggregator, an open source project, based on open standards, that will allow people to create their own social networks and integrate them with any other software via internal APIs and external Web services.

These DLAs will allow people to bring together all of the aspects of your digital life, share it with your friends, manage your children's exposure to various kinds of things, connect families together (even though they may be thousands of kilometres apart) and rate, comment and link to stuff they find out on the web. In other words, Web 2.0 really draws you in.

Marc believes that we need to move to a world of meshed

Islands. Nowadays, the best software is developed by small teams. These develop isolated features, but it is questionable as to whether these should be stand-alone products, all with different user interfaces. Users are becoming allergic to walled gardens. Open standards, on the other hand, can act as a bridge to inter-connect these Islands together into an Archipelago of functionality which at least equals what the Big Companies are doing or will do but also leaves room for small players to participate in the eco-system. This is the ideal model for internationalization and it is truly scalable.

As with the other presentations, the discussion around Marc's presentation took place during the session rather than just after it. There was considerable concern that the public entrusts relatively new Internet companies with all kinds of private data, both about themselves and their offspring. What happens when employers Google your blog five years from now? It is difficult to correct inaccuracies on blogs – no right of reply, yet these blog comments appear very high in Google and Yahoo rankings.

Dr Madanmohan Rao, switched the focus to Asia, looking at ways of navigating and harnessing the Asia media boom and the risks associated with that. China and India are both huge consumers of energy, which is why the recent deal between US and India is significant. Asia is in the news because of conflict, (South-East Asia, West Asia) but also because of major offshoring and outsourcing.

Madan pointed out recent developments in the mobile sector which he's spotted. It ranged from mobile gambling which has sprung up in Hong Kong to



Broadcasting is no longer limited to broadcasters.

both digital mobile broadcasting and WiBro in South Korea. And it is significant that the World Cup 2010 rights were first sold to a mobile network! He outlined the "8 Cs" of New Media" conditions needed for the market to grow sustainably.

- Connectivity: Connectivity, bandwidth, devices, platform, interfaces, standards, portals
- Content: News, information, databases, feeds; media/businesses/government/citizen
- Community: Group dynamics, evolution of communities, support
- Culture: trust, support: openness to change
- Capacity skills, talent, organizational support, training, HR, processes, lawmaking
- Cooperation: Between citizens, industry, government, academia, NGOs, external institutes
- Commerce: E-commerce/M-commerce provisions, fair and open regulation
- Capital: Investments in ICT infrastructure, ROI metrics

No-one in the group defined media as simple radio and TV. Likewise, it was more than simply entertainments. New Media is an instrument for society as a whole, providing affordable access to ICTs, local language content/tools, as well as sectoral benefits (news, education, healthcare, environment, business, government). Broadcasting is no longer limited to broadcasters.

The development of all of this depends on the rate at which countries adapt to becoming one of the Information Societies. For example:

- Restrictive: e.g. Myanmar
- Embryonic: e.g. Afghanistan

- Emerging: e.g. Nepal
- Negotiating: e.g. China
- Intermediate: e.g. India
- Mature: e.g. Australia
- Advanced: e.g. Japan, South Korea

It was striking that many Asian governments have a clear public strategy of what they want to achieve. Compare this with many countries in Europe which seem to have lost their way. The e-Japan Strategy was mentioned: make Japan the most advanced IT nation within five years or the plan to make Korea the gaming production capital of the world by 2008 with 8 billion dollars annual turnover. China is already the world's largest mobile subscriber base, second largest Internet population, whilst India is the world's fastest growing mobile market. Thailand was seen as an example of an early stage market (Thai fonts for SMS only recently came out and there are still few wifi hotspots)

There seem to be little risk that these countries won't achieve their IT goals. But the social impact is far more difficult to judge (growing unrest in China as a result of wealth divide, border tensions, water and energy shortages leading to conflict.)

The second half of the stream concentrated on two examples.

Yme Bosma of Media Republic discussed their Eccky project, the name of a game launched in the Netherlands where two parents can make, name and raise a virtual child. Their Eccky will be added to their MSN Messenger contact list, just like a regular buddy. Parents can chat (also via SMS) with their Eccky and enter a virtual world where they can play games, feed, wash, shop and do everything else that comes

*There are risks involved.
Will kids believe the robots
are real people? There
have already been cases
of people trying to make a
physical meeting with their
Eccky.*

with raising a child in real life. Of course, it cannot be in real time – even 1 day = 1 year was found to be too long. So each day now represents three years. The game will end in 6 days when Eccky will celebrate its 18th birthday. After having gone through three life stages, baby, toddler and teen, Eccky will leave its parents home ... All interaction is done either through the MSN Messenger chat interface, the MSN Messenger activity window or by using a J2ME enabled mobile phone.

Eccky was launched in October 2005 in The Netherlands. There are plans for a roll-out in the UK, USA and China in the course of this year. The English version of Eccky is already being tested. Everyday more virtual babies are being born in the Netherlands than real babies ...

The looks and character of an Eccky are based on the DNA profiles of the parents. At the beginning of the game parents build an avatar of themselves and answer a few questions on their personality. Even if the parents fill in the same information (unlikely) the software ensures that no two Eccky's are the same. The 'artificial life' technology developed by Media Republic will make sure that Eccky's behaviour is always dynamic and in some ways even unpredictable. Parents thus face the challenge of raising their Eccky in the best way possible. At any time, parents can see the results of their Eccky by just looking at him or her, but also by taking a glance at some of the monitors available or by watching the rankings on www.eccky.nl. Happiness, health, wealth, skills and friends are just a few examples of the 160 dynamic variables that make up each Eccky and which are used to

determine how well the parents are doing.

In addition to the game there is also a very active Eccky community. All parents and Ecckies have profile pages with social networking features in order to facilitate community browsing. A 'love match' features helps users to decide on whether or not to invite someone to raise an Eccky together.

Yme's presentation raised a number of ethical questions concerning how kids will be sold Eccky services and the connection with Microsoft. Yme said that the control of the software and the project is still in the hands of Media Republic and that trust is very important to them. Yme said he also sees the integration of different virtual worlds, environments and persons. This could mean Ecckies walking and talking in "Second Life", meeting "Habbos" and "Warlocks" while feeding their "Neopets" on the green lands of "Google Earth". Currently these are very separate (in some cases competing) worlds. He expects to see more (serious) applications of artificial and virtual life assisting us to learn better and alerting us to personal health and welfare issues. Likewise, Eccky is the first experiment in cross media – connecting web with chat and SMS. More multichanneling of (connected) artificial life is to be expected via Web, PC, SMS, toys, chat, phone/voice, and traditional media.

There are risks involved. Will kids believe the robots are real people? There have already been cases of people trying to make a physical meeting with their Eccky. Will these kind of virtual relationships affect the real ones? You could argue that Ecckie type software might be used in the future to judge parent's real parenting abilities.





It may shift to who delivers the software, and who provides the easiest electronic programme guide for use to discover programmes that entertain and inform. The challenge will be to ensure that the public still understands the reasons for all this "new media".

MEDIA & ENTERTAINMENT

The final part of the media stream was led by **Erik-Jan Gelink**. He explained that on the equipment side adoption of digital technology is going at full speed. Look at how fast the public have adopted digital photography – to the point where flash drives are becoming more ubiquitous than film rolls. We shoot millions more pictures each day – on average 13% are ever printed out and put into albums. Still, the TV remains a pretty dumb device, only showing what it receives now. TV's digitization means the chance for a shift in intelligence from transmitter to the receiver. In areas where TIVO has been introduced, the viewing habits of the public have shifted dramatically – there is much less consumption of live TV, with the exception of news. TV 2.0 is very much "my-TV", with individual channels being created by the user. The increase in processing power and cheap storage capability of devices have made this old dream happen now. Set-top box manufacturers like UPC, as well as Window's X-box are both hoping (and taking a risk) that consumers will want these kind of services. Vodafone in the UK has just announced results indicating that their trial of 1000 consumers with Mobile TV (via the phone) has been an overwhelming success. Remote access of content we have paid for (perhaps via a government tax) may fuel the success of devices like Slingbox. There are already video-sharing websites doing a roaring trade. Youtube claims 30,000 uploads per day – to the point where servers have been crashing under the strain. Peer to peer type technology will also revolutionize the broadcast model, for currently the producer of IP content has to contend with huge bandwidth bills this is putting limits on podcasting for individual producers. Some companies are also taking a

huge financial risk in trying to launch high-definition TV in time for the World Cup, when it would appear some equipment manufacturers are having a problem delivering on time. The media bosses in the future will depend on other things than who is just compiling the content (currently broadcasters). It may shift to who delivers the software, and who provides the easiest electronic programme guide for use to discover programmes that entertain and inform. The challenge will be to ensure that the public still understands the reasons for all this "new media".

Conclusions

In summary, the format of lots of interaction with the speakers seemed to have worked, even though it was sometimes difficult to keep the stream on topic. Media is no longer just the technology – and there were a lot of questions from the participants about the social impacts of artificial intelligence (Eccky) and what will happen when the scarcity of distribution goes away (peer-to-peer video file sharing). We highlighted a lot of risks, one of which referred back to the opening keynote speaker of the conference, Paul Judge. He pointed out that the media simply focus on the extraordinary – because that brings in viewers. But there is a danger that we spend too much resources of preventing the extraordinary and far too little on reflecting on our general wellbeing and the planet in general.



MADANMOHAN RAO

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Mobile Media Futures: The View from the Asia-Pacific

Along with the boom in mobile telephony around the world, a parallel wave of innovation in wireless corporate networking promises to usher in a new world of "untethered knowledge workers" and "flexible network organisations."

This paper provides an overview of the mobile ecosystem, highlights Asia's unique role at the head of the mobile race worldwide, identifies a wide spectrum of opportunities and challenges for different players, and ends with insightful discussion and analysis. Wireless environments in the Asia-Pacific are classified into seven categories, based on a combination of factors like ICT infrastructure, political culture, and international presence: restrictive, embryonic, emerging, negotiating, intermediate, mature and advanced. The key findings of some research initiatives from Asia are highlighted, and a set of 15 pithy lessons is identified.

I. Introduction

From dramatically changing business and political climates across Asia to grammatically changing spelling and sentence structures via SMS, the wireless Internet and mobile communications are transforming Asian countries and cultures in unprecedented ways – with lessons, benchmarks and opportunities for the rest of the world as well.

The ITU predicts that by 2010, more than 50 percent of all mobile-phone users in the world will be in the Asia-Pacific region, up from 35 percent in 2000. And in terms of manufacturing output, Asian nations like Japan, South Korea, China and Taiwan have become leading global players in hardware, while software and innovation hubs have emerged in India, Singapore and the Philippines.

The convergence of the three media ecosystems – traditional (print, broadcast), Internet/Intranet and wireless/mobile media environments -- is sometimes referred to as the EverNet, SupraNet, MetaNet or PermaNet, and interesting variations are emerging in the diffusion and cultural acceptance of different forms of wireless media access around the world.

Along with the boom in mobile telephony around the world, a parallel wave of innovation in wireless corporate networking promises to usher in a new world of "untethered knowledge workers" and "flexible network organisations." Wireless local area networks (WLANs) for "plug and connect" applications are also rapidly emerging in the office, in homes, hotels, warehouses, hospitals, stock exchanges, and public "hot spots" like airport lounges, libraries, conference venues, and cybercafes.

Asia also accounts for four of the Top Ten markets in the world in terms of wireless Internet user base as a percentage of mobile users: Japan and South Korea are in the lead, followed by Finland, Canada, Singapore, US, Germany, Italy, UK, Taiwan and France.

Asia is now the largest and most innovative telecom market in the world – but it must demonstrate leadership in this role, said Yoshio Utsumi, secretary general of the International Telecommunications Union, at the ITU Telecom Asia summit in Hong Kong, titled "From Recovery to Prosperity."

2. Frameworks

The media analysis used in this paper is based on a framework developed by the author over the years, called the "8Cs" of the Digital Economy: connectivity, content, community, commerce, capacity, culture, cooperation and capital (Rao, 2002). In other words, the power and success of the

wireless Internet and mobile media depends on the size of the user base, nature of content services, interactive communities, sustainable business models, human resource capacity, progressive culture, cooperation between key sectors of society, and funding for entrepreneurs and startups in new media ventures.

Table 1: The "8 Cs" of the Wireless Information Society

	Wireless as an instrument	Wireless as an industry
Connectivity	How affordable and widespread are wireless Internet platforms and mobile devices (eg. WiFi cards, Internet access, cell-phones) for the common citizen?	Does the country have sizeable demand and suppliers for wireless connectivity (i.e. clients and vendors for hardware, software, datacom solutions and services)?
Content	Is there useful content for citizens to use via wireless access channels? Is it relevant, and in the local language? Is it easy to use?	Is content being generated in local languages and localised interfaces? Is this being accessed/used abroad?
Community	Are there online/offline forums where citizens can discuss the wireless ecosystem and related issues?	Is the country a hub of discussion and forums for the regional/worldwide wireless industry?
Commerce	Is there infrastructure (secure wireless gateways, payment agreements) for M-commerce for citizens, businesses and government?	Does the country have indigenous m-commerce technology and services for wireless channels? Are these being exported?
Capacity	Do citizens and organisations have the human resources capacity (tech, managerial, policy, legal) to effectively harness the wireless medium for daily use?	Does the country have the human resources capacity (tech, managerial, policy, legal) to create and export wireless products and services, and set standards?



Culture	Is there a forward-looking, open, progressive culture at the level of policymakers, businesses, educators, and citizens in opening up access to the wireless medium? Or is there nervousness and phobia about the disruptive aspects of WiFi/WiMax/SMS by incumbents?	Are there techies, entrepreneurs and managers pro-active and savvy enough to create local wireless product and services companies and take them global?
Cooperation	Is there adequate cooperation between citizens, businesses, academics, NGOs and policymakers to create a favourable climate for promoting the wireless medium?	Is there a favourable regulatory environment in the country for creating wireless companies, M&A activity, and links with the diaspora population?
Capital	Are there enough financial resources to invest in wireless infrastructure and players? What is the level of FDI?	Is there a domestic venture capital industry; are they investing abroad as well? How many international players are active in the local private equity market? Are there stock markets for public listing of wireless players?

Source: Author

The age of the mobile Internet promises to be one of rapid innovation, as evinced from the 3G mobile services of Japan, South Korea and Hong Kong. Even the world of 2G is showcasing creative socio-economic applications in China (the world's largest cellphone market), India (with the most potential for growth), Philippines (with SMS as a tool for political mobilisation) and Bhutan (where wireless technologies help bridge the digital divide). However, it should be noted with caution that a widespread shift to 3G mobile may take longer than expected due to high network costs and user satisfaction with earlier generation services. Regulators and industry players alike need to realise that

there are a number of different options for providing mobile Internet services, billing plans, content alliances and migrating to next generation platforms. Other governance challenges will arise in terms of mobile spamming, user privacy, Internet addiction and mobile etiquette.

Location based services (LBS), were once regarded as the "killer app" of the mobile world and are still one of the more intriguing services in the mobile information society. These range from emergency and resource tracking to people monitoring and location-specific advertising services. To be truly successful, LBS must be seamless, accurate, timely,



useful, affordable and not intrusive of users' privacy; it also requires extensive cooperation between operators, technology providers and content players – which is why the uptake has been relatively slow.

In many developing countries, wireless in local loop (WiLL or WLL) technologies may be the most cost-effective solution for combined voice and Internet services in rural areas and less-dense urban clusters. For small offices, WiLL can actually be a more effective business communications solutions than fixed line (which costs more) or mobile (with data services often limited to SMS). Whether based on standards like CorDECT or WiMax, fixed line wireless connectivity solutions need to be offered in conjunction with local entrepreneurs who can operate infokiosks and service points.

From journalism tools and TV polling to music ringtones and mobile gaming, a vast new media ecosystem has been unleashed in the span of less than a decade. Opportunities (eg. instant news alerts, political mobilisation) and challenges (eg. IPR violation, invasion of privacy) arise in the mobile media ecosystem.

Wireless has had tangible impacts in business environments (eg. sales force automation, supply chain management), government (eg. use of SMS alerts for citizens, PDAs by government officials) and education (eg. WiFi infrastructure on campuses, PDA usage for corporate learning). While wireless solutions (such as WiFi and RFID for inventory tracking), handheld devices (eg. PDAs for sales staff) and mobile communications (eg. SMS alerts by health authorities) open up vast new opportunities for productivity enhancement, more effective learning environments

and innovative citizen services, challenges can also arise due to information overload and inadequate security. Careful attention must be paid to metrics covering processes as well as employee impacts of wireless solutions, and a useful classification of such metrics is provided in this regard.

There are also mutual synergies between knowledge management (KM), business intelligence (BI) and the wireless ecosystem. KM and BI are being used to improve efficiency and innovation by wireless players: operators, device manufacturers, network providers and software services companies. And wireless technologies are being used by a range of companies to enhance their existing KM strategies via "mobilising" explicit knowledge and making it directly accessible to employees on the road. Innovative practices on these fronts have emerged from Asia, such as NTT DoCoMo, LG Electronics, Samsung, Sun Microsystems Philippines, Hughes Software Services and Origin Exterminators (as well as examples from outside the region, such as Siemens and Ericsson Canada).

Successive waves of innovation in digital technologies and communication models have posed increasingly complex challenges for policymakers, national regulators and international regulatory bodies around the world. As if the convergence between the Internet and telephony sectors in the 1990s was not complex enough to handle, new technologies like the wireless Internet and mobile telephony are posing even more tricky to handle in a unified framework.

Governments around the world have often bungled the regulation of telecommunica-

China is viewed as a powerhouse that is going to benefit Asia as a whole and will have repercussions for wireless players around the world.

tions services, radio spectrum and media content. To be fair, the rapid pace of technology change and the convergence between previously separate realms of technology have thrown up new opportunities (eg. increasing bandwidth and switching efficiency) as well as challenges (eg. maximising benefits to consumers while also promoting domestic/global industry players and investors).

3. Country profiles

Japan is often regarded as the world's most advanced wireless information society. The e-Japan Strategy is aimed at making Japan the most advanced IT nation within five years. A growing body of social science research is examining a wide variety of social impacts, ranging from gratification effects to digital shoplifting. A key challenge ahead is to reduce the digital divide, in areas like access by disabled citizens.

South Korea is a world leader in broadband Internet – wireline, WiFi and WiBro. The country is also the largest producer of communications equipment in Asia. Broadband usage has 80% household penetration. M-commerce is alive and well in Korea, with over 20 million on-line banking accounts and wide usage of wireless as a transaction platform. Korean operators have also launched a platform called 'Wireless Internet Platform for Interoperability' (or WIPI). Other initiatives have been launched targeting RFID, wireless personal networks (WPAN), ultra wide band (UWB) and intelligent wireless sensor networks. The Korean government has also set up the 'Korea Venture Fund.'

China has mesmerising potential as the world's largest mobile subscriber base and second largest Internet population. Wireless subscribers out-

number wireline users. Markets are growing for products and services ranging from used cellphones to SMS gaming. But Chinese government officials are concerned about the use of SMS for spreading rumours and political messages. A number of home-grown wireless players are also venturing into foreign markets. Controversies are emerging as China flexes its muscles in terms of its own standards and requirements for wireless security, digital content and 3G protocols. Still, China is viewed as a power-house that is going to benefit Asia as a whole and will have repercussions for wireless players around the world.

India is now the world's fastest growing mobile market; CDMA and GSM subscriptions are finally taking off, and the traditional regulatory mess regarding licensing seems to have been finally sorted out. Interesting initiatives have been launched to bridge the digital divide via wireless access, but much more scalability is called for; the market for WiFi is also only slowly opening up. Research funding for wireless technologies is pouring into Indian R&D labs, numerous wireless startups have emerged, and outsourcing of enterprise wireless application development is playing to India's strengths as a software power-house.

Culturally, Australians are early adopters of new media technologies. There are approximately 15 million cellphone users in **Australia** (more than 70 per cent penetration), far surpassing the number of landlines (10 million). Australia's vast size also has political ramifications in terms of requirements for wireless services in remote rural areas. Content and marketing services companies as well as trade associations like the





The Asia-Pacific displays a broad diversity in terms of diffusion of wireless markets and industries, over and above the existing matrix of social, political and economic diversity.

Mobile Industry Advertising Association are addressing mobile marketing strategies. An innovative urban hotzone, CitiLan, has been rolled out in Adelaide.

There is certainly a crucial role that wireless communications and mobile devices can play in a mountainous country like **Nepal**. Wireless technologies form the backbone of all major telecommunications services in the country. The private sector is becoming increasingly involved in small parts of the telecommunications environment, but the monopolistic environment continues to be a constraint. From WLL and Web-to-SMS gateways to WiFi and VSATs, the success of telecommunications in Nepal hinges heavily on wireless.

The story of Grameen Telephone in **Bangladesh** is an inspiring showcase of the fruits of mobile telephony services powered by local citizens and funded by microfinance programs. The CityCell service provider is also a mobile pio-

neer in south Asia. Grameen "phone ladies" provide villagers with a vital link to services such as calls to hospitals and to relatives both in the country and abroad, in a country with the lowest number of phones in South Asia.

4. Discussion and analysis

The Asia-Pacific displays a broad diversity in terms of diffusion of wireless markets and industries, over and above the existing matrix of social, political and economic diversity. On the one hand, markets like Japan and South Korea are at the cutting edge in terms of advanced domestic wireless industries and export of these technologies globally; on the other hand, countries like Afghanistan and East Timor are only beginning to roll out wireless infrastructure. Based on the "8 Cs" framework, the wireless environments in the Asia-Pacific can be classified into seven types, depending on a combination of factors like ICT infrastructure, political culture, and international presence: re-

Table 2: Classification of wireless environments in the Asia-Pacific

Type of wireless environment	Characteristics	Examples
Restrictive	1. Government exercises tight control over media and telecom environment 2. Diffusion, awareness of IT/Internet/mobile communications among population is very low	North Korea, Myanmar
Embryonic	1. Wireless infrastructure is just being rolled out 2. Donor agencies are active in funding and providing human resources	Afghanistan, East Timor
Emerging	1. Wireless infrastructure exists in urban areas 2. Widespread digital divide exists, m-commerce is not yet widely prevalent	Nepal



Negotiating	1. Strong Internet/wireless infrastructure exists 2. Local capacities and markets exist for online news, e-commerce, m-commerce 3. Government is “negotiating” benefits and challenges of new media; authorities exercise strong control over online content, search engines, SMS; political and cultural censorship of Internet is practised	China
Intermediate	1. Sizeable markets for Internet, SMS, wireless services exist 2. Strong local capacities in wireless software design and outsourcing 3. Digital divide is still an issue, donor agencies are active	India, Philippines
Mature	1. Large-scale penetration of Internet, wireless 2. Mature business models for online and mobile content	Australia, New Zealand
Advanced	1. Large-scale penetration of broadband and wireless Internet, as well as 2.5G, 3G 2. Some wireless technology companies are major players in global markets; wireless content models are being exported	Japan, South Korea

Source: Author

5. Conclusion

In conclusion, there are about 15 key lessons about the future opportunities and risks of the mobile ecosystem, based on the experience of Asia.

1. A tight, close-knit relationship between device manufacturers and wireless carriers is necessary to be able to rapidly and finely tune an evolving wireless ecosystem to meet the needs and aspirations of the users. This is where markets like Japan, South Korea and Scandinavia lead.

2. A progressive business model for growing high-value mobile content and applications involves generous revenue sharing on the part of the

operator, with content and application providers. Japan and South Korea again excel in this, and as a result have a very healthy and competitive mobile content ecosystem.

3. Location-based services will indeed be a “killer-app” in the mobile ecosystem, but it may actually be the enterprise market, which will be the main driver in the early stages.

4. Knowledge management and business intelligence will be key initiatives and disciplines that wireless players will have to nurture, if they expect to continually succeed at the innovative edge of the wireless race.

5. Research methods for determining metrics and monitoring



performance impacts of wireless environments ("RoI") will become more complex but will eventually improve.

6. The age of "convergent marketing" is finally dawning, as amazing synergies emerge between traditional media, the Internet and mobile communications systems – but governance approaches will also emerge to deal with contentious issues like SMS spam.

7. Some of the key disruptive technologies to watch out for include WiFi-WiMax along with VoIP, as severe challenges will arise for incumbent voice carriers and ISPs. Until then, hotspots in small locations will continue to proliferate.

8. Despite much excitement about 3G and WiFi, other wireless technologies like WLL (eg. DECT) will continue to play an important role, particularly in developing countries.

9. Despite much excitement about the prospects of 3G in many new markets, a substantial portion of mobile subscribers are still quite satisfied with basic voice and the humble SMS – though competitive pressures will make it hard for wireless operators to scale up ARPU.

10. While Asia leads in consumer mobile markets and innovation, much of this is in the domain of cellphones; the US leads in PDA adoption, RFID, WiFi and enterprise wireless solutions which expand on PC-based data and email applications (though South Korea is a notable exception and leads in mobile as well as WiFi, and smartphones blur the distinction between cellphones and PDAs). The coming decade could upset some of these trends, however.

11. The growing sophistica-

tion and "smartness" of wireless networks and devices as well as the needs of enterprise wireless integration will spawn huge markets for wireless hardware, software services and design – playing to the strengths of Asian players like India as an outsourcing hub and China as a manufacturing giant, and continuing generations of entrepreneurs.

12. Wireless connectivity and affordable handhelds offer a tantalising opportunity to bridge the digital divide and go beyond the "PC mindset" of the early generations of ICT4D practitioners. Though costs have dropped, they will need to drop even more, along with increasing availability of supporting infrastructure like electricity.

13. Regulators will face an increasingly complex task in juggling the needs and priorities of incumbent and emerging wireless operators, as disruptive technologies and blurring market boundaries become the order of the day. These complexities include creating level playing fields for operators, spectrum allocation for WiFi/WiMax, legalising VoIP, and ensuring compliance with safety and security standards.

14. Empowered users of the Internet and mobile devices will face unprecedented opportunities for self-expression, community formation, content creativity and even political mobilisation. In the 21st century, every business is a publisher, every Internet or mobile user is a reporter and photographer, every citizen is an editor, and every community is a political party. But so will government and private sector opportunities increase for surveillance and tightening of IPR; consumers too will have to become ever more vigilant about hoaxes, scams and frauds.



15. Citizens (especially youth) and employees will try ever harder to harness new media and also maintain the elusive work-life balance, opening up a wide array of research opportunities for academics and analysts on issues ranging from consumer attachment and identity evolution to productivity studies and media effects. The book in your hands is thus a notable step in this regard.

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COLBY STUART

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Review of the Summit for the Future 2006

No one really understands the real impact of social media, and yet they do understand that it is already changing the economy and the conventional business models.

Over two weeks ago, May 3-5th, I participated in The Summit for the Future 2006 hosted by the Club of Amsterdam. The theme was "Risk in Innovation and Global Growth". I played trendwatcher for the Media stream and the knowledge stream on Values & Spirituality. Throughout the conference, we had many opportunities to share in delicious conversations with people from all over the planet and from many different disciplines. We engaged in a wide range of approaches to the theme of risk.

Within the knowledge streams and break out sessions, we deepened our engagement with the theme of risk, sometimes even unexpectedly. This was very apparent in the media stream where I sat.

Jonathan Marks was moderator for the Media stream. He had arranged a line of speakers that entertained us, informed us and shared their toys. There were two presentations that raised critical issues for us.

Eccky, the game, was the most provocative because it awakened our sense of parenthood and protective instincts on a deep and personal value level. We explored this questioning with a sense of real purpose, and **Yme Bosma** responded with an openness and shared our concern. He also opened our eyes to other perspectives. The real risk here is parental engagement. How willing are we to engage in the kind of discussion with our children that establishes acceptable parameters for their behavior? Because

Microsoft is one of their investors, they are "American-izing" elements of the game for the moral driven American market. Isn't that a risk as well?

Marc Canter raised a different set of issues regarding our digital identity. He was larger than life in his beautiful bright orange shirt, and so was his thinking. He challenged us to think about who is really accountable for how our identity gets managed online. Where does the authority, authentication, and the authorization lie? It certainly opens up the discussion about companies and software with an open source strategy versus those with protectionism strategies (like Microsoft). It should be user-permission driven - but is it?

During other presentations in the media stream, we looked at the impact on future business models. With the introduction of IP TV, will viewer participation begin to dictate content and programming, much like bloggers and social media have democratized publishing? No one really understands the real impact of social media, and yet they do understand that it is already changing the economy and the conventional business models.

The knowledge stream on **Values & Spirituality** gave us an opportunity to experience an exchange in consciousness. Led by **John Renesch** and **Bill Liao**, the discussion opened up dialogue about how we manifest our engagement with risk. It became obvious that the Dutch culture is driven



by fear of risk on almost all levels. That opened a door into our personal cultures and the values that drive our behavior.

During the collective sessions during the Summit, we listened to sound bites from speakers and participants in the many knowledge streams. The real eye-opener was the disruptive behavior of interrupting the presentations with comments that people needed to share. Most of the speakers and participants accepted this with good nature and even welcomed the interaction it generated. The presentations and sessions became richer through a more interactive and less broadcast format.

I would like to see more follow up from events like this Summit. There should be a knowledge gardener and someone responsible for knitting the learnings together, sharing that and building something. What we really walked away with were new relationships or confirmations of older ones. I guess what people choose to do with that is their own prerogative.



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Risk and the Recording Industry

The biggest danger any industry leader faces today is one of complacency. Complacency causes a false sense of security, making many at the top of their companies resist change. The current era where new technologies come out on a near-daily basis makes this tendency to stagnate an exercise in futility. Instead of jumping to the immediate assumption that new technologies are potential threats, we must embrace these improvements. People at all levels of industry need to be involved in technological advancement, and welcome innovations that enter the marketplace, even if these new tools require an adjustment to their business models.

A prime example of the need to adjust to technology is the recording industry's battle against the music compression format commonly known as .mp3. .mp3, short for Moving Picture Expert Group Level-1 Audio Layer 3, was created in 1991 by a team of engineers in Germany. The format was made commercially available to the public for the first time in 1995. Music files began popping up all over the internet, as the World Wide Web gained popularity.

This led to the development of Napster. Formally introduced in June, 1999, Napster allowed users all over the world to search each other's music collections, and share songs amongst one another. Napster employees contend they had as many as 40 million users by June, 2000, although research firm Media Metrix cites 26.4 million as the

peak number of unique individuals on the service (charted in February, 2001).

Instead of examining how the sudden popularity of file-sharing could benefit artists and record labels in the long-run, the major labels (and several independent labels) opted for lengthy legal battles brought on by the various industry trade groups across the world. Lawsuits were filed against companies that created file-sharing software, like Grokster, Ltd., those that facilitated file-sharing, like Napster, and the consumers who participated in the activity. Legal wrangling resulted in the 2003 shut-down of Napster.

However, a potentially deadly consequence of these actions is the alienation of an incredibly large number of prospective customers. Sadly, a great deal of these lawsuits caused excessive grief for many innocents. Of the thousands of suits filed against consumers, many litigants named were actually people who were deceased before they could have participated in file-sharing, and others who could easily prove their innocence. In April, 2006, one suit was filed against a family that has never even owned a computer. With album sales at a nine-year low the public has clearly become unwilling to purchase music from these companies, instead becoming disinterested in much of the music produced by major labels.

As the lawsuits by international recording industry associations

Various industry trade groups over the last decade have sued tens of thousands of their own potential customers, instead of immediately examining how online music could be a benefit.

against those involved in file-sharing dominated headlines, Apple launched the I-tunes Music Store. Introduced in April, 2003, the online store proved there is at least one way to generate sales with this relatively new technology using the traditional business model the major labels operate under. Had the record labels embraced this technology in the 1990s, they could have discovered a whole new consumer base.

There is no legitimate defense for piracy, but it is most certainly a reality. These lawsuits are clearly not the way to protect profits. Further, the industry's attack on technology is not at all limited to file-sharing. In 1998, the Recording Industry Association of America filed a 1998 suit against Diamond Multimedia for the introduction of their Rio PMP300, one of the first portable .mp3 players released on the market. The RIAA lost the case, and now there are about 300 million owners of .mp3 players worldwide.

The RIAA is continuing their lawsuit-happy method of doing business, having just filed suit against XM in May, 2006. XM, a subscription-based, commercial-free satellite radio provider, is being taken to court over a hand-held device that allows users to record XM's broadcasts. The argument is that XM users have the potential to create near-perfect copies of songs, and - without paying royalties - either keep them or distribute them.

Various industry trade groups over the last decade have sued tens of thousands of their own potential customers, instead of immediately examining how online music could be a benefit. By not taking any risks over 10 years ago, the recording industry may have caused irreparable damage to itself. Accord-

ing to Reuters, despite album sales hitting a nine-year low in 2005, legal music downloads increased by almost 200%. The potential growth that could have been generated by creating legal download sites years earlier was squandered. Instead the industry as a whole chose to fight their own customers.

Sitting around a conference table identifying threats is easy. Adapting to potential detriments is the real task at hand facing all of us. Implementing change in our organizations is definitely a risk, but one we must take in order to survive in a world that is constantly developing and advancing.



SPECIAL REPORT

The Web of Entertainment

By Nitin Bhatia, Nitin Gupta, Shashi Kukar, Hedda Pahlson-Moller,
Evalueserve

By redefining the way people receive and distribute information, the Internet has provided a new dimension for people to express themselves freely. This has been further facilitated by tools such as Blogs and Podcasts, which enable people to share their opinions, ideas, etc., without bothering about how to reach the end audience. The Internet has acted as a catalyst for the development of new means of entertainment, such as mobile phones, IP TV, online games, iPod, etc. Today, it has become an invisible web woven around our lives on which we depend for all our requirements, whether it be entertainment, information or communication.

In today's fast-paced times, where we juggle with the myriad demands of our personal and professional lives, where there is hardly any time to "stand and stare", stress has become a part of our day-to-day lives. And this is primarily the reason that entertainment has gained prominence like never before. The media and entertainment industry today is booming and there are opportunities galore. Technological innovations in this sector have completely re-defined the parameters of entertainment.

Till a few years back, newspapers, magazines, journals, radio, television, and cinema houses were the primary means of mass communication and entertainment. However, the advent of Internet and the increased availability of broad-

band has revolutionised every aspect of our lives. According to research by eTForecasts, the number of Internet users worldwide has increased from 420 million in 2000 to 1 billion at the end of 2005, reaching 15.7 percent of the world population. By 2011, the number of Internet users is expected to reach 2 billion, accounting for 30 percent of the world population. The growing popularity of the Internet and broadband has compelled people in the traditional media to re-think their future strategy. One of their major worries is the rapid onslaught of online advertising, which is threatening to divert advertising revenues generated through traditional channels, such as the print media, radio and television. According to a study by Outsell, a California-based research firm, spending on online advertising and advertising on search engines is expected to grow at 19 and 26 percent, respectively, in 2006.

Although online media poses a threat, it also creates opportunities for the existing channels to better understand the tastes and preferences of their audience. In order to safeguard their present and future revenues, the traditional media has become very proactive, targeting the online audience with niche offerings, hitherto unheard of. This is best illustrated by publications, such as The Wall Street Journal, The Financial Times, The Washington Post, etc., which have beefed up their online presence. The online channel complements their print offerings, ensuring



that users do not shift loyalties to their competitors. However, every threat holds an inherent opportunity, and this is truly applicable in this case. By pricing their online versions aggressively and offering a plethora of advanced features, these publications have managed to turn the tide in their favour. While The Financial Times claims that it attracts about 3.7 million users to its site every month, The Wall Street Journal claims that it was visited by more than 700,000 paying users in 2005 alone, making it the largest subscription-based paid news site online. However, it still remains to be seen whether the traditional media is able to defend its classified advertising revenues from the new age Web companies, such as Google, Yahoo, etc. According to the Boston Globe website, this market is currently estimated to fetch annual revenues in excess of USD 150 billion.

The increasing use of Internet has also created a strong demand for new content, which is partly being met by the users themselves. Modern technology has made it possible for people to create and distribute content over the Internet. New tools, such as blogs and podcasts, allow users to share their ideas, opinions, feelings, etc., with others more rapidly and cost effectively. Blogs serve as an online diary, allowing the author to voice his/her opinion on any topic, share experiences or write creatively without having to chase a publishing medium to get the message out. The popularity and impact of blogs can be gauged from the fact that they were used as a medium to spread messages of hatred and intolerance in the recent French riots. Podcasts allow users to publish and distribute audio content over the Internet. These podcasts can be easily downloaded on to a

computer or on a personal music player. An article published on BusinessWeek online states that the tool is becoming so popular that it was recently used by a prominent French political party to address the ever-expanding online audiences. And the effort did not go to waste! The podcast attracted 50,000 viewers.

The Internet has not only impacted the way people gather and spread information, but has also changed the way they entertain themselves. The advancements in IP technology and the advent of broadband have helped transform the PC - hitherto known to be associated only with work and office - into a full-fledged entertainment provider. TV broadcasters are facing new competition from ISPs, who have started offering a number of TV channels over their broadband networks by teaming up for content with leading production houses. The escalating demand for advanced services and increased competition has led to the creation of new means of entertainment, such as satellite radio, mobile phones, video iPods and software, which allow users to upload/download audio content over the Internet. All this has led to the mushrooming of the mobile content market over the Internet, which is not just limited to the download of polyphonic ring tones and wallpapers, but also includes music, TV, games and other software that was available only on a PC a few years back. Research from LogicaCMG predicts the global mobile content market (including ring tones, wallpapers, games, etc.) to reach EUR 7.6 billion by mid-2006.

As a result, many new devices have evolved over time and include features that were once unimaginable. The ubiquitous



cellphone was only meant to ease communication and make people more accessible. However, in today's times, communication is just one of the many purposes that a cellphone is used for. The modern cellphone acts as an entertainment device by combining features such as mobile television, gaming, radio, and support for audio and video content, into a single device. Today cellphones are equipped with a large memory chip – similar to the hard disks used in computers – allowing users to store a large amount of information on their personal phones. In Europe, mobile operators are trying to lure customers by providing differentiated offerings such as Mobile TV. A company called '3' launched a mobile TV service in October 2005, while Vodafone launched its mobile TV service for its European users in December 2005.

The easy availability of mobile content has also brought a fresh lease of life into the portable music player market. One such example is the launch of Apple's iPod, which has seen tremendous growth in popularity, especially among the youth. Recently, Apple launched an iPod version that has the ability to store videos, photos, etc. The company registered a 207 percent increase in sales of iPods, which increased from 4,580,000 units in Q1 2005 to 14,043,000 units in Q1 2006. Realising the market potential for such devices, Sony recently launched its Walkman range of phones, which are capable of storing a large amount of data, i.e., music, games, etc., over a memory chip. Many other cellphone manufacturers are expected to launch similar devices in the near future.

The media and entertainment industry is thriving and the potential is literally as diverse

as the thought processes of marketers, innovators, content developers and telecom operators. The advent of new products and technologies creates immense opportunities for expansion and innovation. One such innovation is Blogs, which is expected to become a primary medium of public communication as major news portals, news sites, entertainment portals, gaming sites and others continue to launch them. They will complement the information in print media and would provide users a different perspective based on views of the online audience. The print media will continue to be preferred wherever factual information is required and the authenticity of information needs to be proved. Blogs would prove useful for marketers and producers seeking to gather feedback on their products and services. Recently, marketers have started tracking blogs to study consumer experiences with new products and services. This is expected to become a major tool for them in the near future and might impact the launch and market strategy of new products and services. Subject-specific blogs, similar to chat rooms, will also become widespread, enabling marketers, etc., to refine their search.

The growing popularity and increasing user base of the Internet will also result in the print, radio, and television media becoming more aggressive and targeting users through various means, such as portals and mobile content to retain their user base. In 2005, BBC entered into an agreement with ROK player to distribute its mobile content to mobile users. Similarly, CBS partnered with Google in February to distribute its video content over Google's Video Store. Production houses and television channels are ex-

pected to work in close tandem to produce exclusive content that can be distributed over IP TV and mobile phones. This is expected to further induce people to opt for mobile TV and IP TV subscriptions, which are already gaining popularity in Europe. A Screen Digest study forecasts European broadband TV subscribers to grow from the current 0.6 million to 8.7 million in 2009.

The demand for content and the need to bring innovative offerings to the market might also result in an increase in the number of mergers and alliances between different content developers, production houses, broadcasters, etc. This will encourage competition and lead to the creation of an oligopolistic market, where the consumer is, in fact, the King.

Summary

The growing stress levels have increased the significance of entertainment like never before. This has been further facilitated by tools such as Blogs and Podcasts, which enable people to share their opinions, ideas, etc., in a fast and cost-effective manner. There was a time when media and entertainment were restricted to newspapers, magazines, journals, radio, television and cinema houses. However, the advent of the Internet completely changed the way people receive and react to information. It gave ordinary people the opportunity to share their ideas, experiences and opinions with others sitting across the globe. The growing popularity of the Internet created demand for fresh content. A part of this demand was met by the users themselves through tools such as blogs and podcasts. While blogs allow the author to voice his/her opinion on any

topic without having to chase the conventional publishing media, podcasts allow users to publish and distribute audio content over the Internet. Both these mediums are becoming increasingly popular among the online audience and are expected to play a more crucial role in the future.

The Internet not only helped people express themselves more freely, but also led to innovations in technology. Today, it is being used as a medium to distribute video, audio, games and other types of entertainment content. The availability of new content over the Internet will provide a boost to the IP TV market in Europe, which, is currently in a nascent stage.

Competition and advancements in technology have also led to the introduction of new gadgets, such as advanced mobile phones, iPod, etc. These gadgets further provided an impetus to firms engaged in creating and distributing mobile content. Today, the mobile content market is not just limited to ring tones and wallpapers, but includes mobile TV, audio and video content, games, software, etc. The ubiquitous cellphone has now become a complete entertainment provider. The latest trend is airing TV programmes on 3G mobile phones.

With such exciting developments taking place, the future no wonder will have many surprises in store. For instance, blogs will complement topics published in the traditional media and will provide users with a different perspective based on the views of the online audience. They are also expected to be used by marketers to gauge consumer behaviour. The print media will become more aggressive and try to retain users by making its presence felt more strongly by offering in-



novative services. All these developments are likely to benefit the consumer making him 'the king'!



Trade - Asian Leadership



... India requires longer-term view while in China a quicker reaction pattern is realistic.

OEBELE BRUINSMA

Knowledge Stream Leader Trade - Asian Leadership
Founder & Partner, Synmind bv

Summary: Trade - Asian Leadership

Offshoring India

The overview of the different modalities of offshoring in India was placed in the context of the status development of India from a developing country (as recently as 1991 it was virtually broke) to a modern developed and industrialized country catering for more than 1 billion citizens.

The IT and now electronic equipment making industries have transcended the states of low sophistication: entry data to transactional processing to customer care to engineering to end-to-end engineering: a state of high sophistication. Despite this evolution, comparison with a neighbouring case China reveals striking differences in approaches to offshoring and related activities.

These differences have been caused by the different influences of the constraining ecosystems the offshoring developments have experienced.

- In India the dual problem of complex bureaucracies, covering both internal (operational) problems and external (import/export) issues. In addition the lack of infrastructure and drive to deliver quality products (except IT products) has placed brakes on the speed and the direction of the intended development.

- In China based on a manageable bureaucracy and a relative open border policy combined with massive infrastructural investments

propelled China far ahead.

- In China and India the huge internal markets continue to provide market opportunities for action takers.
- India requires longer-term view while in China a quicker reaction pattern is realistic.

Due to the different basis on which Indian and Chinese professionals behave and integrate in US and EU societies, returnees will differ in their entrepreneurial approaches further amplifying the differences between the two powerhouses.

Partnerships

Different ways of entrepreneurial co-operation have different codes. One of these codes is Partnership - in other words customized relationships. Most of such partnerships are not successful 83 % fail in a certain degree, while 27% of these fail in a catastrophic way.

It is thus wise to start a partnership on the basis of well-defined goals and basic rules. In addition the different time perceptions of both partners should be vectored in the equation. The partnership goals and rules should be transmitted to the various locations through "ambassadors".

Methodologies exist to measure beforehand on a scaled basis, relevant variables of such relationships. These will translate such variables into actions to counteract negative development.



Given the success rate of partnerships it is not considered as a fast track to commercial success.

Impact of Open innovation processes

A number of painful aspects of the classic closed patent based innovation process have been highlighted. Piracy, leverage of trade over aid, adverse human behaviour.

The origins of patents, wise at the time, is being questioned based on the ability of man, especially in the IT and media business to clone/copy/adapt patented or otherwise registered products. Again this is the painful (for the developers) side; the opportunity side is that allowing potential competitors/pirates in co-developing novel or less novel adaptations can be a very profitable undertaking. Examples are already emerging in China with very cheap DVD clones (legal) from recent movies or media productions. The business case is less profit per sold (cloned) unit but large-scale unit sales of which through co-development/partnership arrangements part of revenue streams will end up with the original developers.

Trade and transport

Despite anti-globalisation opposition massive international containerized trade streams provide for jobs and satisfaction by the tens of millions. Imbalances of such trade streams may look inefficient and in effect they are. Its consequences are considered minimal (a few shipping lines going bust). The impact of massive trade streams has reduced the cost per shipped good unit to an all time low. So far so good - at least for quite a few. Developing customer taste, personalizing and sophistication probably will change the trading streams

to a more balanced pattern. Nevertheless geographically unfavoured nations/locations will have to face a transport price penalty. Anyway the appreciation of the negative effects of these massive trade streams is more based on the leverage powers of running wild consumerism than on the rather primitive way of using (transport) technologies.



DAVID BUTLER

BA, FRSA, Chairman, Leadergen, Director, DSA (Singapore)

Partnership: A 21st Century Imperative

Some words develop a life of their own, loaded with values that surpass their dictionary definition. 'Partnership' is just such a word. To some people, including many of those interviewed in recent research, partnership is an inspiring ideal. Two phrases that surfaced again and again as we interviewed senior managers were 'win-win' and 'shared objectives'. The partnership ideal encourages different enterprises to work together with openness, mutual trust, with shared aims and shared methods of communication and control. It is hardly an exaggeration to claim that in some hearts partnership has a quasi-spiritual significance. To others, the partnership ideal is a snare and a delusion. To them partnership is a smoke-screen. It is a ruse that suppliers employ to get customers to lower their guard and suspend their usual caution when dealing with ambitious salesmen.

The negative values associated with the idea of partnership originated in the ICT industry. During the last decades of the twentieth century, computer devices of all kinds – memories, servers, desktop and laptop computers, printers, screens – were rapidly becoming commodity products. Premium prices based on superior technology disappeared into the past. Many vendors set forth to make the tricky and perilous transition from being sellers of technology to being providers of service. In their new role they found relationships with customers to be of vital interest. The

strategic partnership was the chosen vehicle through which such relationships could be cemented. What lay behind the veil of partnership was often little more than an ambition to prop up sagging sales figures. No constituency bristles against the word 'partnership' with deeper and more understandable hostility than the IT directors who were the targets of such veiled sales campaigns. When outsource contracts failed (as they sometimes do) to deliver on promise, these same IT directors were also the victims. They can be bitter.

In recent years the concept of partnership has been derogated in other ways. Globalization means that companies are now at liberty to partner with others across geographic boundaries. If my operation is based in London or New York and yours in India or China, maybe we can cooperate to both our advantages. Very many of these global partnerships have taken the form of outsource contracts, and have provoked controversy on two fronts. Critics like Naomi Klein¹ see globalization as a mechanism by which powerful companies dupe their customers with fancy brands, inducing them to spend money they can't afford, while at the same time they exploit cheap labor in the developing world. Offshore development can also easily be depicted as unpatriotic. In the recent US presidential election, the issue of 'exporting American jobs' became a live one.



If we added up the total volume of world trade that can reasonably be described as partnership-enabled, a high percentage of it today would be accounted for by offshore outsourcing, companies transferring back-office functions to territories made attractive by lower labor costs.

TRADE - ASIAN LEADERSHIP

Yet the concept of partnership is nothing if not durable. Anne Deering is a Vice President of the international consulting company A.T.Kearney. With Anne Murphy she co-wrote the book *The Partnering Imperative*. The book² explains convincingly why partnership is a key concept in the developing world economy and how important it is for ambitious companies to be good at partnering. The graph below, reproduced with kind permission from Anne Deering, shows that companies who demonstrate excellence in partnering can out-perform the stock market average for their sector by a margin up to 40 percent. This is a claim no CEO can ignore, however hard-headed and cynical a view of partnership he may have been predisposed to take. Instead I propose to take a balanced and objective view of partnership. If partnership has been a trap for the unwary, how can we prevent that mistake being made again? If the loftier aims of partnership have been unrealistic in the past, how can we work to make them a feasible ambition?

The issues surrounding partnership are also set to become more complex, more demanding of serious solution. If we added up the total volume of world trade that can reasonably be described as partnership-enabled, a high percentage of it today would be accounted for by offshore outsourcing, companies transferring back-office functions to territories made attractive by lower labor costs. But this situation, fuelled by cost reduction, will not persist for ever. The demand for skilled labor in India, for example, is already driving wage costs up. Alongside higher wage rates goes a much higher rate of volatility. In some areas the attrition rate for employees is 20 percent per annum. An

appeal to customers based exclusively on wage arbitrage is in the end a self-defeating proposition. As it succeeds, so it sows the seeds of its own destruction and the business moves elsewhere until 'elsewhere' becomes uncompetitive too. All the Indian companies who have made a successful business out of offshore outsourcing know that their destiny lies in the more ambitious expedient of Business Process Outsourcing (BPO). Instead of just handing over prescribed packets of back-office work, the customer hands over the whole of a specified business operation, such as accounts receivable or logistics. Don't just do my back office work, be my back office. In a way, the outsource providers are seeking to make the same tricky transition from product suppliers to service operators that Western hardware vendors began a generation ago. It may prove just as costly and demanding. On at least one score, the loftier view of partnership turns out to be more realistic. Hard-headed critics like to pretend that when a partnership deal goes sour, it is because the price for participation turned out to be too high or the contract was too weak or the attendant Service Level Agreements (SLAs) were too fuzzy to be enforced.

Experience shows this view to be of very limited truth. Of course the detailed apparatus of command and control must be put in place. The contract must be carefully drafted. The clauses for escalating disputes must be precise and workable. It is also our finding that when a partnership is in trouble, it is at the operational level that problems first appear. But all our evidence suggests that this control apparatus falls into the category of necessary but not sufficient to ensure suc-

cess. If this control apparatus is weak and imprecise, it can undermine a partnership. But however precise and strong it is, it will not itself guarantee success. Failures come when hearts and minds no longer accord. 'These are not the people we took them for.'

¹ See Klein's book *No Logo*, Flamingo, London, 2000

² John Wiley, Chichester, England, 2003



MARTIN HERZOG

Philosopher Catalyst in the Knowledge Stream Trade - Asian Leadership
Philosopher, Brainworker's Online-Journal des Wissens

Trade - Asian Leadership

The **CLUB OF AMSTERDAM** is an international think tank which reflects our future: How we want to live, communicate with each other and what tools and cities we need, how we want to commute and how culture or industries should develop. In short: **what we want our future to be.**

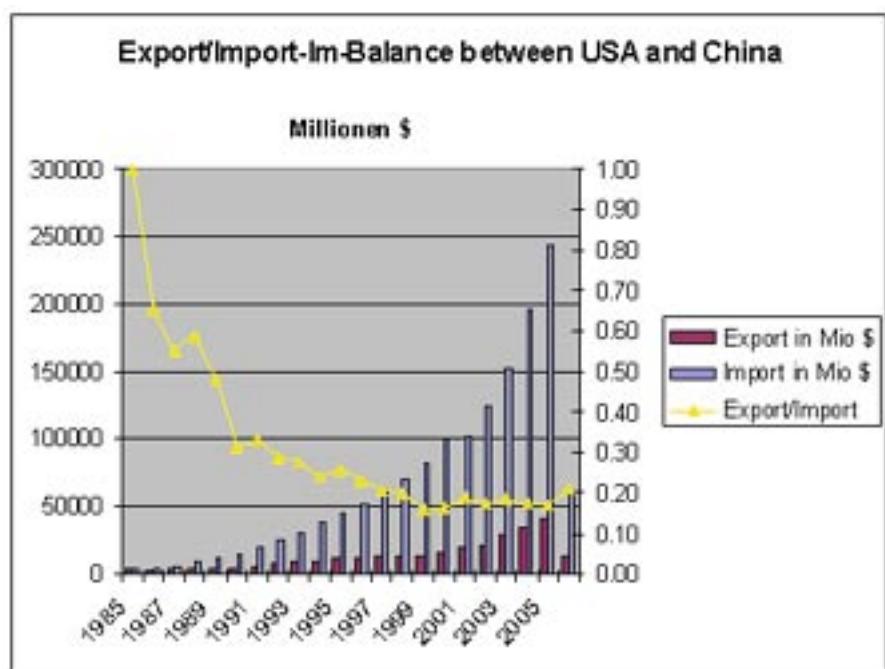
The meeting brought a lot of interesting input, many contradictions and little synthesis. So was the main insight of the group: trade - Asian leadership on Wednesday (5.3.06):

India and China are not only risks, they will not only export cheap goods and services - but they are at the same time huge new markets for our exports.

While on Thursday it got clear, that:

Ships from China to the USA are full, the opposite way empty. The costs for a container from China is between 800 and 1400 \$, to China half of that. And still there are large areas excluded from those lucrative potential.

As example Soeren Jacobsen mentioned the apple producers of Georgia. The price they have to pay to bring their apples, or apple juice, to the port, is almost higher than the world market price for those "commodities". That means that **all land-regions are heavily discriminated in the world trade.**





TRADE - ASIAN LEADERSHIP

Because the USA and Europe still think they are the center of the world, this is seen as a problem, while the fact, that China itself has quite a balanced import/export sheet, while Germany exports much more than it imports, while the USA import much more than they export (Not just because of China).

Not only here, but in the whole discussion about Chinas influence on the world market, the complementary and in each economy necessary second part of trade, the flow of money, has been totally neglected. It is well known, that China buys a lot of dollars and has enormous stocks of foreign currency, a) not to have to Dollar dropping too low, what would make exports more difficult, b) to secure its own rather shaky banking system. That means that Chinese workers paid so far the credits for the US-war in Iraq, as well as for over consumption in the USA. Considering the money flows we might even say: China exports goods – the USA exports wars.

For a detailed analysis see:
From "Economy of Power" to a sustainable "Wise Economy".

www.brainworker.ch/Wirtschaft/summit_for_the_future.htm

Think Clubs: Show, awareness raising or propaganda?

The meeting was good. Many different and often conflicting interests, matters and people met and discussed openly. Some found e.g. the PR-show for business of Richard North disgusting – others e.g. the idea, that partnership is something that should be managed by computers and checked for profitability (David Butler) – who himself found the final comments of the psychologists

(more spirituality is needed) as very much unfit to be brought up in discussions with economists.

Glen Hiemstra's teleported message showed, where the controversy seems insurmountable. His presentation summarized as the main problems we should solve in a not too far future:

- 1. global warming**
- 2. global poverty**
- 3. religious conflicts**
- 4. lack of positive ideas**

I do share that view, but would put point 4 first, because, as Alice was told in wonderland:

If you don't know where you want to go, don't ask for the road! Global warming is obviously for many business minded people, what is the red towel for a bull. Global poverty not their problem, religious conflicts neither, and they would never complain about a lack of positive ideas, as long as it is possible to make money with some ideas.

The major critique of the show would be, that it is really difficult to get an overview. For this we should not be content with the few glimpses we got here in those few days. All participants just got a partial, so lopsided insight, as there have been 5 knowledge streams and 5 interdisciplinary streams, and I did not meet one participant, who really had an overview. To really use all that knowledge presented in such a meeting efficiently, a better knowledge distribution and knowledge management would be needed:

A) **De-personalize knowledge** into arguments, make it more objective and discussable.

The presence of well known prominent persons, the presentations by "authorities", out-



So far all knowledge has been considered as Goods gift and could so not be sold. In the future it has to be regarded as a source of profit and to be managed under this perspective.

[Charles Kleiber, Swiss state secretary for education and research in: *Le Temps*, 11.10.1999]

Totally opposing views have to bang together, and they do that only in open meetings ...

standing persons, leaders, even "idols" is probably the major attraction of such a meeting, but for further discussions all those personal opinions, personal convictions and personal knowledge would have to be de-personalized, that means, to be rendered more objective, to be discussed. This is needed, as learning means to integrate new knowledge in ones old system of knowledge. To be able to learn, one has to think, not just to listen and to see. And thinking means to evaluate the new knowledge after ones owns values and priorities – without "bending" it. That would be propa-ganda.

B) Present knowledge in a multilevel-multicompartiment - but one world - presentation model. Details s. web-philosophy www.philosophypathways.com/newsletter/issue103.html in engl.; www.brainworker.ch/wald-philosophie/web-philosophie.htm german original]

Many times during the meeting I asked myself, what is the main target, what is the function of something like the Club of Amsterdam? Is it awareness raising, networking, knowledge seeding, thought processes, black box, think-show ... or just a show? The first impression one gets is: propaganda. All the time someone is promoting the idea, that "*trade is better in solving problems than the government, or development aid e.g., because each donor tries to influence the receiving nations politics. Private business is by far more efficient.* ...

Only a few days later, back in Switzerland, I understood the big advantage something like the *Club of Amsterdam* has over Universities and standard think tanks. The problem of universities, research and schools (higher and lower ones) is, that they compartmentalize knowledge. The taught and sold knowledge is so one-sided, that the holes in this knowledge cheese are much bigger than the real content. To fill those holes all kind of "lateral" thinkers, as those met the meeting, are indispensable. Totally opposing views have to bang together, and they do that only in open meetings as the discussed one, they rarely do at universities, even less at schools, and not at all at think tanks, that are mostly bound by a specific ideology, be it politically right or (no, not wrong) left.

Why do we produce cheesy knowledge (a fact that does not only hold true for Switzerland ... Well, even most of the famous Emmentaler is nowadays produced in Holland ...)?) One reason is **specialization**. No specialist accepts interference by no-specialists, and few try to interfere with the specialties of the others. That means, nobody has an overview, as claimed up). Every specialist estimates his specialty to be the most important, interesting, future oriented, and each specialist wants to control discussions in his field. **Wiseacres always intend to control results and decisions**, what leads to lacking democracy, lacking information of others – so lacking knowl-



edge on their side and lacking acceptance for the strongly needed participatory planning on all levels of society.

Open discussions as we had it at the *Club of Amsterdam* would be of utmost importance in Switzerland as well, but business runs here its own propaganda-shop, called *economiesuisse*, classified as think-tank by the organizers; while the counterpart, the socialist party, runs a think-grid ... that produces not much more than applications of the old ideological views from their side.

Even at Amsterdam one had to accept to be constantly bombed with balderdash against the government and rather stupid eulogies of the rich – but on the other side “very old business experts” got disturbed by the opinions of philosophers and sociologists, reminding them of the not neglectable importance of spirituality, society and natural environment.

Incredible differences in thinking bang here together – and the astonishing thing is, that still some productive discussions prove possible.

Ideological exclusion of certain ways of thinking turn each think-tank to a botchtank – no difference if social thinking, and the inclusion of nature in the thinking system is excluded from the right side, or if economic thinking is excluded from the left side.



RALPH FRELINK

Psychologist Catalyst in the Knowledge Stream Trade - Asian Leadership
Founder, Centre for Holistic Inquiry

"They think the unthinkable and do it." – Summit Quote

We gathered for three days from all over the world to talk about the future. What did we take home? The Summit of the Future dealt with the future of risk. What is risk? How do we relate to risk? And what does risk have to offer us? In three days we exchanged a wide spectrum of opinions and perspectives. In this report I would like to explore risk from the psychological perspective of letting go.

What is the future of risk? I believe it has everything to do with the risk of letting go. Letting go of those things that we wish to control and change. Letting go is not about indifference, nor is it a form of negligence. Letting go has to do with a new form of leadership that is emerging. It's about the ability to surrender to the process of self-organisation, without trying to impose change on the world. We have a chance to create the future, but in a way that is in alignment with the forces that permeate and encompass our lives.

Letting go is a subtle way of dealing with the future. When we learn to let go we are actually bringing something qualitative forth. With this unnameable quality in our midst, we can learn to organise things in a way that we can never achieve on our own. This new awareness is dawning globally, and has everything to do with rising need for spiritual inquiry on an individual, collective and systemic level. Through inquiry we can learn to notice the subtler, less tangible aspects of reality,

which, once noticed and acknowledged, can radically shift our quality of life. We can then learn to enable this process of self-organisation and bring forth a more coherent world.

Sounds like fiction? In actuality our mode of consciousness is still in the way of this potential, but people are gradually opening up to it as the pressure of our global crisis intensifies. It is obvious that we can't create a new future together, when we don't engage on a deeper level and truly learn how to think and act together. We have to sit down to inquire, share and build community. We need to clear the surface and adopt a beginner's mind to look at ourselves and the world afresh.

A word much used at the conference was 'dialogue'. This expressed a deep need among the participants. A discussion is about convincing the other of our viewpoint. A dialogue is about suspending our viewpoints and reaching new ones together. Dialogue facilitates social learning and brings about the change that we are looking for. In dialogue a kind of change emerges that we can actually 'be part of'. The problem is that most change has to happen 'out there', which is a kind of change that we can't be part of. This is one of the illusions that requires our surrender.

A conference facilitates conversation, but most of the dynamics that take place in these conversations, remain unknown to us. With dialogue we can learn to consciously



reveal and utilize the hidden dynamics of our interaction. This process provides us with the unique opportunity to bring these dynamics into the light of our conscious experience and bring about change. Dialogue is not about a perfect conversation, because breakdowns and breakthroughs play a determining role. In dialogue we can discover a new collective potential. A way of relating that brings not only understanding, but also connection, openness, cohesion and innovation.

The dilemma of our present situation, as we globally try to address the issues of poverty, diseases, climate change, etc., is found in our responsibility. At the Summit for the Future there is also talk about others, referring to people in places of power that just won't change despite the odds of our global predicament. Questions like: How are we going to get them to change? How come they don't change their way of doing business? John Renesch, one of the keynote speakers, said that we give too much legitimacy to the current systems. We are literally giving our power away. We project it upon other people, the current leaders, in a negative or positive way, and disown our personal power.

If we begin to own our powers then all the systems will change as consequence. There is nothing out there that needs to be changed, other than the change that will arise and manifest as a result from our own transformation. What this requires is the spiritual faith and courage that will take us to the next level. Dialogue can offer a way forward to bring about change that matters. Together we can pierce through the illusions that sit in the way of our true potential and make creative decisions for the future. This can become a living expe-

rience that changes our understanding and perception.

It is obvious then that the future will be less about individual ownership and more about open source innovation, collaborative ownership and co-creation of our products and services. We will find alternative methods of compensation and deal with the issues of intellectual property right and patenting. We will begin to understand that money is not a problem. It is the consciousness that invests the money that causes the problem. Money is an aspect of consciousness externalized. It is a healthy means that unfortunately has become the single focus of unhealthy human endeavours.

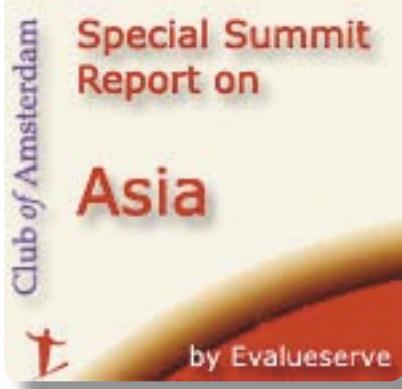
Money essentially expresses the flow of exchange between human beings and moves with our actions. It does not exist on its own, so therefore we can determine the way we utilise it. We don't have to let go of money, but we have to let go of the illusion that pursues the money and invest in a more conscious manner. This will lead to more quality, value and exchange in which money can play a functional and determining role.

If we let go, we give space for something new to arise. We give the processes of nature a chance to work for us in an unprecedented way, if we give ourselves a chance to work for nature. Together we can learn to shine as one. From this place of openness it is not hard to begin to see that what we give is what we receive. However this can only be understood through experience. Dialogue is such an experience in which we can discover the beauty, unity and brilliance of a world that is already together and whole.

Maybe 'letting go' will be the new core business of all organi-

sations. It will be the source of all creativity and innovation. Because if we let go, we also let come.

Is this the unthinkable future of risk?



SPECIAL REPORT

Asian Leadership in Trade and Associated Risks

by Evaluerseve

Asian Leadership in Trade and Associated Risks

World Trade: Emergence of Asia

Asia's journey from the 1997-98 financial crisis to being one of the world's most dynamic regions in terms of trade, development and investment activity, can best be termed as a 'Renaissance'. The world's centre of economic gravity is shifting towards Asia, as it currently accounts for 27 percent of international trade. This growth is mainly driven by the exemplary performance of the emerging Asian countries, including China, India, Hong Kong, Thailand, Malaysia, Singapore and Vietnam. The share of these emerging Asian countries in world trade increased from 13 percent in 1990 to 20 percent in 2004.

The Asian region is gaining significance in merchandise as well as commercial services trade. Asia's share in world merchandise exports and imports stands at 26.8 percent and 24 percent, respectively. The value of Asia's merchandise exports and imports shot up by 25 percent and 27 percent, respectively, in 2004. The growth in exports from the region can be attributed to strong demand from the US, and intra-Asian trade, stoked by a recovery in electronics trade.

Exports of commercial services increased at a fast rate of 27 percent in 2004, while imports were up 25 percent during the same period. Asian countries, such as India, China and the Philippines, are the most

preferred destination today for outsourcing of business services, such as transaction processing, customer care centers, medical transcription, IT services and application development, high-end analytical services, R&D services, etc. Other commercial services, such as transportation services were strong in 2004, while travel receipts recovered by 31 percent during the year from exceptionally low levels in 2003 (due to the spread of SARS).

Intra-regional trade as a share of total trade went up sharply to 41 percent in 2004, primarily due to intra-industry trade as a result of greater vertical specialisation and relocation of production processes. This is evident in the electronics sector, where capital intensive processes (like production of microchips) are carried out in high-income economies like Singapore and Korea, and labour intensive processes (like assembly of personal computers) are located in low income countries, such as China. Asia has integrated into a global production chain with some cities like Hong Kong and Singapore becoming the hub of manufacturing and trade.

The dynamics of growth and development in Asia is a perfect illustration of how countries have used trade as a means of achieving greater degree of integration with the international economy. Region-specific factors have provided the stimulus for this growth.

Growth in Central Asia driven by energy sector

Central Asia witnessed an over-

China has become the world's third largest merchandise trader after Germany and US; it is also gaining a substantial share in business services outsourcing.

all increase of 39 percent in exports in 2004, with the energy sector acting as the main growth driver. Kazakhstan, where substantial FDI has developed the oil and gas sector in recent years, accounts for about 60 percent of the aggregate exports of Central Asia. A notable feature has been the growing strength of the Kyrgyz Republic, Tajikistan and Uzbekistan.

Structural reforms and booming manufacturing and services sectors drive South Asian economies

South Asian aggregate GDP grew by 6.4 per cent in 2004, with economies reflecting the impact of structural reforms, stronger domestic demand, stable exchange rates, high reserves and improved current account balances. Improved performances in manufacturing and services gave the sub-region, particularly India, one of the best economic performances in recent years. Measures such as construction of a pipeline to transport natural gas from Myanmar via Bangladesh to India reflect the steps towards economic integration that drive growth.

Consumption growth and business investment drives growth in Southeast Asia

With an economic growth of 6.4 percent in 2004, Southeast Asia experienced a pick-up in exports, which was particularly robust in Cambodia, Malaysia, Singapore, Thailand and Vietnam. The developments that augured growth in for the sub region have been the increase in consumption, upturn in electronics cycle, public infrastructure investments in Thailand and Indonesia, improvements in FDI flows, and growth in business and investment climate in Singapore, Malaysia and Thailand. There has been

an upsurge in business investments following reduced political uncertainty because of peaceful elections in Indonesia, Malaysia and the Philippines.

China fuels growth in East Asia

The East Asian countries have contributed tremendously to world trade in recent years. The expiry of textile and clothing quotas has allowed China to gain a substantial share of 25 percent in both the US and EU textile imports in 2004, up from 17 percent a year ago. China has become the world's third largest merchandise trader after Germany and US; it is also gaining a substantial share in business services outsourcing. Increased FDI investment, improved infrastructure and declining import tariffs are driving growth in the economy. Korea is benefiting from the upturn in demand for electronics and motor vehicles. At the same time, the Japanese economy is showing signs of recovery with the end of deflationary pressures and continued financial restructuring.

These locomotives of growth have shifted the focus of world trade towards Asia. However, the opportunity is also coupled with risks that the Asian region is subject to. These risks can be major hurdles to the future growth and development of business in the region.

Risks to Trade in Asia

Asian economies being net importers of energy, will be hard hit by a rise in global oil prices. Crude oil prices have more than doubled since mid-2002, breaching USD 59 per barrel in November 2005. Asian economies are more vulnerable to such global oil price increases as they are manufacturing-intensive and, thus, highly dependent on oil. Asia produces

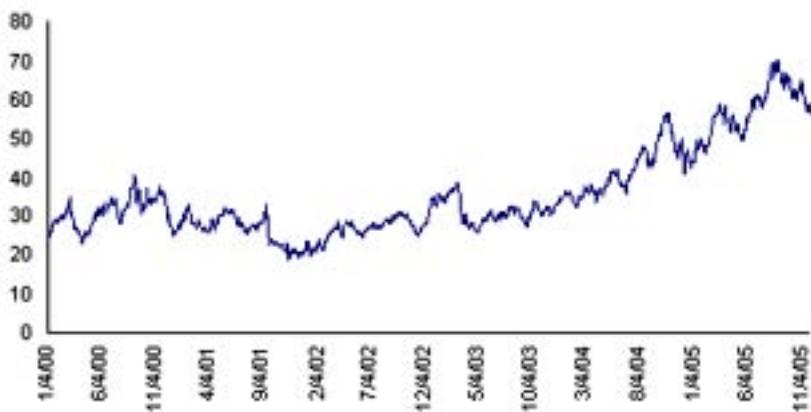


about 11 percent of the world's crude oil, but consumes more than 20 percent. This region (excluding OPEC) accounts for

Infrastructure gaps exist in growing nations in Asia

While their economies are

Figure 1: Oil Prices Development



Source: Bloomberg (Brent Chicago Delivered Crude Oil Spot Index Price)

roughly 80 percent of oil imports by developing countries, and is also the region where the ratio of oil imports to GDP remains the highest.

According to estimates, a USD 10 increase in oil prices for one year will reduce growth by around 0.8 percent. Higher oil prices have generated trade losses of 0.7 percent in 2004-05 in East Asia and 1-2 percent per year in net importer countries like the Philippines and Thailand. Countries like Indonesia, the Philippines, Malaysia and Thailand, which subsidise fuel costs, are facing big budgetary deficits. Another steep rise in oil prices would dampen export growth from Asian countries and amplify inflationary pressures.

The macro-economic performance of the region can be affected by transfer of income from oil-importing to oil-exporting countries, higher costs of production, and lower real incomes, which can further depress domestic demand and lead to rising unemployment.

growing rapidly, emerging Asian countries still face a major challenge in the provision of infrastructure. The resulting infrastructure gap, particularly in electricity, transport, telecommunications and water supply, threatens efforts aimed at reducing poverty and improving trade and investment facilitation. According to UNESCAP, East Asia has a massive need for infrastructure, amounting to USD 200 billion per annum for the next five years. Some 65 percent of this will be in the form of new investments and the remaining on maintaining existing assets. In addition, there are large unmet infrastructure investment needs in South, Central and West Asia. Infrastructure requirements for India are estimated at USD 27-45 billion per year over the next five years. Lack of infrastructure might restrict further flow of funds and prevent companies from off shoring/out-sourcing their activities to the Asian region.

Inflation and interest rate rise would aggravate debt servicing burden and discourage invest-



ments

Inflation in some economies has been triggered by rising oil prices, and this might lead to severe inflationary pressure in the future. A sustained rise in inflation gives way to higher interest rates, thereby making the economies vulnerable to rising debt servicing burdens, possibly leading to an increase in default rates in some countries. Many countries in Central Asia, and some in Southeast Asia, might experience this phenomenon as they run high levels of external debt. An increase in interest rates might alter the consumption and savings behaviour of the people, thereby negatively impacting business and investment of non oil exporting economies.

Exchange Rates volatility hinders private capital inflows

The varying degrees of volatility in cross currency exchange rates can widen the trade gaps and pose a threat to financial stability within the region. During August 2004-March 2005, a number of regional currencies appreciated significantly vis-à-vis the US dollar, with the Korean won rising by about 15 percent, the Taiwanese dollar by over 9 percent, and the Thai baht and Indian rupee by 7.5 percent and 6 percent, respectively. A depreciation of the US dollar would lead to Asia losing the cost advantage and hence will make exports to the west uncompetitive. Speculation on regional currency appreciation gives way to volatility of private capital inflows to the region, which compounds the problem of sterilisation.

Outsourcing business prone to information security risk

For Asian economies like India, China and the Philippines, outsourcing seems to be unequivocally beneficial for employment, exports, and economic growth. However, equally concerning are the risk factors, such as like weak intellectual property laws, less transparent and efficient courts, inefficient financial and public records mechanisms of employees, exposure to information privacy issues (like in the case of Mphasis in India) and the cultural divide between the East and the West.

Logistics bottleneck might inhibit outsourcing of manufacturing to Asia

Epidemics can curtail the GDP growth of the region

The possibility of the outbreak of epidemics presents a potential setback to future growth in the region. Many epidemics have plagued the Asian region and dampened growth in the past. The occurrence of avian influenza or bird flu during late 2003 and early 2004 plagued the poultry in eight Asian countries, namely Cambodia, China, Indonesia, Japan, Laos, South Korea, Thailand and Vietnam. A sizeable loss to the potential world output is evident from its effect on poultry production, exports and consumption; tourism; industrial production; medical costs and supply shocks due to reduction in the size and productivity of the labour force.

The outbreak of bird flu in Asia since 2003 has killed more than 60 people so far. ADB estimates that a human influenza



pandemic would cost Asia USD 283 billion and would reduce the region's GDP by 6.5 percentage points.

SARS, the respiratory infection that flared up in East Asia in 2003, had the greatest economic impact of USD 30 billion to USD 50 billion and loss of possibly 2 percent of GDP of the Asian region in one quarter. Tourist arrivals plunged 58 percent in Hong Kong, 62 percent in Singapore and 69 percent in Taiwan during the period. An epidemic of such magnitude could have a strong distorting impact and might lead other economies to look away from Asia for the supply of goods and services.

Ageing population in China, Japan and Singapore is a source of concern

Demographics play a pivotal role in terms of challenges to Asia's growth with China, Japan and Singapore facing ageing populations, while India, Indonesia and Vietnam have a growing number of young workers seeking gainful employment. The shortage of skilled and experienced professionals in China is forcing many companies to expand facilities elsewhere and has led to substantial wage inflation and increasing employee turnover.

Cultural differences can prove to be detrimental to growth

Historical and cultural disputes, such as the movements aimed at establishing Islamic concepts in South East Asia, will continue to be a risk to business and trade. Anti-Japanese demonstrations in China and South Korea can further threaten the growing economic ties. India's religious and linguistic diversity also present potential problems to an extent.

Terrorism can lead to de-

creased FDI, decline in tourism, fiscal imbalances and unemployment

The impact of terrorism on Asia's trade and investment flow and GDP cannot be undermined. Social instability due to fear of terrorism can lead to decreased FDI, increased security expenditure, decline in tourism, fiscal imbalance and unemployment. In the recent past, the Bali bombing incident reduced Indonesia's GDP by up to 0.56 percent. The volatile security situation due to terrorist groups in Indonesia, Malaysia and the Philippines can continue to place a drag on the economic growth of the region. The continued tension and uncertainties around the Korean Peninsula and Taiwan Straits, Maoist insurgency in Nepal and India, the Kashmir issue between India and Pakistan, can have a great impact on the developing countries of the region.

Asia is prone to various kinds of natural disasters

In Asia, natural disasters wield an enormous toll on development. Each time a region is struck by a calamity, growth, investment activity, tourism and foreign exchange reserves have to bear the brunt of lost businesses and reconstruction costs. The most severe disasters in the recent past have taken place in the Asian countries, including Indonesia, China, Bangladesh, the Philippines, India, Maldives, Malaysia, Sri Lanka, Thailand, Vietnam and Japan.

The 2005 earthquake in Pakistan led to infrastructure losses worth USD 5 billion; the severity of losses from earthquakes in Indonesia and Gujarat (India) are not far behind. Central Asia is prone to disasters like earthquakes, landslides, floods, avalanches and drought, with



Tajikistan being the most vulnerable.

The human and economic loss from the tsunami disaster in late 2004 is visible in Indonesia, where the GDP forecast for 2005 is 5.4 percent down from 5.7 percent. Sri Lanka faces economic challenges due to its already mounting budget deficits coupled with setbacks to the tourism and fishing industries. The economic impact on Thailand will be evident from damages inflicted on the tourism industry, which contributes 6 percent to GDP. After the disaster, the country's GDP growth fell by 0.3 percentage points.

However, despite the risks and challenges faced by the region, trade in Asia is yet to reach its full potential. The emerging Asian region is expected to grow 6.6% in 2006 according to ADB estimates. The recent acceleration in growth promises to propagate further restructuring and reforms, which would create rich opportunities for stimulating faster trade growth within the region. In order to boost the growth momentum, Asia has to ensure that appropriate measures are taken to eradicate the risks prevailing in the region through economic cooperation amongst the Asian countries and continued structural reforms within individual economies.

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Healthcare



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"My Genes, My Health"

Successfull (healthy) survival has a lot to do with "living up to your genes", which means that there must be a certain degree of compatibility between the life-style pattern "dictated" by evolution and an individual's life-style.

Aging and chronic degenerative diseases are logic consequences of life. Our genes and our life style determine the pace at which we age and the individual health risks that come with aging. Modern molecular medicine offers options to use this knowledge, especially in view of individual health risk reduction (= prevention).

Evolution and gene-compatibility

Aging is a normal biological process. It is the logic consequence of the fact, that we can only exist and survive thanks to the use of the oxygen that we breath and thanks to the interaction between our genes and triggers coming from abroad (e.g. food). During the several million years of evolution of Homo sapiens, a delicate pattern of gene-environment interactions has developed that made our species so successfull.

Successfull (healthy) survival has a lot to do with "living up to your genes", which means that there must be a certain degree of compatibility between the life-style pattern "dictated" by evolution and an individual's life-style. It has become clear, that the dietary and life-style habits in the industrialised countries are far from "gene compatible". The majority of today's nutritional ingredients are "not known" to our genes, as is the lack of adequate physical activity. As a result, many body functions suffer from this incompatibility, which is always characterised by the occurrence of chronic

inflammatory processes.

Genetic individuality

Recent research from several disciplines (molecular biology, nutritional sciences, pharmacology) shows that the effects of identical external triggers (food, alcohol, pharmaceutical drugs etc.) can have widely varying effects on different individuals. It has been demonstrated that among the human population genes are present in variant forms. These variants have very small structural differences, for instance just one single nucleotide out of the several hundred nucleotides that form a gene.

Such variant forms (single nucleotide polymorphisms; SNP's) give rise to proteins with a slightly different structure. A variant protein may work satisfactorily under normal conditions, but when it gets under pressure (for instance, in case of a chronic infection or during the metabolism of certain food components or medicaments), it might perform less adequately and cause an imbalance in the regulating mechanisms of the homeostatic "maintaining system" of the body. If not brought back to balance properly and timely, this may lead to health disturbances and, ultimately, to disease. Every human being carries many thousands of such variant genes and this explains, why exactly the same factors can nevertheless cause different reactions in different people.

We have begun to understand

Focus will be the assessment of key factors determining the individual health condition, leading to an individual risk profile.

how the interaction between an individual and the environment, including nutrition, infections etc., is under the influence of these gene variants. They are responsible for what is called "genetic predisposition" and they form the basis for our genetic individuality.

A new type of personalised medicine

These developments form the basis for a novel type of medicine, which enable us to put much more emphasis on prevention than ever before. It enables a personalised approach for optimising quality of life in connection with the prevention of degenerative health conditions, based on individual health risk assessment, including genotypic (SNP's), phenotypic (classical medical examination, including imaging techniques) and life-style characteristics.

It is generally accepted that chronic health disturbances and chronic diseases are the consequence of chronic overstimulation of our homeostatic regulatory system. Drivers of this overstimulation are aging, life-style and genetic predisposition. In practise, the homeostatic system is the psycho-neuroendocrinological-immune (PNI) network that functions as one body-wide operating system with common signal molecules and common mechanisms.

Chronic overstimulation of the PNI system in practical terms means chronic inflammation and no degenerative disease develops without the involvement of inflammatory processes. Prevention of chronic diseases, therefore, means: avoiding or minimising chronic PNI-stimulation.

For an adequate assessment of the PNI system and health

risks, we need information about endogenous factors (genotype: genetic predisposition), exogenous factors (nutrition, environment, life-style) and the result of their interactions (phenotype: physiological performance).

"My Genes, My Health": evidence-based personalised preventive health management

Preventive medicine will become a dominant factor in tomorrow's healthcare. There are many reasons, the most obvious being the socio-economical advantages to prevent rather than treat disease. Focus will be the assessment of key factors determining the individual health condition, leading to an individual risk profile. This profile provides the basis for a tailor-made health management program, which can be monitored in an evidence-based manner by means of objective measurements.

Such an assessment includes

- 1) medical physical examination including image analysis of essential organs (such as sonography of thickness of the wall of the carotid artery, which is a marker for the condition of the blood vessels throughout the body)
- 2) dietary and life-style analysis
- 3) genomic testing (individual gene-variants, the effects of which can be modulated by dietary and life-style measures)
- 4) metabolic profiles and clinical chemistry parameters (providing information on the risk for inflammation)
- 5) analysis of physical performance (lung-, heart-, musculoskeletal functions)
- 6) evaluation of the mental status and perceived quality of life





Preventive medicine will become a dominant factor in tomorrow's healthcare.

These data form the basis for the personalised health management program which concentrates on nutrition, physical exercise and mental activity. This program can be monitored at intervals which are dependent on the numbers of "red flags" encountered.

The experiences with the "My Genes, My health" approach show a high level of interest on the side of all stakeholders: insurance companies, patients/clients, politicians and physicians. One reason is the fact that the success of the program can objectively be measured by means of scientifically established methods. It has also been noted, however, that the motivation of the public regarding prevention will have to be stimulated in the context of political (organisation of the healthcare system) and financial (insurance industry) incentives. In addition, an open and transparent communication between all stakeholders regarding the consequences of personalised preventative medicine will be indispensable for the establishment of this essential aspect of the Medicine of the Future.



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Integrative Medicine - Integrating Complementary and Alternative Medicine into Mainstream Medicine

An integrative physician approaches a patient and his individual situation without prejudice and specific preference of healing methods.

Integrative Medicine is a new approach in the treatment of the most common chronic, as well as acute illnesses. It employs proven methods and procedures developed within the therapeutic systems of Complementary Medicine (here after Complementary and Alternative Medicine or CAM) and of Mind/Body Medicine. The following overview introduces the essential components of the German concept of Integrative Medicine that has been developed over the past years at the Chair for Complementary and Integrative Medicine at the University of Duisburg-Essen.

What Do We Mean by Integrative Medicine?

Metaphorically the term "Integrative Medicine" can be understood as multilingualism. An integrative physician uses several different "languages" to understand and to treat a patient and his diseases. These languages are on the one hand the Mainstream Medicine and on the other hand the Complementary and Alternative Medicine (CAM) as well as the Mind/Body Medicine that helps patients to develop skills in improving the self-healing capacity of the body and in coping with illnesses through behavioural methods. An integrative physician approaches a patient and his individual situation without prejudice and specific preference of healing methods. Decisions about the most appropriate methods are based on both the relevant scientific evidence (external evidence) as well as on the physician's own

experience (internal evidence).

Why Integrative Medicine?

An analysis of the prevalent illnesses in Europe shows a significant shift in the last decades. Due to the enormous progress in modern medicine, acute infectious diseases have become less threatening; the number of deaths they caused is decreasing steadily whereas chronic diseases are developing into a new scourge in the Western culture. Most of the over 65-year-olds are suffering from chronic illnesses, which causes an explosion in medical care cost. In Germany about 80% of the expenses of the health system are spent in chronically ill patients. This situation is not merely a financial problem, but a new challenge for physicians since a large percentage of patients suffering from chronic diseases benefits from conventional therapies only to a limited degree. Moreover, long-term medication rarely leads to a complete cure of the illness it treated and chronically ill patients are often exposed to long-term polymedication that causes interactions between the prescribed substances, which still cannot be fully understood. That may be the reason why the compliance ranges of these patients are rather low.

In many cases medication taken over years causes side effects, which could be so problematic that they themselves need further treatment. Side effects often handicap the carrying on of the original treatment, and in some



cases they even cause death. Official (!) figures show that in the U.S. over 100.000 patients die annually because of side effects of their medication (4). For this reason, the extended treatment approaches become most significant.

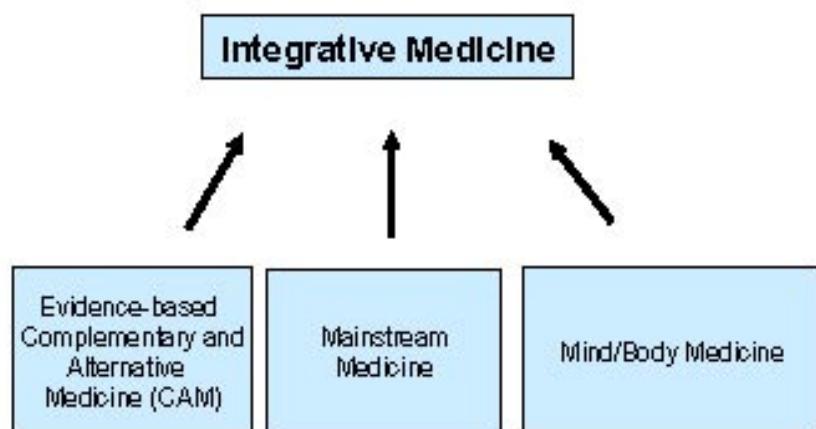
CAM and Integrative Medicine

Complementary and Alternative Medicine (CAM) enjoys a growing popularity in Germany and the United States (1). This trend exists independently from the scientific evidence that is unknown neither to physicians nor patients in many cases. In spite of the enormous popularity the number of systemic and scientific researches is still very limited. CAM methods have been systematically investigated by several active groups of scientists in Europe and the United States only since a couple years. After the National Centre for Com-

plementary and Alternative Medicine (NCCAM) at the National Institutes of Health was established in the U.S. in 1998 research on a larger scale has become possible. Today, the NCCAM provides 140 million US dollars for research on CAM and on Mind/Body Medicine annually.

Meanwhile the concept of Integrative Medicine (Integrated Medicine in the U.K.) has been established at a number of well-known medical schools in the United States. Stanford University, Harvard Medical School, the University of Arizona and the Sloan Kettering Hospital in New York City are currently running out-patient programs based on the principles of Integrative Medicine successfully. These institutions have reached new quality standard because the health care services they provided are evaluated scientifically based

Fig. 1-1: German Concept of Integrative Medicine



Applying integrative approaches in the treatment of chronic illnesses has been shown to be worthy, especially when long-term treatment is warranted, since a combination of conventional and CAM methods often optimize treatments.

Integrative Medicine in Germany

The first chair of Naturopathy in Germany was established at the Benjamin Franklin University Hospital in Berlin in 1989, followed by the founding of the Chair of Naturopathy at the Rostock University. The focus of the Rostock University was to integrate naturopathic medical treatments into rehabilitative therapies.

In 1999 the first clinic for Internal Medicine with the focus on Integrative Medicine in Germany was established at the Kliniken Essen-Mitte as a model institution of the state of North-Rhine Westphalia. This clinic is equipped with a 54-bed ward for in-patients, a day-care clinic as well as an out-patient clinic for CAM with special focus on Traditional Chinese Medicine. Its goals are the application, evaluation, and research of CAM therapies and their integration into clinical treatment. Since its opening it has treated more than 9.000 in- and out-patients already.

After a 5-year evaluation period regarding the research and teaching of the model institution, the Scientific Board of the University of Duisburg-Essen approved the establishment of the Chair for Complementary and Integrative Medicine, the first one of this kind in Germany. This establishment and the funding from the Alfried Krupp von Bohlen und Halbach Foundation provide an unique opportunity for clinical implementation of the newest findings in CAM research.

The clinical experience of the institute indicated that most chronic diseases require a life-long drug treatment that potentially causes severe side effects like chronic diseases of the digestive, endocrine, cardiovascular and

musculoskeletal system as well as diseases of the connective-tissue, metabolic diseases, pulmonary diseases and chronic pain. These indications coincide with the chronic illnesses that cause most of the spending in the German health care system.

Applying integrative approaches in the treatment of chronic illnesses has been shown to be worthy, especially when long-term treatment is warranted, since a combination of conventional and CAM methods often optimize treatments. If they are applied correctly, they constantly support the reduction of drug-induced side effects because dosage of drugs can be reduced by enhancing the self-healing capacity of the body through CAM and Mind/Body methods.

Advantages of Integrative Medicine

Leech therapy, a CAM treatment method for painful osteoarthritis, is a good example to demonstrate the potential advantages of CAM methods. This method might seem to be exotic, but its use has been documented in Europe since Hippocrates more than 2000 years ago. Scientific research has proven its therapeutic value in treating osteoarthritis for the knees. Eighty percent of patients who have been treated once, with four to six leeches, report a 60% reduction of pain. On an average, this pain reduction occurred within 3 days after the treatment (5). For 70% of the patients this positive result maintained for at least three months. The effect lasted even for over six months for 40% of the patients. One year after treatment one third of the patient still reported a reduced dosage of pain medication. Thus, the leech treatment has been shown to be considerably





61% of the questioned opted for a combination of Chinese and Western medicine.

more effective than all other known pain treatments for this condition. Effects of conventional treatments regularly last for a mean of 24 hours only. After undergoing leech treatment, non-steroid anti-rheumatic medication can be reduced in many cases or even discontinued which at the same time reduce the potentially harmful side effects.

Recognition of patients' needs

Besides scientific evidence and costs, patients' needs and wishes play a very important role in the process of choosing the form of therapy. It is well known that patients with chronic diseases do not wish to take medication with large side effects potential known.

CAM therapies, alone or in combination with Mainstream Medicine, are becoming increasingly popular. A recent Allenbach-survey (08/2005), comp. 1-2a-d, (1) showed that in case of an illness half of the German population would prefer to be treated with a combination of Mainstream Medicine and CAM methods. Which mean every second person favours an Integrative Medicine. Only one third wants to be treated conventionally and 7% would prefer a CAM treatment exclusively.

Even more striking were the results of the questions concerning Traditional Chinese Medicine (TCM). Only 18% stated that they would reject being treated with methods like acupuncture if these opportunities were offered by their physicians in addition to conventional therapies. Among the questioned 31% has had experience with TCM already (26% with acupuncture and 5% with other methods). 61% of the questioned opted for a combination of Chinese and Western medicine. Of those who had

experience with TCM as many as 89% advocated this combination (comp. 1-2d).

This positive evaluation does surprise. It indicates that the majority of those who had been treated with TCM methods were satisfied with the treatment and their results. The compliance with integrative treatments can generally be expected to be high and interestingly components of conventional medicine within integrative treatment concepts enjoy an increased compliance as well.

Results of the Allensbach-survey (page 9-11)

Non-conventional components of Integrative Medicine

1. Naturopathy and CAM

In Germany the term naturopathy stands for the body of knowledge about natural remedies and methods of healing and in addition refers to measures that apply natural means to therapeutically stimulated self regulating processes that foster the organism's ability to heal itself or to stay healthy. This German understanding of naturopathy is only part of the Complementary and Alternative Medicine (CAM), the umbrella term of complementary healing methods used in the United States. Depending on the system of classification, between 130 and more than 200 methods and applications can be considered as naturopathic. For some of these a high standard of evidence is available while others must be considered to be dubious. Systematic research is still required for further investigation and evaluation of CAM methods.

Classic German naturopathic methods range from therapeutic methods on nutrition



and exercise to hydro- and phyto-therapies, as well as Mind/Body Medicine (so-called *Ordnungstherapie*). Apart from Kneipp, balneo-, massage- and manual therapies are also classical components of the German naturopathy.

Besides these classic methods the catalogue for medical training in CAM lists a large number of "extended naturopathic methods". The so-called derivative procedures from ancient European medicine, neural therapy as well as osteopathic treatments are subsummarised there. A third category includes so-called "other therapeutic principles" like TCM. Homoeopathy constitutes a separate approach and is not defined as a naturopathic method in Germany.

2. Mind/Body Medicine

Mind/Body Medicine (MBM) utilizes the existing interactions between mind and body in order to enhance the capacities of organism for self healing and is considered as part of CAM. The National Institutes of Health defines MBM as "interventions that use a variety of techniques designed to facilitate the mind's capacity to affect bodily function and symptoms". (6). Fundamental research was conducted by the teams of Herbert Benson (Mind/Body Medical Institute at Harvard Medical School) and of Jon Kabat-Zinn (University of Massachusetts Medical School). Currently, the National Centre for Complementary and Alternative Medicine (NCCAM) runs a designated program to investigate biochemical and structural phenomena of MBM.

Evidence of Mind/Body medical therapeutic potential has been shown in the following symptoms and conditions: coronary artery disease, hypertension, inflammatory bowel disease,

chronic rheumatic diseases, chronic pain, chronic headache, migraine, depression and others. In addition, MBM also has positive effects such as adjunctive treatment for breast cancer.

The therapeutic concept of the Mind/Body Medical Institute at Harvard Medical School in Boston for out-patients served as a model for the in-patient program established at University of Duisburg-Essen and includes several modules like the so-called relaxation response (3), cognitive restructuring, exercise, nutrition, and the aspect of social support, which are interconnected to a comprehensive therapeutic concept.

During years of cooperation with the Mind/Body Medical Institute in Boston, the American concepts of Mind/Body Medicine have been combined with the German concept of "*Ordnungstherapie*" in Essen. This newly integrated therapeutic concept has been implemented into the clinical treatment routines of a German hospital, and scientifically evaluated. During the last six years, over 7.000 in-patients and more than 2.000 outpatients were treated according to the concept of Mind/Body Medicine additionally to CAM and mainstream treatments. It aims at the promotion of sustainable life style changes that allow the patient to best foster his or her own health (7). Independent of the therapeutic context - in-patient or out-patient, curative, rehabilitational or preventive, the activation of the patient's own resources for healing and health remains the main target of all Mind/Body interventions. This aim can be reached by establishing a life-style that is structured in ways that allow both physical and mental self-healing. Such a life-style includes stress reduction and the cultivation of an individually



... The basis for all of these interventions is formed by an understanding of the human condition that includes the biological, cognitive, psychological, social and spiritual dimensions.

appropriate balance between activity, rest, and recreation. In addition, a constructive style of coping with the person's own limitations and disease is promoted as well. The basis for all of these interventions is formed by an understanding of the human condition that includes the biological, cognitive, psychological, social and spiritual dimensions. All interventions are grounded on a salutogenetic attitude towards the patient.

Scientific evaluation

Decisions about the application of CAM methods within the context of Integrative Medicine are based on the evidence available for the respective methods. Due to the lack of evidence in some areas of CAM, application in some cases is also based on clinical experience of a group of experienced physicians (internal evidence). Additionally aspects of scientific plausibility based on a coherent scientific paradigm are taken into consideration. The rating of a method according to its scientific plausibility allows a provisional classification of the procedure until sufficient external evidence, which is always the major goal, is reached. The Centre for Reviews and Dissemination, a research institution that is associated with the National British Health Authority, pragmatically suggests to base decisions if a method would be applied or not on three factors:

- The level of evidence
- The costs of treatment
- The potential side effects

In order to recommend a therapeutic procedure as a "first line intervention" a high level of evidence is required. On the other hand, a procedure with a lower level of evidence can also be recommended as an adjunctive treatment for refractory patients, e.g. for patients with

a chronic condition. Following this rationale the recommended hierarchy of decisional factors may change especially in cases of chronic illnesses where the therapeutic options are reduced.

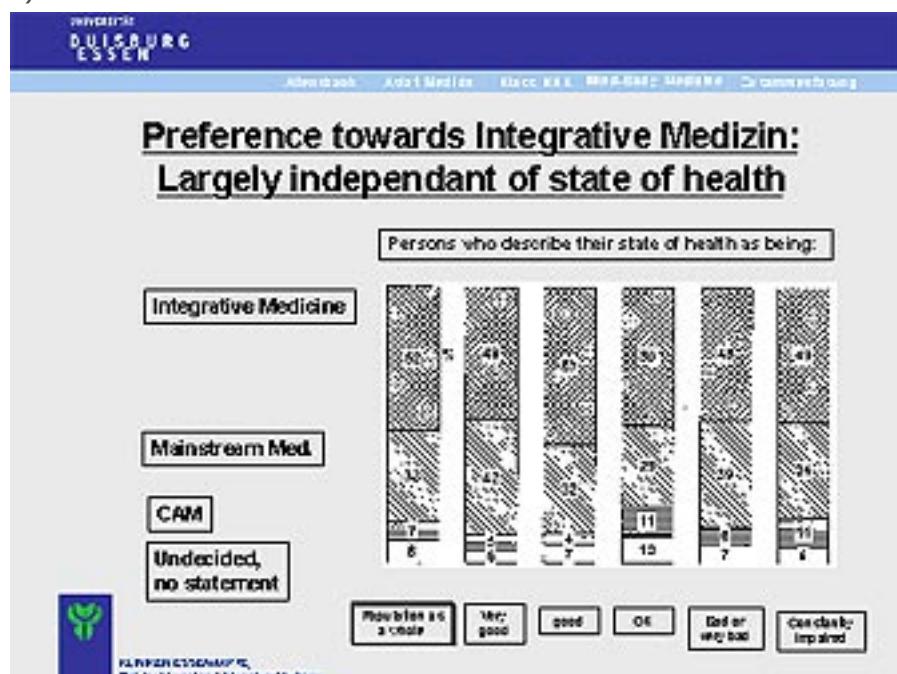
To summarise, the practice of Integrative Medicine provides a combination of Mainstream therapies with CAM and Mind/Body methods. Very often, especially when chronic conditions are involved, this combination allows the implementation of more successful treatments. Paradigms of Mainstream Medicine remains to provide the basis for all treatment, but often this extended approach of Integrative Medicine can optimise therapeutic options in chronically ill patients. The fewer the side effects of a long-term treatment are, the higher is the quality of life a patient can achieve.



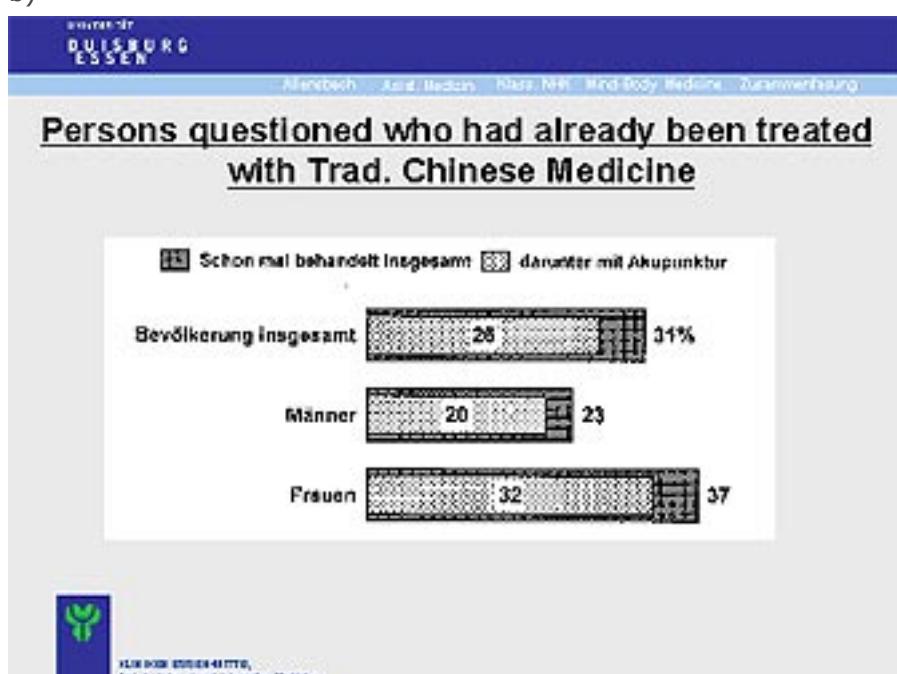
Fig.1-2: Results of the Allensbach-survey 08/2005

- Preference towards Integrative Medicine: Largely independent of state of health
- Persons questioned who had already been treated with trad. Chinese Medicine
- Clear Preference towards: Treatment including TCM-methods
- Persons who know TCM -methods, to a large extent prefer a combination of both

a)

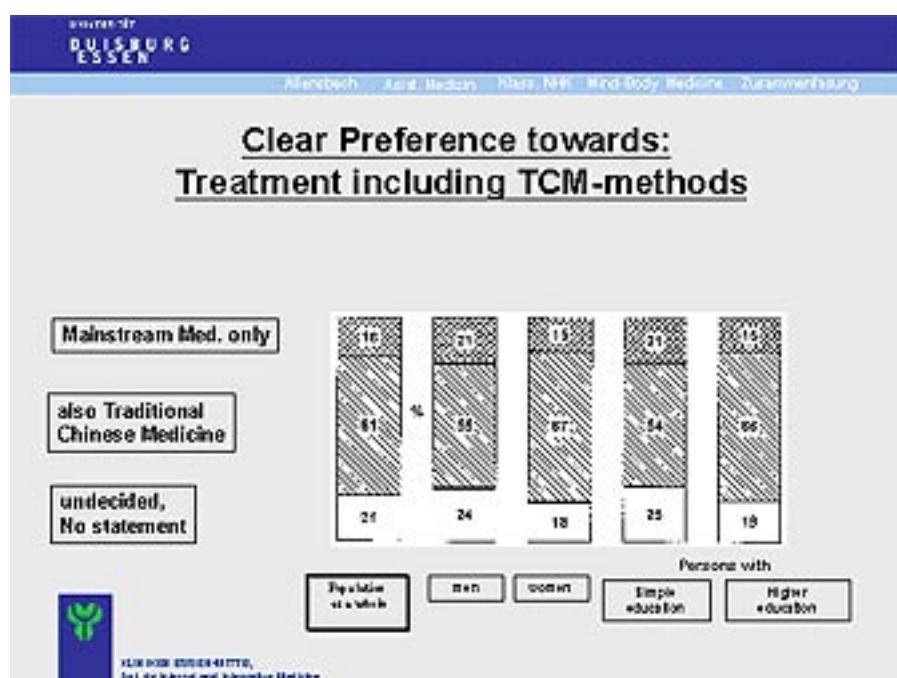


b)

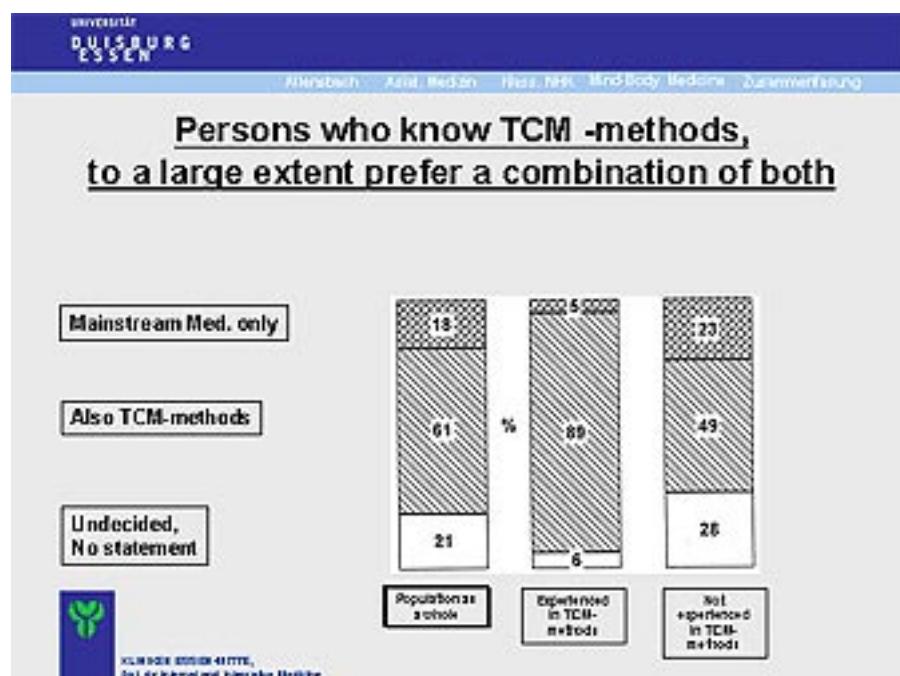




c)



d)





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Healthcare

The mind body system is a very old fashioned model, designed by Descartes. We know now that we have a variety of neuron connections, we have hormones and we have immune systems. This system works with or without our will.

As a philosopher I was deeply impressed by the contributions of the medical professionals in the workshops concerning health.

Health is mostly considered as a problematic topic for people with overweight, sick people, poor countries or for money making assurances and health drugs companies. I myself was more interested for questions on power and politics. But I realized very soon that the matter of health is in effect the core business of our problems.

Health is connected with the quality of life, the pursuit of happiness and the good life for the good persons. The experts of the workshops demonstrated very clearly that the way, medical science and practice is organized, darkens any relation between healthcare and the philosophy of life.

The philosophy of life and the quality of life is detached from medical care, because the paradigm of medical approach is "sickness". So only if you really have a observable or factual sickness, you are allowed in the domain of medical work. Medical workers only want real sick persons, so they can do their job, which is curing. Although the sickness paradigm emits an image of the human creature, it does not reflect this. So it will keep on curing victims of a sick-making lifestyle, without questioning the life style. These sick provoking factors are:

- state of the mind
- food
- stress in work

- lack of exercise/relaxation
- money obsessions
- stress full environment

The new paradigm in medical science could be the switch from "sick - driven" to a "health-driven" medical care. Thanks to genetic science we can look for the quality of life in a personalized way. We can see the consequences of environmental issues, mental problems and emotional problems on individuals. We can even analyse how you could live your life at best, with a minimum of risk to diseases. Some genes will only be active if you take for instance broccoli or whatever foodstuff. We can choose our lifestyle with more personalised information, we have more choice to design this way of life.

But most of all we all will be more aware of the consequences of a sick-making life-style. Science shows evidence that the costs of our way of living, when we include medical costs and the loss of happiness, is not an economical sound one. The costs of pharmaceutical drugs are repelling, while the costs of prevention are substantial low.

With new research we can look at our live from a different image of the human system.

The mind body system is a very old fashioned model, designed by Descartes. We know now that we have a variety of neuron connections, we have hormones and we have immune systems. This system works with or without our will. This



... the struggle for a happy life has never been put so sharply in the centre of our emotional, psychological and bodily health and in the centre of power.

model is called the psycho neuro immune system (PNI). The PNI system is in balance when there is no over stimulation or stress on the system. When poisoned components enter the body then a unbalance of the PNI could be the case. When you have stress in your psyche it causes over stimulation and this causes defects in the PNI system.

All these effects in the PNI system can be measured by looking at the levels of hormones, proteins, minerals etc. So we can really measure health, which was impossible till now. More strongly put, we can foresee heavy sickness with adequate prevention analysis.

This whole analysis really speed up to an integrated vision on life and happiness. A very strong aspect of the almost nano way of looking at our PNI systems is, that we even can measure so called placebo effects. In the old paradigm, placebo is a proof of failure. In the new paradigm we can see that the placebo effect is a strong competence of the PNI system. Also we can observe that methods like meditation, acupuncture do have strong effects on the PNI. So the new human model really opens to traditional medicine.

Finally we can see that the genetic system is also dependent on our way of life, the way you eat is a form of genetical engineering. We are constantly taking stuff that can enhance genes or that make genes asleep.

Also psyche factors could awake or weaken genes.

To put it shortly: prevention (for coronary diseases, breast cancer, and so on) of wide spread diseases can be realised with a better quality of life. The way we organize this life is also a

matter of politics. So the struggle for a happy life has never been put so sharply in the centre of our emotional, psychological and bodily health and in the centre of power.

Living in a real community with care and attention is probably the best prevention for a bad PNI system!

By the way all women should test on the papilloma virus (sexual transmitted disease) and eradicate it, to prevent cervical cancer with a special treatment.

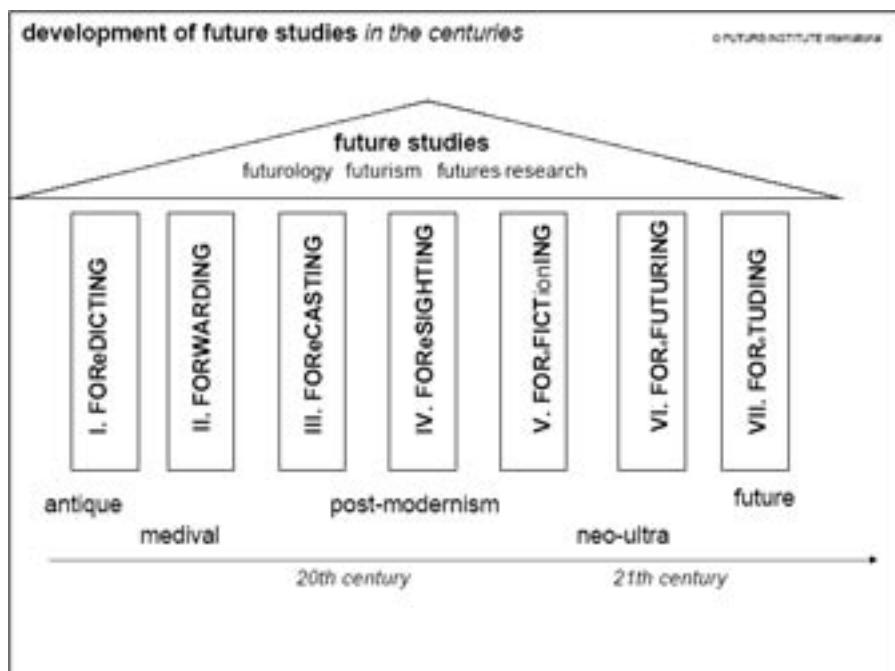
Is sexual promiscuity a good thing in life?

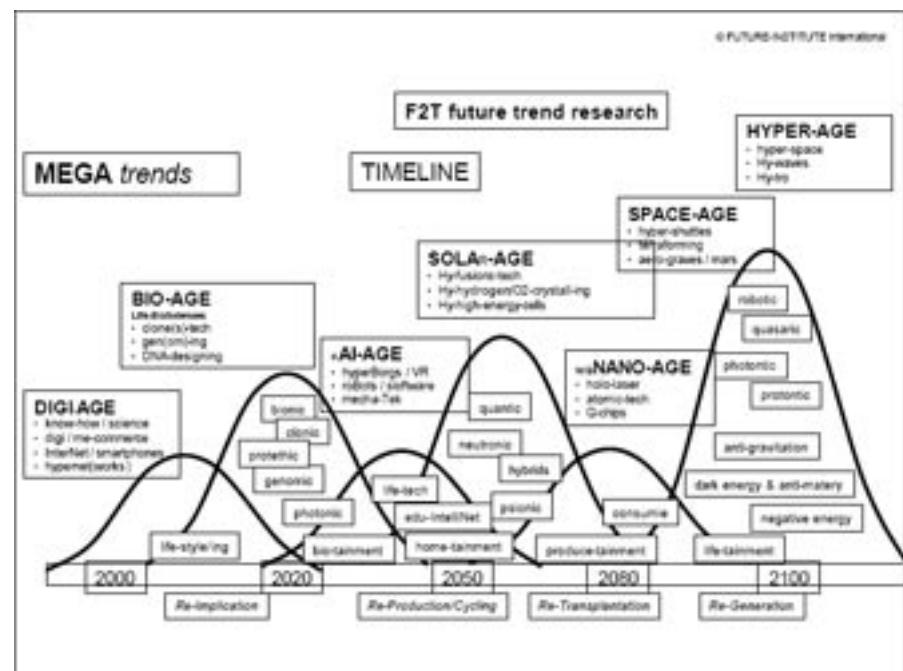


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Healthcare





RISK + OPPORTUNITIES = VISION

imbalance/inequality (gap poor - rich, missing competences,...)	digital technologies use free for everyone (Internet, media,...)	create first a better virtual world, than a real (freedom / liberty,...)
winners & losers (Asia <->USA, third world,...)	social responsible networks obligated for influencers (managers, politicians,... worldwide)	reach a balance & world partnerships for pro-globalization
less life-quality (healthcare, aging society,...)	predetection & prevention Hitech as basic behavior training in schools; more selfness responsibility	bio-care contract for the whole world, not only single solutions like climate protocols; free basic access supply providing
global culture conflicts	teach global values & a holistic spirit	a world religion like a global language (Esperanto II)

TRENDWATCHERS

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Opportunities or *how can we change the world?*

1. Start new school programs (life quality lessons, digital coaches, culture exchange...)
1. More focused discussions (like here in Amsterdam)
2. better leadership training, accompanying the whole career
3. A New United Nations organization for a better world
4. Push for more cross-cultural globalization

TRENDWATCHERS

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ONE FUTURE – One WORLD

TRENDWATCHERS

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The Fall of Icarus - Risk taking: to live in a mode of panting



Like Daedalus, we do tend to take risks when the possibility of gains are high, such as freedom, but at what cost?

Dutch painter Pieter Brueghel depicts the fall of Icarus as a mere detail in his painting carrying a similar name, Landscape with the Fall of Icarus. When the legend hero meets his tragic death on the surface of the sea, life goes on as usual; "one farmer plows his land while another minds his herd. Meanwhile, the environment makes no acknowledgement of the great tragedy taking place."

As the legend goes, Daedalus and his son, Icarus, were to escape the labyrinths of Crete where they were imprisoned by King Minos. Using his skills as an artist, sculptor, engineer, and architect, Daedalus built two pairs of wings out of a wooden frame, and feathers attached by wax – the only material available for their journey to freedom. Just before the great moment of escape, the father warned Icarus not to fly too close to the sun, because the wax would melt,

the feathers would loosen, and the wings would disintegrate. Overwhelmed with the joy of flying, Icarus forgets his father's words and quickly flies high to the sun only to meet his demise. Technology has outstripped our ability to be cognizant of it; our ignorance of its effect on our lives means we too could be condemned to a murderous plunge into ignorance without the world taking notice.

Like Daedalus, we do tend to take risks when the possibility of gains are high, such as freedom, but at what cost? We are capable of not only risking our lives, but also the lives of our loved ones. We would rather avoid making such decisions, because living on the verge of losing the irreplaceable sets an incredibly uneasy mood.

Bruegel's approach is beautifully layered. He almost leaves us at a critical position of wanting



to alert the farmers and alike about the fall of Icarus, whose death seems to go unnoticed by them. At the same time, the tragedy of Icarus would not mean much to these farmers. They are stable elements of a continuing cycle, which does not favor nor tolerate a sudden change.

In "The Great Laws of Change," Kenneth E. Boulding writes, "nature is a Heracleitan flux, and we never step into the same river twice. All equilibriums are temporary." Indeed, the basic laws of physics taught us all that everything, especially matter is in a constant state of movement. That brings us to another layer of Brueghel; If we ignore the remote detail of Icarus' drowning, Brueghel's painting is all about a closed system of stability, a fantasia, a heaven that represents only a dream. But then, we do have a partial image of Icarus drowning, however faint. This is a very disturbing image. It hints the presence of at least one element in this reflection of paradise that acts to change the cycle, bringing it into a natural form of flux. However sad, the passion of high flying is an actual act of taking risk, with or without being aware of it; an act to reach untested heights for the sake of its beauty. Or else, we would end up keeping this false image of paradise, a paradise that does not exist. For "change", as Boulding puts it, "is a universal phenomenon in all systems."

With modernization, the idea that rational thought would open doors to more and more knowledge -of nature-, which, in return would provide new ways to do things; a map, a schedule for humanity one may say. However, things turned out to be different. We ended up landing in an environment full of risks.

If we look at the laws of change, our perception indicates that evolution is the most compelling explanation we can have, since it helps us to understand the biological and social development of human beings. Biological evolution's impact is obvious; any biological being is more complex than the most advanced manmade creations. But then, the decision making process about designing future and creating collective attitudes about these decisions is a superiority of social evolution.

As far as the deterioration of conditions on Earth shows, we need to depend on our social evolution capacity to make decisions to change the course of events that are damaging the physical system. At conferences like this one, we do gather in groups to listen to experts in their fields with a vision and accelerate the process of social evolution through communication of ideas to take part in building complex systems and protecting, preserving and continuously upgrading them with a collective understanding.

Participation in a system requires individual wellbeing, which can be translated as to have an active mind and the will to act. Just as we try to inject knowledge to the system to remove it from its present impasse, we do need to adapt a similar attitude towards ourselves. After all, we are all connected.

During the conference, a number of healthcare experts shared their vision to challenge the way we look at health care and health care systems. Technological developments have brought us to a kind of modernity that can no longer accord with our expectations when it comes to health. While individuals expect more and more



Ignorance turns out to be the greatest of risks that we can no longer afford to take. We have to adapt reflexivity to be able to recover from modernity's ills.

HEALTHCARE

personal health care, a great portion of the world population is simply devoid of the basics of it. We obviously can no longer afford to live concentrating only on our needs and ignoring the rest of the world. Without going through the statistics, we can easily see that technological developments in the medical industry are so costly, that it would be impossible to provide optimum benefits to every individual even in the Western world. One way of fixing this systemic problem is to avoid the risk of getting sick. Avoiding health risks requires, among other things, awareness about the choices we make on a daily or even momentary basis. Because leaving the solution of problems to the authorities proved itself as an option no longer valid.

As Anne Loeber mentions in her paper, Practical Wisdom in the Risk Society, German sociologist Ulrich Beck describes the understanding of modernity that was dominant during the last century as a "linear development", which was a combination of rationalization and technological development. What we have ended up with is a society that is incapable of coping with the risks it has created. Whether we witness it or not, reflexive attitudes are winners of our times. The world is obviously not only made up of the West, as modernity made us believe. The co-evolution of social and technological developments opens many doors, which were remained shut long enough. Now is the time to value reality as a reflection of personal standing, not "something out there" to be found, as "reality" used to be described by the modernists.

We are now bombarded with a flux of information that crosses our lives like highways. The biggest threat to wisdom and safety now is the lack of a map

to make sense of the complexity of issues. We need not just information but the guidance of knowledge to navigate in the crowded jungle of the information age. Ignorance turns out to be the greatest of risks that we can no longer afford to take. We have to adapt reflexivity to be able to recover from modernity's ills. Otherwise, Icarus might be falling into the water as we continue plowing the land, backs turned to the sea.

Boulding sees the unused capacity of our brains as the greatest asset to be explored for the future. As we are learning from our mistakes, we will surely find ways for the journey to ourselves, which would pave the way to connected beings.



The glorification of information was evident for me in the majority of the presentations.

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Challenging Scientific Practice: A Vision for the Future of Healthcare

Over the course of the conference, there was much talk about the need for a change in paradigm: about the need for a more 'caring' paradigm, where costs and profit do not serve as the bottom line; about shifting to a more holistic approach in healthcare, where patients should be encouraged to lead healthy lifestyles rather than starting treatment once a patient is already sick. What I took from these discussions is the desire to change the goals and methods of healthcare delivery but not necessarily a paradigm shift in the Kuhnian sense of the term. While it is difficult to attest to a single understanding and use of the term paradigm I think an attempt to maintain Kuhn's original meaning may prove useful in reflecting upon the course of the conference.

Essential to Kuhn's notion of paradigm shift is that it is the outcome of a crisis when what is generally accepted as 'facts' becomes challenged. Kuhn offers the scientific textbook as a tool to determine what is in dominance in the current paradigm. It is this de-contested knowledge, accompanied by forms of practice, which establish themselves in the dominant paradigm, which must be challenged to enable a paradigm shift. So when two competing viewpoints can both be supported by the existing facts they cannot by definition be considered competing paradigms. Paradigms are not a normative concept, by definition they cannot be judged alongside a moral or political viewpoint. They can only be

evaluated as correct or incorrect, proven or disproven.

It is in this framework that I can observe a dominant paradigm emerging from the discussions throughout the conference. Where new techniques and methods were being offered as healthcare for the future, all these techniques offered the same solution – more information. While the term 'information age' may at this point seem cliché, I think it is important to understand how this is shaping the direction of society.

The glorification of information was evident for me in the majority of the presentations. Chris De Bruijn demonstrated the lengths at which society has developed methods to produce information in offering a futurist vision for healthcare where every person could be genetically tested at birth and provided with a complete genetic profile. Coenraad K. van Kalken offered a program where information on personal health and lifestyle was regularly collected and information on high-risk identification could be provided back to the public. Mercedes Lassus offered various oncology prevention and early detection strategies with consideration for different cultures. Each presenter offered a direction for healthcare with various considerations and goals in mind, yet they all offered the same solution. More scientific knowledge and information will lead to better health care.

It is of course difficult, nearly

Where methods of knowledge production provide a sense of control over the natural world, Dobos challenged the scientific necessity of controlled randomized-testing.

impossible, to challenge this notion that more information leads to advancement. Perhaps this is the best evidence that knowledge intensive practices are truly characteristic of our current paradigm. But it may prove useful to question this paradigm nevertheless. These great advances of genetic mapping, information technology and diagnostic techniques all led to the same solutions for best healthcare practice: live a healthy lifestyle, eat a balanced diet, and don't smoke. Perhaps it is in this respect that we can reflect upon current health practices.

An excellent example of this necessary reflection came during Gustav Dobos' presentation. Dobos was offering an integration of evidence-based complimentary medicine into mainstream practice. Essentially he was testing ancient eastern medical practices such as leech therapy and implementing it alongside modern western medical practices. Dobos pleaded that the promotion of these techniques is an attempt at a paradigm shift where the scientific method, that is controlled randomized testing, could be replaced. Dobos admitted that currently his methods are only being accepted because he is fitting them into the dominant paradigm by applying these techniques through the scientific requirements for publication. At one point Dobos was asked for a scientific explanation why these techniques worked, and it was here where Dobos emphasized that a change in paradigm is not necessarily providing a scientific explanation for old methods. Rather, it was a change in mindset; a challenge to the necessity of scientific explanations was what his efforts entailed.

While all the speakers offered novel methods of healthcare

delivery, it was only in Dobos' presentation that I perceived a genuine attempt at a paradigm shift. Dobos was not advocating any normative judgement on current health practice, rather he was challenging the underlying principles of medical practice and modern believe systems. Where methods of knowledge production provide a sense of control over the natural world, Dobos challenged the scientific necessity of controlled randomized-testing.

It is in challenging dominant practices that Dobos offered me a potential vision for the future. During the introduction I stressed adherence to the Kuhnian notion of paradigm because I think it is a useful concept in questioning modern practices. I think it is a dangerous thing to use such a term casually out of context as such popularity of a term can render it meaningless. Rather, we should use Kuhn's work to help us contest the practices we would never think to contest. In the case of healthcare, it is this glorification of information, which seems to dominate, and perhaps it is here where we can reflect on the future direction of society.

Corporate Governance



JACQUELINE TERNIER-DAVID

International Forum for Social Innovation

They Shoot Horses, Don't They?

Sydney Pollack, 1969. *On achève bien les chevaux.*

By Jacqueline Ternier-David
and Christophe Verrier

1. Origin of the concept

In the seventies (1970's), disappointment and dissatisfactions emerge in the United States about the performances of North American companies (including about the capacity of leadership of their executives). Some doubts appear also about the State capacities to regulate private companies and their environment.

In 1976, in studying European models (the German model and particularly the French one), Prof. Alfred F. Conard (University of Michigan) defines the concept of Corporate Governance as the role of private companies in economy and in the governance of the nation rather than as the way of steering these companies.

Thus, since the beginning, the issue of Corporate Governance includes the issue of accountability of companies within their environment, within a sphere, which largely transcends their own limits.

But more than twenty-six years later, the scandal of ENRON gave another meaning to this concept. The question is not only to manage the space given to trade companies in order to create wealth but also to control them. What is the limit to liberalization or freedom for trade companies (finances, links to politicians, transparency toward shareholders and employees, etc)? What is their individual and collective ac-

countability toward their internal and external environment? Is Adam Smith's invisible hand still the more safe and reliable process for world economy?

2. Transformation of traditional power and social organisation in the eighties.

Economics acquired a new supremacy in the 1980's. In most of the western countries, the decline of traditional ideologies and powers suddenly accelerated: religious power, for instance, but also political power.

In the same time, the economical power definitively emerged as a crucial engine for the social and societal prosperity. In France in the early 1980's, for instance, President François Mitterrand's new left government had to acknowledge – and even to rehabilitate – private entrepreneurship.

This is why the field of companies' accountability began to transform.

What are the main reasons of this new supremacy of economics?

- Obviously the world globalisation process which increased competition and favoured industrial concentrations till the emergence of world giant companies with tremendous power and responsibilities. Today, we know that the benefits of such giants – and sometimes the personal wealth of their leaders – can exceed the budget of small countries.



- Also the new domination of technological resources: wealth and prosperity could no longer be considered only as a consequence of the natural resources of the soil of a country but can emerge from everywhere (under certain conditions).

3. New and unexpected issues

Thus, in the early nineties, the world woke up with a kind of headache since its new internal equation of power was unexpectedly transformed. What are the main consequences?

Big (or world) companies face new, unexpected and difficult issues and temptations:

- temptations? The temptation of omnipotence, as usual, as Enron — but also in France Vivendi Universal (during Jean-Marie Messier mandate) — offers a good example.
- new issues? The most recent example is *Yahoo!* in China. This company must tackle a difficult and contradictory issue which mixes on the one hand economics (usually avoiding politics, clean and white, even sterilized, hands) and, on the other hand, a political problematic of human rights and democracy. Such a political issue usually mobilizes capacities as courage, determination, militancy and activism. Is it possible for a private trade company? The question is still open.

Yahoo! in China is not the only example. Companies face numerous issues in various dimensions: not only social or industrial but also ethical, political, environmental, geostrategic, wealth deployment and development, diplomatic and even military, etc: price of AIDS medications for Africa,

plant relocations in East Europe or Asia, ecologic disaster, etc.

The question is: how can these economic leaders, and particularly Board members in charge of the Corporate Governance, face such issues? Is it part of their competences? Roles? Capacities? Accountability?

4. New masters of the world?

In the political dimension, these centres of decision are so powerful that they can really consider themselves — or be considered by others — as the new masters of the world. This is particularly clear in the Enron story just before the crash. But, at the psychic level, this position is very difficult or dangerous to hold: many expectations, wishes, anger, hatred, and other feelings are projected onto them. At any moment, they can be asked to answer any question, to solve any problem, to become either leader, saviour or prosecutor, devil against their will. Which space is offered to the leaders to clarify these processes projected onto them?

What is happening when a decision, which is justified economically and industrially, put all an area in a situation of economical depression? Which hatred is generated and how it affects further decisions? (Renault and the closing of the plant in Vilvoorde, Belgium; currently, Peugeot-Citroën in Ryton, UK; Arcelor in the area of Liège, Wallonie, Belgium).

On the spiritual level, many things could be said about St. Dow Jones, St. Nikkei, St. CAC 40 or St. AEX, in front of which devoted rituals are performed several time each day...

5. Our subject

We notice that the etymology of Corporate Governance is

rather simple.

Corporate

From the English corporation "to from a body" (15th Century), "set of persons organised in a body (or a corps)", and (16th Century) "a trade company".

Governance

1297, from O.Fr. governer "govern," from L. gubernare "to direct, rule, guide", originally "to steer", from Gk. kybernan "to steer or pilot a ship, to direct" (the root of cybernetics: Gk. kubernētikē "art of governing"). The -k- to -g- sound shift is perhaps via the medium of Etruscan.

Governance is immediately related to the experience of steering a ship; Corporate to the body (corpus). Both — ship and body — are very systemic entities as if Corporate Governance pointed this way of understand things around us.

A body cannot live without regulating its relations with its environment. But this environment must also take into account how it must regulate the relations with the multiple bodies to not be destroyed.

A ship is dependant to the sea. The systemic approach doesn't point out only the internal organisation of the ship: coordination of a diversity of roles, vision and leadership of the captain, etc. To steer a ship requires also a strong link with the destination and primary task in a direct relation with the environment. The captain must deal with the sea (or with the system sea + ship) in order to steer the ship to its destination. Nobody can cheat with the sea.

6. Corporate Governance: a body and a ship

Such a complexity can

certainly not be tackled by recipes or models. Mathematical rationalisation is no longer enough in front of such complexity. Some understanding may be brought by processes of integrating, analysing, interpreting, discovering links and equilibriums, associating, interacting rather than establishing cause-effect links.

But when such a concept as the Corporate Governance is launched, the danger is to create tool which improves, becomes sophisticated, is fed by itself, developed and reproduced by itself without answering the original questions anymore. The European Certification processes may sometimes meet the same dangers. This is why we suggest to go back to the origin.

7. Fragility and sustainability: the "Colossus with feet of clay"

The second additional difficulty is the tremendous worldwide competition, which affects the core of each business and each company. This pushes each executive to processes of survival rather than life: short term vision, immediate environment of the company, automatic financial mechanism, repetition instead of transformation processes. To maintain a company in a good economical health is crucial but so difficult, harassing, uncertain, anxiety-provoking that executive find no longer space to breath. Are they ready to face these multiple issues?

This process actually distorted the initial meaning of Corporate Governance to what we all know: the capacity of a company to present its main figures, orientations, engagements, values, assets in a transparent and available way. But even



if this is recommended as an ethical good practice, it still focuses on internal mater: to be attractive for new clients and new investors, to develop prosperity.

8. Some questions remain open

Thus, this opens some question about the connexions between economic systems with their environment particularly in term of mutual accountability.

- **how the various dimensions (political, economical, etc) must be interpenetrated?**
- **In particular, which partnership must exist between politics and economics (and how to regulate it)?**
- **What must be regulated? Managed? Controlled?**
- **what is the difference between management and governance?**

Management: from the Italian word MANEGGIO, MANEGGIARE: to handle (MANO = the hand); to ride a horse, to train it, to break in it, in a riding school (= un manège).

Do we manage individuals (like horses: racehorses? draft horses?...) or do we manage resources?

- **What about "interdict and freedom"?**
- **Are we opposing a model from the USA (extremely dynamic but very liberalized with all the consequences) to a European model (where the need to regulate is recognised, but leads sometimes to bureaucracy and immobilism)?**

● **what are the specificities of these question today and particularly in relation with the future?**

● **what is crucial for the future: to be fair, moral, ethical, legal, democratic or just to act in order to provide sustainability? And then what does it mean?**

● **how far liberalized market regulation is able to make sure that the use and deployment of the available resources of the planet are optimal in order to generate a sustainable future?**



JOOP REMM 

Knowledgedialogue

Ruling the waves, not waving the rules

Good corporate governance is a bit like reading the tea leaves. It requires sensing the processes in one's constituencies and realizing ones role in them, being able to go with what is happening, not upsetting it.

We often see things go wrong in corporate governance where individuals exceed their role within their constituencies, offsetting what in itself could be a resilient system. They often think that it is either them or the group, while more successful individuals see their success as emerging from the success of their constituency.

Ruling the waves, not waving the rules

This story is a lot about control. The issue is, do you control your destiny by adding something to what is apparently happening, or do you seek control against what unites the contexts within which you live?

Reading the tea leaves

Whether you have much control over your life and work, or not so much, it will always take place within a larger context, with a dynamic of its own. Your personal success will partly depend on how well you are able to understand that dynamic and are able to relate to it in your actions.

Constituencies

Organizations, whether business organizations or not for business organizations, are made up of groups of people with shared interests (next to interests which they

do not share). These groups, organized in formal structures and also in more informal ways, represent the potential of the organization. For actions and decisions, they are the constituencies which will determine, whether the action or decision was the right one.

Part of a whole, or the whole apart

One can regard a whole as a context of value, to which one adds value. But also it is possible to abuse the whole, treating it as something to feel comfortable in and to hide in. A whole can be a legitimization, but it can also be an excuse. The two may appear – very deceiving – practically the same.

Integrity and the social context

Integrity is not just about individual strength, but it is about how one acts from personal strength within a social context. It shows itself within relationships. (Robert Solomon, 'The Joy of Philosophy')

Appreciating what is happening
With 'appreciating' is not meant the same as 'agreeing', a commonly made mistake. It means realizing the inner value of what it is you appreciate, whether you agree with it or not.

This may be misunderstood as totalitarian, but it is in fact its opposite. The totalitarian attitude would be to realize what is happening and then to abandon one's individuality, either or not as the result of external pressure. True appreciation means that one takes upon him- or



Dialogue is characterized by postponing judgement, as we too often offset communicating by starting it with a verdict, not an open question.

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herself an active attitude towards what is happening and accepts shared responsibility for it.

How not to upset what is happening

One could say that 'what is happening' has a validity of its own. One can share the responsibility for it from a realization of one's own validity, or authenticity. The inability to be authentic – admittedly, a tall order – with the individual has a negative impact on the coherence of the larger context.

Explicit and implicit

Governance can be a matter of explicitly mobilizing constituencies. Yet, it can also happen implicitly. Some theories of leadership emphasize the remarkable individual who is capable of unusual things ('svae the company', or messianic leadership), but also in that case there are relationships implied in leadership and constituencies empower that individual to be in fact remarkable.

Things going wrong in corporate governance

Corporate governance is about managing the coherence of the populations that make up the organization, in line with the purpose of the organization and in line with its strategy. From time to time things go wrong, in the sense that undesired and harmful effects occur. Those things are often caused by either a culture of distrust, infecting the whole or a large part of the organization (rats live in large groups) or by individuals with ego issues.

Roles and constituencies

Organizations are increasingly not 'more of the same'. The more effective organizations derive quality from appreciating differences between individual members, as sources of motivation, ideas and other forms of input. Thus, those

members take on a diversity of roles, often with some aspect of leadership. Those roles become meaningful in how they express the relationship of the individual to certain constituencies. (Jim Collins, 'Good to Great')

Resilient systems

A healthy system is resilient. It can grow from its roots, absorb what is new and protect itself from what is counter to its growth.

From 'either/or' to 'and'

Individuals can be exclusive, but constituencies have to be inclusive in order to be resilient. Instead of making apparent choices, they need to think outside the boxes created by those choices.

Personal success from context success

One can safely say that lonely success is no success at all (except for a psychopath). Success, in general, is not a natural resource, as if it could be drilled and then shared equally or unequally. Rather, it is a process stemming from what is typical of human needs, motives and capabilities. Those take place within the poles of individual growth and relationships; poles of the same world, of course. (Aristotle, Eudemian Ethics)

Dialogue

Dialogue is a way of exchanging meaning, which is characterized by accepting what is new and discovering what is real. Traditionally, 'logos' means 'expression of reality', so we can take 'dialogue' to mean 'to go through the expression of reality'. This we have to do together, as the reality is up to a point a shared reality. Dialogue is about exploring together.

Dialogue is characterized by postponing judgement, as we



too often offset communicating by starting it with a verdict, not an open question. However, it does not mean `forgetting about judgement'. No, at some point the exploring, if it is done realistically, leads to the discovery of a decision. At that point, the process of having explored together allows for that decision to be understandable and shared by the constituency for which it has meaning.

Knowledge and thinking beyond the individual

Increasingly, we notice that intelligence is not the effect of an intelligent individual, but the result of intelligent connections between more or less intelligent individuals. Knowledge is of this nature. It requires constituencies, which recognize reality in it together. (David Bohm, 'Thought as a System')



So, to talk about the biology of human businesses, I could simply point out that all our businesses are systems made up of people, who are living beings, and that therefore businesses are living systems or biological entities. QED. However ...

ELISABET SAHTOURIS

Evolution Biologist, Futurist, Living Systems Design

The Biology of Business: Key to a Sustainable Future

Introduction

As an evolution biologist, it is obvious to me that we humans are part of Nature and that Nature has been doing business for billions of years, if we take a broad definition of business to be the economy of making a living, of transforming resources into useful products that are exchanged, distributed, consumed and/or recycled. So, to talk about the biology of human businesses, I could simply point out that all our businesses are systems made up of people, who are living beings, and that therefore businesses are living systems or biological entities. QED. However, to say something more useful I need to go back through history to show why most human businesses, despite being made up of people, do not function like living systems, at least not like healthy living systems. Those few that do are swimming upstream against the norm, usually with great difficulty, and that just should not be, need not be and must not continue to be.

Our businesses, unlike those of other species, are organized and run in a socio-political cultural context, and that context has a history. Historical context has a great deal to do with what we believe about ourselves and our world, and when I sort through that socio-political history looking for the most salient influences on contemporary business from my own perspective, I am naturally drawn to the history of science.

Four very important publica-

tions by two great 19th century scientists have so strongly shaped our beliefs about our world that they affect everything about human culture including our definition of human nature and the way we do business. They are:

1850, Rudolph Clausius' *On the Motive Power of Heat, and on the Laws which can be Deduced from it for the Theory of Heat*

1859, Charles Darwin's *On the Origin of Species*

1865, Clausius' paper on Thermodynamics reformulating the fundamental laws of the Universe as energy constancy and entropy

1871, Darwin's *The Descent of Man*

I will argue that Clausius' model of a universe running down by entropy and the Darwinian model of biological evolution as an endless competitive struggle for scarce resources both give us half-truths about Nature that seemed appropriate in their historical context but are now seen to be fundamentally flawed, thereby seriously misleading us and holding up our own natural evolution. The full truth - including the other half of a more holistic view in physics and biology respectively - reveals that Nature is on our side in role-modeling the evolutionary leap that would rapidly bring about an energy efficient and globally beneficial human economy that functions like a truly healthy living system.

The bottom line of human experience is that it all takes



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Our world is now in sufficient crisis that transparency in all our endeavors is critical to our survival.

place within our consciousness and that our minds form the beliefs on which we act by collectively creating a uniquely human world. Change those beliefs and that world changes accordingly.

How could science have failed to rectify hugely important flaws in 19th century science even in the 21st century? I believe the answers lie in the fact that science, for all its protestations about being value-free, has never been an independent cultural endeavor free to pursue unbiased inquiry into Nature. Science was raised to the status of a secular priesthood - in the sense of being given the mandate and power to tell us how things are in our universe and who we are within it - by an even more powerful political economy, in turn for the great power of science in its engineering applications that keep that political economy in power.

Our world is now in sufficient crisis that transparency in all our endeavors is critical to our survival. Light shed on the relationship between science and political economy can, I believe, show us the way to true freedom and a healthy economy for all the world's people. It is Business that will lead the way, providing it, too, adopts transparency and belief in the mission of creating value for all stakeholders from people to planet.

Science and Political Economy: in which God Gives Way to Man

Only a few centuries ago in Europe, a new alliance of industrial entrepreneurs and scientists forged the industrial revolution, bringing the modern age successfully into being and replacing the prior cultural hegemony of the alliance between Church and State. Let me address a few details of this

process, while noting here the current attempt to reinstate the Church/State alliance in the U.S. at present.

Over the past few centuries, science became far more than a vast research enterprise that gave us an advanced technological society with more commercial products than any previous culture could possibly have imagined, along with "progress" at a breakneck pace that leaves us breathless and wondering if we can even hope to catch up with our own children and grandchildren. Science, in addition to spawning that technological society, also became the cultural priesthood appointed to give us our cultural worldview: our beliefs about How Things Are in this great universe of ours, and on our planet Earth in particular. This is a relatively new and very important historical phenomenon in the history of civilization, as the priesthoods of most previous civilizations (large organized sociopolitical entities with urban centers) with notable exceptions such as China, were religious, getting their worldviews more from revelation than from research.

The scientific worldview founded by Galileo, Descartes, Newton, Bacon and others was of a non-living, non-intelligent mechanical universe - a clockworks projected from human mechanical inventions to God's as the "Grand Engineer's" Design of Nature in which humans were just complex robots, the males alone imbued with a piece of God-mind, according to Descartes, so that they, too, could invent machinery. As models of celestial mechanics, the Newtonian motion of stars and planets, became more elaborate, social institutions as well were increasingly seen and modeled on mechanism and expected to run like the well-oiled machines of factories.



Time/motion efficiency studies of workers turned people themselves into machines as Charlie Chaplin movies so well caricatured. Most of today's businesses are still conceived, organized and run as hierarchical mechanics.

As men of science had come to feel increasingly competent and knowledgeable about the physical world, and in consequence felt themselves to be in control of human destiny, they had formally abandoned the "hypothesis" of God, thereby removing any notion of Nature, including humans, as existing through sacred creation. Rather, Nature was redefined as a wealth of natural resources to be exploited by Man, the pinnacle of accidental, natural evolution.

One of the most pervasive and persistent cultural beliefs we have been given by science is the concept of this godless universe as non-living, accidental, purposeless and running down by entropy, with life defined as a transient "negentropy" opposing this force of decay, yet never overcoming or even balancing its inevitable slide into heat death. To me, this is like describing the life of any one of us as a one-way process of decay toward death, with a negdecay process of birth and growth opposing it, though overall unsuccessfully.

This dreary view of life made me wonder deeply about the very concept of non-life, realizing in the process that it was invented by western science. All cultures have understood life and death, but non-life is something that never was or will be alive - a concept that came into human culture with the invention of mechanism in ancient Greece and resurfaced some dozen centuries later in a new era of mechanics. Was it really appropriate, I asked myself, for science to force life

to be defined within a context of non-life? Could one really explain the existence of living things as accidentally derived from non-living matter? Could one derive intelligence from non-intelligence, consciousness from non-consciousness as I was consistently taught in the graduate science departments of several universities and research institutions?

Entropy reconsidered

It was German theoretical physicist Rudolph Clausius, who first formulated the two basic laws of Nature in 1865 - exactly halfway between Darwin's publication of *The Origin of Species* in 1859 and *The Descent of Man* in 1871 - as:

1. *The energy of the universe is constant.*
2. *The entropy of the universe tends to a maximum.¹*

Clausius' work on the thermodynamics of entropy, openly acknowledged by Maxwell in England, was based on Sadi Carnot's experimental work with energy transfer in the closed mechanical systems of steam engines and applied (by Clausius) to the universe as a whole with no evidence that the universe was a closed system in which such extrapolation might be valid. Yet these two "inviolable laws," along with the more basic conceptualization of the universe as purposeless non-life, have persisted since as absolute dogma in physics and all other areas of science.

But this model is a less satisfying conceptualization from scientific observation than the ancient Taoist, Vedic and Kotodama model of a universe built on fundamental dualities within the Oneness of Cosmic Consciousness, which Yasuhiko Genku Kimura has explicated from a number of perspec-

tives in the pages of this journal. Dualities are essential to the process of creation and the primary duality is often described as outward/inward, centripetal/centrifugal, expansion/contraction, translating in contemporary western science to radiation/gravity as the most fundamental forces or features of Nature.

Elsewhere, I have cited Walter Russell², as well as Nassim Haramein and Elizabeth Rauscher³, for their models of a universe in which entropic radiation and centropic gravity are in a perfect dynamic balance of expansion and contraction that constitutes a unified field. Haramein and Rauscher's theory is so conceptually and mathematically elegant that universal forces are reduced from four to two and the need to postulate hypothetical dark matter and energy in the universe is eliminated. In short, the work has been done to show that a universe of unified opposites satisfies our observations better than a one-way entropic universe, and shows that the universe is not running down at all.

The still "official" entropic universe, conceptualized after Einstein as beginning with a Big Bang and deteriorating ever since, is in sharp contrast to previous worldviews of Nature as alive and vibrant with intelligent creation and purposive direction - a view closer to my own model of a self-organizing, living universe in which planetary life is a special case of extra complexity, now actually measurable as being halfway between the microcosm and the macrocosm, where "upwardly" and "downwardly" spiraling energies collide on physical surfaces where such life can evolve⁴.

Historically, the social consequences of the proclamation

of an entropic universe by the scientific establishment were enormous, giving rise, for example, to belief in the Malthusian struggle for existence in a world soon to end (see below), interpretations of Darwinian evolution theory as a "dog eat dog" world and a philosophy of Existentialism extending this view of the purposeless and hopeless human struggle into psychology, art and western culture at large. Such beliefs fostered the growth of our current consumer society with its "get what you can while you can" outlook in which advancing in the "job market" to increase power to consume became the driving force of modern and post-modern western civilization. Humanitarian social values and morals were left to religions with lesser persuasive clout than science, which came to openly pride itself on being value-free, and therefore even more scientific (read: unassailable in its conclusions about How Things Are.) Small wonder that businesses carried out the competitive struggle justified as "social Darwinism" and deemed inescapable'.

Darwin, Global Conquest and Evolution

Darwin himself had concluded with great elaboration in his magnificent opus on *The Descent of Man*, that humans must exercise their evolved capacity for moral behavior, as David Loya has so beautifully pointed out in his book *The Great Adventure*⁵, but this aspect of Darwin's work was not promoted by the science that took up his theory of evolution, focusing rather on his explanation of struggle in scarcity as the driver of evolution, which is best understood as rooted more in Darwin's historical context than in Nature itself. Had Darwin been able



to see beyond that context, he might have noticed that highly evolved natural systems evolved long before humans display cooperation, mutual support, altruism and other features we define as ethical, but that is getting ahead of my story.

Columbus' voyages in the late 15th and early 16th centuries had inspired commerce between Europe and the New World, including such feats as Pizarro's plunder of 24 tons of treasure collected for the Andean Inca Atahualpa's ransom before his murder - exquisite art works of master craftsmen that were melted into gold bricks for transport to Europe - and trade in African slaves that were used to build colonial infrastructure, care for the colonists, etc. The American colonies were, in fact, settled by a corporation - the Massachusetts Bay Company, chartered by King Charles in 1628 for the purpose of colonizing the New World and its commercial ventures.⁶

Magellan's global voyage in the 16th century had established that all the world's territories were finite and could be owned, and the East India Company had been founded in 1600, Queen Elizabeth granting it monopoly rights to bring goods from India to challenge the Dutch-Portuguese monopoly of the spice trade. Eventually the East India Companies of eight European nations functioned as the world's first great multi-national corporation or multi-national cartel of corporations. Though it incited American colonists to riot in the Boston Tea Party rebellion of 1774, Betsy Ross was commissioned in 1776 to sew the circle of stars representing the first 13 states of the new union over the British emblem in the top corner of an East India Company flag to create the first US flag. To this

day we retain its thirteen red and white stripes with a blue corner field.

In Darwin's day, Thomas Malthus had been commissioned to inventory the Earth's natural resources as head of the Economics Dept. of the East India Company's Haileybury College. Malthus concluded from his work that the world would end soon because human populations would overwhelm food production, causing an inevitable dying off of humans. This prediction justified the East India Company's "us or them" policy of assaying and acquiring all the Earth resources possible for Europeans so that they, at least, could survive.

Darwin, after doing his own Earth inventory work as a young shipboard scientist, could find no better way to explain the driver of evolution for his theory than simply to adopt his family friend Malthus' theory of human competition in scarcity and apply it to all of nature. This came to give scientific validity to our socio-economic vision of scarcity and fierce competition for resources, of humanity doomed permanently to win/lose economics and warfare. As Darwin put it in *The Origin of Species*:

... Nothing is easier than to admit the truth of the universal struggle for life, or more difficult...than constantly to bear this conclusion in mind. Yet unless it be thoroughly engrained in the mind, I am convinced that the whole economy of nature, with every fact on distribution, rarity, abundance, extinction, and variation, will be dimly seen or quite misunderstood ... As more individuals are produced than can possibly survive, there must in every case be a struggle for existence... It



... evolution is better understood as the biogeological process of Earth as a whole and the changing species patterns, both physiologically and behaviorally, over time within that larger context.

is the doctrine of Malthus applied with manifold force to the whole animal and vegetable kingdoms; for in this case there can be no artificial increase of food, and no prudential restraint from marriage.⁷

Thus, Darwinian theory as Darwin himself established it, not just through later misuse as "social Darwinism," was very essentially rooted in political economy, which was itself rooted in a scientific worldview of a godless, mindless, coldly mechanical universe ever running down.

From Competition to Cooperation

My own work as an evolution biologist shows a very different picture of How Things Are in Nature and in our human world. Once I adopted Maturana and Varela's definition of life as *autopoiesis* - that a living entity is one continually creating itself in relation to its environment⁸ - and Vernadsky's definition of life as a disperse of rock⁹ (which I paraphrased as "life is rock rearranging itself"), I quickly recognized that the Earth itself qualifies as a living entity. Its crust continually creates itself from erupting deep magma and recycles itself back into that magma at the edges of tectonic plates; its pervasive biological creatures are continually formed from and recycled into that same crust - all this in relation to Earth's Sun star, moon, other planets and greater galaxy.

Further, oceans, atmosphere, climate and weather are all global systems. While biological creatures from bacteria to mammoths and redwoods are created from the same DNA, the same minerals and largely from the same proteins. Therefore, evolution is better un-

derstood as the biogeological process of Earth as a whole and the changing species patterns, both physiologically and behaviorally, over time within that larger context.

This leads me to include in my view of evolution the observations

- a) that the process of biological evolution goes well when individual, species, ecosystemic and planetary interests are met simultaneously and reasonably harmoniously at every such level of organization, and
- b) that human behavior is as much a part of biological evolution as is the behavior of other species.

Nested levels of biological organization were called holons in holarchy by Arthur Koestler¹⁰, and are a useful contrast to the hierarchies humans have tended to model in machinery and build into socio-cultural organizations. In a healthy holarchy, no level is more important or powerful than any other; rather, all are vitally important, so none can dictate its interests at the expense of interests at other levels. All levels must continually negotiate their interests with other levels. In our bodies, for example, cells must negotiate their interests with their organs, organ systems and the body as a whole, just as families (the next level of holarchy beyond individuals) must negotiate family interests with family members. A clear violation of healthy holarchy occurs when cancerous cells cease to negotiate and consider only their interests in proliferation at the expense of the body as a whole. This is, of course, a self-defeating strategy on their part.

The process of evolution is universally recognized as leading from the simple to the complex.



Even the single nucleated cell - the only kind of cell other than bacteria - is now known to be a cooperative enterprise evolved by once hostile bacteria.

Early Earth was a homogenized mass of mineral elements and evolved to the extremely complex planet of which we are part. Its first organisms were invisibly tiny archebacteria, while we ourselves are vastly more complex multicelled creatures. Multicelled creatures are relatively huge cooperative enterprises that could never have evolved if individual cells had been doomed to a struggle in scarcity, so they cannot really come about at all by the Darwinian hypothesis. Even the single nucleated cell - the only kind of cell other than bacteria - is now known to be a cooperative enterprise evolved by once hostile bacteria.

Note that I said, "once hostile." Indeed it seems that the first half of Earth's life in which bacteria had the planet to themselves, was for much of its existence indeed a Darwinian world of stiff competition, great crises caused by the archebacteria themselves and wonderful technologies they invented in the course of it, not at all unlike the human world's current situation. In fact, the archebacteria harnessed solar energy, invented electric motors (now coveted by nanotechnologists) and nuclear piles. They even invented the first WorldWide Web in devising their very productive and universal information exchange in the form of DNA trade, as I have described in great detail in my book *Earth-Dance: Living Systems in Evolution*¹¹. Eventually, however, as we know through the work of microbiologist Lynn Margulis¹², they created the collaborative nucleated cell, turning these very technologies to good use in cooperative ways and streamlining themselves, as well as committing to community, by donating some of their DNA to the collective gene pool we call the nucleus.

What (r)evolutionary learning

process made this shift from competition to cooperation possible?

The key to answering this question and developing a complete model of biological evolution is suggested by the standard classification of natural ecosystems into successive Type I, II and III. A typical description of succession - defined as the replacement of species with other species - is as follows:

*Ecosystems tend to change with time until a stable system is formed... pioneer organisms modify their environment, ultimately creating conditions... under which more advanced organisms can live. Over time, the succession occurs in a series of stages which leads to a stable final community... called a **climax community**. This community may reach a point of stability that can last for hundreds or thousands of years.¹³*

Type I ecosystems are populated by aggressive species establishing their niches through intense, sometimes hostile, competition for resources and rapid population growth, while the species in Type III ecosystems tend toward complex cooperative or collaborative systems in which species feed or otherwise support each other to mutual benefit. Type IIs generally lump together various "transitional" ecosystems. It seems reasonable to ask where the "more advanced" species that can "build stable final community come from? How did they evolve? Logically, there must have been a time when only pioneer species existed, yet somehow evolution led to the existence of mature, cooperative species. It would seem there had to be some kind of evolutionary learning process in which species discovered through their experience that



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... healthy, mature living systems are dynamically cooperative because every part or member at every level of organization is empowered to negotiate its self-interest within the whole.

cooperation pays!

Why not recognize the evidence for this ancient learning process revealed in the different types of ecosystems? We are certainly familiar with learning and maturation processes human life, especially the transition from immature adolescence, so often feisty in its competitive stance, and socially cooperative maturity in adults, who at their best become wise elders role-modeling the finest in human behavior. The ancient adage "As above, so below" has proven itself again and again in seeing the similarity of patterns at different levels of Nature from simple to complex, from microcosm to macrocosm. It is in the similarity of its patterns that we see the true elegance of Nature.

We know the stages of evolution in the archebacteria, from intense competition to their huge leaps in cooperation forming nucleated cells. We also know these cells' collaborative process in evolving multicelled creatures, all the way to our own highly-evolved bodies containing up to a hundred trillion cells, each of which is more complex than a large human city, each containing some 30,000 recycling centers just to keep the proteins of which they are built healthy.

Again and again our close looks at Nature show this sequence from intense competition to the discovery that peacefully trading with competitors, sharing with them, feeding them, providing homes for them, even helping them reproduce, all the while collectively recycling resources and ever enriching the shared environment, is the most efficient and effective way to survival and even thrival for all.

It is in this mature cooperation that we find the ethics Darwin

thought could only be evolved by humans. Indigenous tribal peoples learned such ethics by recognizing them in Nature, copying reciprocal gifting and insuring food and shelter to all tribal members, even working consciously to ensure tribal and ecosystemic wellbeing seven generations hence. Like most indigenous peoples, ancient Greeks advised cooperating with Nature by giving back as much as we take from it, yet our advanced civilization seems to be the last to learn this. We seem stuck where Darwin was stuck, believing we are doomed to remain in hostile competition forever. How fond we are of repeating "You can't change human nature" without ever really looking clearly at the nature of Nature itself.

Glocalisation as an Evolutionary Leap

For some eight to ten thousand years up to the present, much of civilized humanity has been in an empire building mode that is immature from the biological evolution perspective. From ancient empires ruled by monarchs we progressed to national expansion into colonial empires and more recently into multi-national corporate empires. All these phases have increased our technological prowess while also increasing the disparity between rich and poor that is now devastating the living system comprised of all humans as well as the ecosystems on which we depend for our own lives.

As we have seen, healthy, mature living systems are dynamically cooperative because every part or member at every level of organization is empowered to negotiate its self-interest within the whole. There is equitable sharing of resources to insure health at all levels, and the system is aware



that any exploitation of some parts by others endangers the whole. Clearly, internal greed and warfare are inimical to the health of mature living systems, and humanity is now forced to see itself as the single, global living system it has become, for all its problematic, yet healthy, diversity.

Therefore I see the formation of global human community - including but not limited to economics - as our natural evolutionary mandate at this time. We are actually achieving quite a few aspects of this process in positive, cooperative ways; for example, in our global telephone, fax, postal and internet communications, in air travel and traffic control, in money exchange systems, in the World Court initiative and international treaties on environment and other issues, in most United Nations ventures, through ever more numerous and complex collaborative ventures in the arts, sciences, education, and sports, among religions and the activities of thousands of international NGOs. Yet the most central and important aspect of glocalisation, the glocal economy, is still following a path that threatens the demise of our whole civilization.

Let me draw once again on the historical context of the alliance between science and industry. Hazel Henderson points out that Adam Smith related his famous theory of "an invisible hand that guided the self-interested decisions of business men to serve the public good and economic growth," as set forth in his 1776 book *An Inquiry Into the Nature and Causes of the Wealth of Nations*, to Newton's great discovery of the physical laws of motion. Also, that economists of the early industrial revolution based their theories not only on Adam Smith's work, but also

on Charles Darwin's,

...seizing on Darwin's research on the survival of the fittest and the role of competition among species as additional foundations for their classical economics of "laissez faire" – the idea that human societies could advance wealth and progress by simply allowing the invisible hand of the market to work its magic...this led economists' and upper-class elites to espouse theories known as "social Darwinism:" the belief that inequities in the distribution of land, wealth and income would nevertheless trickle down to benefit the less fortunate. Echoes of these theories are still... propounded in mainstream economic textbooks as theories of "efficient markets", rational human behavior as "competitive maximizing of individual self-interest", "natural" rates of unemployment and the ubiquitous "Washington Consensus" formula for economic growth (free trade, open markets, privatization, deregulation, floating currencies and export-led policies).¹⁴

All these theories, as Henderson points out, underpin today's economic and technological globalisation and the rules of the World Trade Organization, the International Monetary Fund, the World Bank, stock markets, currency exchange and most central banks.

When the Bank of Sweden's economics prize, incorrectly but widely considered as one of the Nobel prizes, was awarded in December 2004 to economists Edward C. Prescott and Finn E. Kydland for their 1977 paper purporting to prove by use of a mathematical model that central banks should be freed from the control of politicians, even those elected in



It seems high time for our dominant western culture, especially the United States, to learn the economic lessons that were learned by many an other species in the course of their biological evolution.

democracies, there was a wave of long-building protest. Scientists, including members of the Nobel Committee and Peter Nobel himself, demanded that the Bank of Sweden's economics prize either be properly labeled and de-linked from the other Nobel prizes or abolished on the grounds that economics is not a science, but a set of increasingly destructive policies¹⁵.

It seems high time for our dominant western culture, especially the United States, to learn the economic lessons that were learned by many an other species in the course of their biological evolution. In human economic terms, Henderson long ago made the analysis of the relative costs of destructive wars and constructive development,¹⁶ showing clearly how making war to destroy enemy economies was vastly more expensive than peaceful development of economies. More recently, Ben Cohen of Ben and Jerry's beloved ice cream company made an animated video for the web-based organization True Majority using stacked Oreo cookies to show the amount of money the US Pentagon requires for its military and the comparatively trivial amount it would take to feed all the world's children, build adequate schools and provide other basic services at home and abroad¹⁷.

The unsustainability of present economics has now become widely discussed around the world, but it is still not clear we understand deeply that the word *unsustainable* means *can not last*, and therefore, *must be changed*. Knowing how and why current economic policies are unsustainable is not enough; we must become more conscious participants in the process I call *glocalisation*, rather than letting a handful of powerful interests and players

lead us all to doom.

Capitalist free markets can only succeed in the long run if a) they really are free, which is not currently the case, and b) if that freedom leads more and more towards friendly (rather than hostile) competition and increasing collaboration - not as exploitative cartels, but as ventures consistent with global family values. Profits can be increased by treating people well and forming cooperative ventures such as BALLE (Business Alliance for Local Living Economies), a scheme I helped pioneer in the Social Venture Network (SVN) that is dedicated to building alliances among locally networked businesses for the common good¹⁸.

Reclaiming human communal values and acting upon them in ways that renew our economies while reversing the ravages of colonialism, and what John Perkins calls the "corporatocracy's" more recent predations as he so horrifically describes them in his new book *Confessions of an Economic Hit Man*,¹⁹ is absolutely necessary if we are to turn our economies from unsustainable paths of destruction to sustainable paths leading to thrival.

Fortunately life is resilient, and we are witnessing a growing tide of reaction and dialogue on the present nature of economic globalisation. These natural and healthy reactions have in common the recognition that communal values have been overridden in a dangerous process that sets vast profits for a tiny human minority above all other human interests. For a World Trade Organization to dictate economic behavior that does not meet the self-interests of small struggling nations, as it is increasingly discovering, would be like trying to run a body at the expense of its cells. We are living systems, whether we like



it or not, and the only way to build a healthy world economy - to *glocalise* successfully - is Nature's way. (I use the terms *glocalise* and *glocal* economy to indicate all levels of economic holarchy from local to global.)

Economic success has so far been measured in monetary terms rather than in terms of well-being for all, focusing on GNP/GDP accounting rather than on quality of life accounting such as that pioneered by Henderson¹⁴ and now taken up by many progressive economists and at least one nation - Bhutan - by decree of its king, while others, notably Brazil, are leaning in that direction.

The Biology of Business

In my *EarthDance* book¹¹, as well as in my article "The Biology of Globalisation"²⁰, I set out the

Main Features and Principles of Living Systems:

1. Self-creation (autopoiesis)
2. Complexity (diversity of parts)
3. Embeddedness in larger holons and dependence on them (holarchy)
4. Self-reflexivity (autognosis—self-knowledge)
5. Self-regulation/maintenance (autonomics)
6. Response ability—to internal and external stress or other change
7. Input/output exchange of matter/energy/information with other holons
8. Transformation of matter/energy/information
9. Empowerment/employment of all component parts
10. Communications among all parts
11. Coordination of parts and functions
12. Balance of Interests negotiated among parts, whole, and embedding holarchy

13. Reciprocity of parts in mutual contribution and assistance
14. Conservation of what works well
15. Creative change of what does not work well

This list was derived from my observations, as a biologist, of living systems from single cells to complex multicelled creatures, and of healthy ecosystems. These features should also be present in any healthy human system from family to community, business, government or other social system up to our global economy. But it became quickly clear that few businesses show these features.

Note that numbers 9, 10, 12 and 13 on the list, in a business that functioned like a healthy living system, implies the active empowerment and participation of every employee of that business in what it does and how it is run, with open communications among all. This, in short, means full inclusion and transparency, features totally abused in recent cases brought to public light, such as Enron and WorldCom, which glaringly highlighted what happens to businesses that see themselves in fierce competition rather than as healthy, collaborative aspects of their greater (stakeholder) communities. In sharp contrast, Bill George, former CEO of Medtronic and author of a book called *Authentic Leadership*, once made headlines by boldly declaring that shareholders came third, after customers and employees. In his address to the World Business Academy annual meeting in 2004 he expanded on this, saying, among other things, he had told all employees on becoming CEO that none of them would be fired on his watch. In a time of unprecedented job

Cooperation, collaboration and community empowerment are, as Nature role-models them and as I cannot repeat too often, more efficient and effective ways of doing business than living in fear of drowning in a competitive race or wasting energy and resources on beating down the competition.

CORPORATE GOVERNANCE

insecurity at all levels of employment up to the top, this was bold leadership toward a very healthy company, whose shareholders had no complaints on his watch either.

The Internet, which is playing a huge role in business by now, is a vast boot-strapping, self-organizing system that, however young and chaotic, shows all fifteen of the features in one way or another and must therefore be considered a real living system. One of the big problems remaining to be worked out on the Internet is its ethical self-governance. A *Wired Magazine* article on Wikipedia, the phenomenal self-organizing web-based encyclopedia that rapidly outstripped - in numbers of articles - existing encyclopedias fashioned by experts over very long periods of time showed it to be an exciting example of how this self-governance is now coming into practice. While anyone with web access is free to initiate, amend or extend articles at any time, fleets of dedicated contributors monitor the changes and quickly catch malicious insertions. As reported in the March 2005 issue, the average time it took to detect attempts to sabotage Wikipedia's integrity was 1.7 minutes!

Cooperation, collaboration and community empowerment are, as Nature role-models them and as I cannot repeat too often, more efficient and effective ways of doing business than living in fear of drowning in a competitive race or wasting energy and resources on beating down the competition.

Tachi Kiuchi, former CEO of Mitsubishi Electric, and Bill Shireman, an ecologist, put it this way in their important book, *What We Learned from the Rainforest*: "There is no problem ever faced by a business that has not been faced

and solved by a rainforest."²¹ A rainforest is a Type III ecosystem in which mutual support among all species has proven more efficient and effective than spending energy to make war among species. (Note that predator/prey relationships are actually cooperative when seen from the ecosystem level of holarchy because prey feeds predators while predators keep prey species healthy.) The rainforest (like a prairie or coral reef) creates enormous new value continually by very complex production and trading systems as well as by recycling its resources very rapidly.

Kiuchi has proposed a clear program for corporate accountability that he calls The Eightfold Path to Excellence²², posted on the website of this journal, in which it was published. The eight steps of this path, related to the rainforest lessons, are:

- #1: Adopt a bold and visionary CORPORATE MISSION, one that envisions how your company will
- #2: Conduct a regular ASSESSMENT of your success in maximizing return to stakeholders, and
- #3: Develop INCENTIVE STRUCTURES that reward the creation of real stakeholder value on behalf of the corporate mission.
- #4: Adopt MANAGEMENT SYSTEMS to help you manage the company toward maximum stakeholder return, and measure your step-by-step progress.
- #5: Establish a STAKEHOLDER ENGAGEMENT SYSTEM, to monitor and solicit feedback from
- #6 Create value for the POOREST in the world. The stakeholders through whom the greatest mutual benefit can be delivered.
- #7: Issue an ANNUAL REPORT TO STAKEHOLDERS



that is as systematic as your annual report to shareholders.

#8 LIVE the mission of your business. Make THAT – not your 90-day earnings report – the map to guide your course.

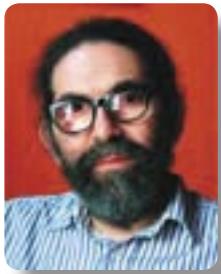
From an evolution biology perspective, glocalisation is a natural, inevitable, and desirable process, much broader than economics and already well on its way - the latest and greatest evolutionary instance of cooperative collaboration in a living system. Consider all the collaboration required for global communications from telephone and fax to television and the Internet, for money exchanges across all cultures, for international travel, scientific cooperation, world parliaments of religion, the many global activities of the United Nations, and so on. All these instances of cooperation remind me of the formation of the nucleated cell a few billion years ago, when the technologies invented by archebacteria in their hostile competitive phase were put to cooperative use in building the new communal cell. This glocalisation process is not reversible, though it certainly could fail, with the consequent destruction of human civilization as we know it. The critical link will prove to be how we change the way in which we carry out our economic, business activity as a global species.

As we have seen, unopposed universal entropy and Darwinian evolution through struggle in scarcity, presented as official scientific Laws of Nature, have prevented us from seeing them as half-truths requiring completion from a more holistic perspective. The entropy of radiation balanced by gravitational 'centropy' is, at the biological

level of Nature, the life/death recycling process that creates overall abundance - on Earth some 4.8 billion years of value creation despite huge accidental extinction setbacks. Darwin's struggle in scarcity is therefore not permanent for any species, because young pioneering species can and do learn to share, recycle, and support each other. We humans are such a young, pioneering species, and I believe we now stand on the brink of our own evolutionary maturity, ready to do business as it is done in the rainforest.



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- 17) See BenCohen's animation video for True Majority at <http://ww11.e-tractions.com/truemajority/servlet/Gamelet;jsessionid=99F98662FA3A4E7C920CDBDD29064AC6?req=BjEzO6PaM3E3tzM6bjEFTXM6B3Ef%2BWC3Q%2FmabjF>



GEOFFREY KLEMPNER

Philosopher Catalyst in the Knowledge Stream Corporate Governance
Philosophy for Business

My Summit

In one of the coffee breaks, when I finally got to talk to Felix Bopp, I asked him straight out, 'Why did you invite me? why am I here?' It's difficult to find philosophers involved in business,' Felix replied with a smile. I resisted the temptation to pursue the subject further. I was there, that was all that mattered.

But why did I come? what was I looking for?

Back in August last year, when I received my invitation, I wrote in my online notebook:

Socrates said, 'Know thyself'. It is great if you feel that you know yourself. (Better still if you are correct!) Most of us would be happy to be working towards self-knowledge -- or at least going in the right direction. I am a philosopher. Truth-seeking, more than anything else, is what turns me on. Why that should be I don't really know. It would be interesting to find out. But is what I have just said really true? Is it truth that I am really after, or something else? Why put myself on this stage, exposing myself to all manner of 'risks', if I could seek truth much more safely -- and, probably, much more efficiently -- in some little philosophy department somewhere? Could it be, after all, that there is something I want more than I want truth?

When you put yourself to the test, there's two things you can risk... You can risk finding out the real truth about yourself, the truth you didn't want to learn. Or you can risk losing your way in the search for self-knowledge. Both of these things I fear. -- I don't know which is worse.

**Glass House Philosopher
14th August 2005
<http://www.pathwaysplus.com/glasshouse/notebook2/page75.html>**

I came to the Summit not just looking for some interesting problems or questions to practice my philosophical skills on. I came looking for inspiration and practical advice.

I want to succeed as a philosopher in the business world, and not just 'of' it.

The keynote speeches on risk could have been written just for me. As I write these words, I am in the process of preparing to launch a philosophy business -- a UK limited company -- in partnership with one of the students from Pathways, my online philosophy school. This is no mere intellectual 'risk'. A substantial amount of money is at stake. Back in August, I would probably have reacted in horror to the idea. But much water has passed under the bridge since then.

On the first day, I learned a few useful techniques for overcoming my risk aversion. 'Whatever, you do, death will get you in



the end' is a good one. Thanks for that, Sir Paul Judge. I've written before about the fear of death. My radical solution -- it will not appeal to everybody -- is to give up belief in an 'ego' which persists over time. Only the present moment is real. When you let go of your ego, all sorts of things become possible.

But is that true?

You tell me. Faced with a real challenge, and the very real and scary possibility of failure, it is not so easy to cast ego aside and say, 'whatever will be will be'. I'm an inconsistent fatalist. I can't quite persuade myself to give up the illusion of 'control'. I guess I still have some work to do on that aspect of my personality.

In the corporate governance stream I learned about the role of dialogue. The company of the future will be an organic, fluid entity rather than a rigid hierarchical structure, but more than merely organic because each of the 'organs' is a self-conscious individual in his or her own right. The very fabric of the company of the future will be built up from the personal interactions within it. Through this arises the possibility of a new kind of 'competition', a new kind of 'marketplace' where co-operation rather than egoistic survival of the fittest is the key to survival.

Is that true?

I don't know. But here's something I am more sure of.

It arises from a discussion about the difference between an 'business consultant' and a 'philosophical consultant'. Are they two of the same? Or are we talking about apples and oranges? You will see the point of this in a minute.

A colleague was telling me yesterday about the practices of the big international consultancy companies:

About ten years ago the big international operating auditing companies came under criticism because they offered consultancy and auditing within the same legal entity. The independence of the auditors and herewith the credibility of the audits was questioned because there were cases where the auditors claimed weaknesses in the audited business and recommended the companies to ask the auditing company's consultants for advice...

This is how they recruit. They hire the best graduates from the best universities, more than they need, for example 100. Then those 100 newcomers are put into very difficult projects... From 100, only 5 to 10 'survive' through elbow tactics, politics and so on. Those who are successful are recognized as high 'potentials' and are promoted and supported. All the others have to leave.

From the level of a senior consultant on, the consultants have to sell and acquire contracts with customers; their compensation is mainly based on the revenue they generate. There is no quality measurement other than financial indicators that have an impact on their compensation.

This is orthodox Darwinism with a vengeance. I replied:



In my view, we have to follow the path of virtue because ethical values are real, there is no other reason.

If the question is, 'How can we increase profits?' -- if that is the only question -- then you have got to go with the consultancy firm who have the best track record at increasing profits.

What you have described is an inevitable result of that question. The giant consultancy firms arose out of a struggle to compete. The big boys came out on top. Now, if you're saying that actually it's all hype and the big boys only proved that they had a better marketing operation then that's a different issue. In that case, the best strategy is to avoid the giant consultancies and look for hidden talent, the smaller but smarter firms with a lower advertising budget.

Of course, there's the point about short term and long term profitability. There will be the argument that the track record of the big consultancies is artificially hyped because they go for spectacular short term gains to the neglect of the long term. I assume that there are enough companies who are aware of this and are looking for consultancy firms who will increase their performance 'in depth', so that their longer term profitability is improved.

We start from the position that, 'it's not all about profit'. But if it's not all about profit what is it about? enlightenment? happiness? peace and love?

Of course, I was being rhetorical.

What distinguishes the philosophical consultant from the business consultant is the recognition that there is something that matters, beyond profit. The bottom line is not the 'bottom line'.

I finally had my chance to say 'what it's all about' on the last day of the summit. I didn't see eye to eye with the other philosophers, mainly because I didn't accept their easy Aristotelian equation between virtue and happiness. In my view, we have to follow the path of virtue because ethical values are real, there is no other reason.

If virtue is worth pursuing purely for its own sake, as I believe, then no other motivation is needed to be a virtuous business man or woman. Yes, you may be happier, but there is no guarantee. Nothing is certain in this life. This isn't 'peace and love'. This is simply, Reality. See what is real, and you will not be blinded by the lure of material rewards into forgetting that other things are important too.



NICOLET WOUTS

Student Catalyst in the Knowledge Stream Corporate Governance
Student, Utrecht School of Governance

Corporate Governance

Reading last year's report on the Summit of the Future I was taken with what Felix Bopp says in the preface about how we have to shape our own preferred future instead of going along with the flow and see where we will end up. This idea appealed very much to me and so my interest was raised for this year's Summit, to which I was invited as student catalyst.

The opening speeches truly lived up to my expectations. Mister Noorda made the most interesting and original opening speech I ever hear. Sir Paul Judge took al my, and I think everybody's, fear of dying by an accident away. Glen Hiemstra appeared to us thanks to modern technology and who could forget the impasionate speech by Mr. North and the liberating speech of Simon Jones (Learn to let go, read King Lear!)

During the Opening Event I sensed a kind of colourful life spirit and enthousiasm to embrace new developments and opportunities. This certainly wasn't a boring Summit only joined by 50-something men in gray suits as I had imageden in a pessimistic moment.

I joined the knowledge stream on Corporate Governance and was at first a bit disappointed that the participants in this stream seemed to fear new developments as for example the raise of Asian countries as economical powers. The participants, so it seemed to me, didn't want to create their own future but wanted to predict wat would happen in ten or

twenty years from now. Now I look back on it, this was a very healthy way to go about it and led logically to the next day when Elisabet Sahtouris explained her evolutionist theory with a clear (although arguable) idea about how we can shape our future and create a sustainable environment and sustainable corporations.

Hearing these speaches and talking to all of you during the Sessions and the breaks made me think about the world we live in, in a different light. I am a firm believer in Corporate Social Responsibility, which came up a few times during the Summit. I really think that CSR offers us a possibility to create a preferred future without having to compromise on anything. I hope together we can shape this future and love to keep in dialouge with you about it.



SPECIAL REPORT

Corporate Governance - the controlled way to success

By Sutithi Chakraborty, Prince Batheja, Hedda Pahlson-Moller,
Evalueserve

Over the years, the world of business has witnessed many such unexpected successes and failures. Enron, Worldcom and Parmalat are some of the examples of the latter in the US and Europe. These corporate failures, and many more, have each caused insurmountable losses - loss of wealth, loss of livelihood, and most importantly, irreparable loss of goodwill. Why did these organizations falter? What went wrong? Could the disasters have been prevented? Could the process of atrophy be arrested at the very onset?

Summary

In the wake of large-scale financial failures such as those of Enron and WorldCom, the world of business has woken up to the need for internal controls. Such internal controls are necessary to ensure equitable distribution of rights among various stakeholders and make every corporate participant accountable for their practices. In other words, the concept of corporate governance has started gaining acceptance and popularity. Corporate governance is a system, which provides sufficient controls to the way an organization is managed and hence ensures transparency. Sound corporate governance demands focus on long-term financial returns to all shareowners, full and accurate information disclosure, accountability of board of directors and constructive dialogue with the government and legislators. It also demands

adherence to all applicable legislation prevalent in the country of operation. Therefore, the model of corporate governance followed by an organization depends on its geographic location and thus, varies between organizations. Though adherence to corporate governance directives is the onus of all stakeholders, it is probably the highest for top-level managerial staff. While the practice of sound corporate governance undoubtedly enhances the goodwill of an organization and ensures financial stability, a careful balance needs to be maintained to ensure that excessive focus on controls do not straitjacket innovation and hence affect customer satisfaction.

Corporate Governance - the controlled way to success

'I am not saying there won't be an Accident now, mind you. They're funny things - Accidents. You never have them till you're having them.'
- Winnie-the-Pooh

Unpleasant occurrences, like their pleasant counterparts, always happen unexpectedly. Over the years, the world of business has witnessed many such unexpected successes and failures. Enron, Worldcom and Parmalat are some of the examples of the latter in the US and Europe. These corporate failures, and many more, have each caused insurmountable losses - loss of wealth, loss of livelihood, and most importantly, irreparable loss of goodwill. Why did these organizations



CORPORATE GOVERNANCE

Corporate governance ensures accountability, transparency, fairness and responsibility of companies on legal, social and economic affairs.

falter? What went wrong? Could the disasters have been prevented? Could the process of atrophy be arrested at the very onset?

This brings us to the discussion of a very important concept - Corporate Governance. Corporate governance refers to the set of rules or regulations that govern the functioning of an organization. According to OECD, "Corporate governance is the system by which business corporations are directed and controlled. The corporate governance structure specifies the distribution of rights and responsibilities among different participants in the corporation, such as, the board, managers, shareholders and other stakeholders, and spells out the rules and procedures for making decisions on corporate affairs. By doing this, it also provides the structure through which the company objectives are set and the means of attaining those objectives and monitoring performance".

The history of corporate governance dates back to the Watergate Scandal, which effectively involved a series of political scandals over 1972-74 and the abuse of power by the Nixon administration in attempts to undermine political opposition. During this period, many companies in the US had engaged in secret political contributions and corrupt payments, thus diluting shareholder value in the long-term. Later, in the nineteen eighties, a number of business failures took place, which made it apparent that the organizations severely lacked proper internal controls and independent audits. In other words, companies were not following the requisite corporate governance directives and instances of corporate failures due to management negligence, non-transparency,

unequal distribution of power, etc, were rampant.

In last few years, this trend has changed. Companies have started adopting systematic approaches to manoeuvre and manage their business operations. In other words, corporate governance has gradually become popular in the corporate world. Due to its apparent importance in shaping the economic health of corporations, and therefore society in general, corporate governance has also succeeded in attracting a good deal of public interest.

Corporate governance ensures accountability, transparency, fairness and responsibility of companies on legal, social and economic affairs. In today's world, characterised by intense competition, these elements are all crucial for success. According to a survey conducted by McKinsey, shareholders in Latin America and Asia are willing to pay around 20-28% premium for shares of well-governed companies. Similarly, in Europe and the US, shareholders are willing to pay 17-23% and 16-19% premium respectively. Hence the importance of corporate governance can hardly be overemphasised.

Sound corporate governance demands the following;

- Focus on long-term financial returns to all shareowners
- Full and accurate information disclosure
- Ultimate ownership structure disclosure
- Accountable and qualified Board of Directors
- Consistent corporate remuneration policy
- Adherence to all applicable laws of the jurisdictions
- Constructive dialogue with the government and legislators



Adherence to sound corporate governance is not only the onus of the owners of the company, or those who hold top managerial positions. It is the responsibility of all stakeholders.

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In order to ensure compliance to corporate governance, several ratings scales have evolved in the recent past. These scales have set parameters to monitor and judge the ratings of individual organizations on compliance parameters. Companies, which are rated low due to non-adherence, are therefore losing goodwill among stakeholders.

Adherence to sound corporate governance is not only the onus of the owners of the company, or those who hold top managerial positions. It is the responsibility of all stakeholders. In general, the most important factor in any organization's success is its employees, and the responsibility falls heavily on their shoulders.

The model of corporate governance followed by an organization depends, to a large extent, on its geographical location. Some of the reasons for this are as follows:

- Difference in structure of board** - The structure of the board differs per country. Boards of organizations in certain countries, such as Germany, Netherlands and France, follow a two-tier structure; whereas those of organizations in the UK and Spain follow a unitary structure. The two tier structure allows the upper-tier to oversee the work of lower-tier, and hence leads to better adherence to corporate governance.

- Difference in creditor profile** - Since creditors are key stakeholders, difference in creditor profiles lead to different corporate governance models being followed in different countries. For instance, in the US and the UK, equity is the dominant form of long-term finance. Banks are thus relatively less important and do not enjoy much control in the opera-

tions of organizations. On the other hand, the higher component of debt in organizations in Japan gives banks significant ownership and control in organizational matters.

- Difference in power of customers** - The legal framework of certain countries, such as the US and the UK, vests significant rights to customers. For instance, the Citizen's Charter in the UK states that public services have to develop and publish a charter, which clearly lays down the rights of the customers and performance standards expected from the company over a period of time.

Good corporate governance practices include the following:

- Flexibility of special meetings on needs basis, in addition to regular meetings
- Maintaining clarity in the positions and titles of directors
- Regular management executive meetings
- Creation of a system to clarify responsibilities of directors
- Creation of a corporate advisory committee for better transparency and objectivity
- Improvement in the auditing system
- Fair, appropriate, and timely disclosure of information regarding corporate activities (such as management policies, management objectives, and financial position) to all stakeholders
- Educating employees about business conduct guidelines

Amidst all the emphasis on corporate governance, organizations should remember that better governance is not an end in itself, but rather, the means to a different end - that is customer satisfaction. While tight governance can protect



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Customer expectations should not be compromised against adherence and the two should be carefully integrated to create a transparent organization delivering customer value at all times.

organizations from frauds, errors and undue risk, it can also threaten agility and innovation. Organizations should ensure that regulations and controls do not get in the way of nimble delivery of customer expectations. Customer expectations should not be compromised against adherence and the two should be carefully integrated to create a transparent organization delivering customer value at all times.

A recent example of good corporate governance is the Sarbanes-Oxley Act passed in the United States in 2002. In the wake of the large-scale financial meltdowns of powerful corporations such as Enron and WorldCom, which shook the very foundation of the financial world, this act was designed to review the out-dated legislative audit requirements. Considered to be one of the most significant amendments in the United States' securities laws, the act specifies the establishment of public company accounting oversight board, auditor independence, corporate responsibility, and enhanced financial disclosure.

Some organizations which have successfully used corporate governance to their benefit include Swiss RE, GE, Shell and IDC. About a decade ago, the board of Swiss Re, a large re-insurer, carried the image of "advance guard of the enemy". There was little transparency in the system and important issues were hidden from the board. All this underwent a sea change and now the company boasts of sound strategy and proper information flow, resulting in better transparency within the company. The performance of non-executive directors has also come under scrutiny and external coaching is made available to enhance their performance.

Corporate governance at IDC is based on two principles:

1. Management must have the executive freedom to drive the enterprise forward without undue restraints
2. This freedom should be exercised within a framework of effective accountability

What are the emerging trends in corporate governance? Companies have already started being more transparent and accountable, demarcating the role and responsibilities of the board and conducting performance appraisals of the board members. There is also a trend towards more external representation in boards and shorter tenure for such externally appointed board members.

Innovation as Risk Taking



OEBELE BRUINSMA

Moderator
Founder & Partner, Synmind bv

Summary: Innovation as Risk Taking

The type of organisation and the way it has to operate according to its masters dictates or at least heavily influences the solution of a problem. This has to do with risk appreciation.

The human race is considered to be intelligent. The type of organisation and the way it has to operate according to its masters (NASA-politicians; Scaled-Composites-shareholders) dictates or at least heavily influences the solution of a problem. This has to do with risk appreciation. One can approach this issue from a number of angles. If one approaches it in a linear fashion one end always with a brick wall encounter. Science through its ways of converging and diverging approaches is one way of dealing with risk or its containment. Another way is the use and development of networks. Networks have components, which vary in connectivity, develop nodes, deal with hierarchy all at the same time. In one word networks facilitate co-development networks with built in flaws appear to be more innovation because of the constraints they have to deal with. Networks satisfy criteria like pre-defined criteria, member identity, instant peer-review, evaluation resulting in loose or tight or temporal or eternal communities of practice fully accommodating its own and purpose build goals. Networks are very actionable vis-à-vis risk appreciation based on simple rules.

Global outsourcing and global innovation.

Based on a massive amount of data and their interconnectivity the trend towards the brainpower phase as a prime resource (sometimes scarce) is emerging with consequences

as to how organise innovation. The consequence of this tsunami-like development is that current decision-making systems will have to change. When no change is considered, innovation and risk taking activities will come to a relative standstill.

New innovators will take over as leaders.



MICK YATES

Founder, LeaderValues Ltd.

Innovation as Risk Taking – and the Organizational implications

Innovation always involves risk taking. Yet today Enterprises face at least three significant challenges in generating innovation.

First, there is the need to get an increasing return on R&D spending and other “innovation investment”. You only have to witness the declining approval rate of New Chemical Entities by the USA FDA despite massive increases in industry R&D \$’s.

Second, it is necessary to decide how best to organize both internally and with external suppliers to maximise both innovation and risk management processes. How many managers are bemused by the latest consulting fads, which hit us with ever increasing frequency?

And, third, Enterprises need to figure out how best to meet the dual knowledge management challenges of scientific convergence (where traditional disciplines blend) and the exploding variety of science (into ever more specialised areas).

Effective Leadership is of course a pre-requisite for success, irrespective of Enterprise, organizational type, geography, or competitive setting. Still, this is not sufficient without defining structural approaches which can help drive innovation whilst also balancing risk.

We propose three ideas to help this structural balancing:

- 1) **Customer Centricity:** focus the entire organization

on meeting Customer needs, and in particular using data-driven insights to build effective Customer-centric programs

2) **Networks:** proactively build Networks of internal and external resources, with structures that learn from the relatively new sciences of “Scale Free Networks” and “Communities of Practice”

3) **Sense & Respond:** extend both of these two approaches by creating an effective “Sense & Respond” system – using computational power and streamlined business processes to better sense Customer needs “in real time” and thus to more quickly meet those needs

It is often easy to confuse “invention” with “innovation” – in a dictionary the two terms are often used interchangeably. Yet in the real world, an invention is only truly useful when it is actionable in a way that is repeatable and sustainable, and which creates value. It is at that point that an invention becomes an innovation.

And, what about risk? Well, that is a little easier to define. Risk ...

“is the chance of something going wrong, the possibility of investment loss, or the statistical odds of danger from something, especially from the failure of an engineered system”

So the management of risk



... the essential first step in all innovative and risky ventures – to have Leaders who communicate a clear vision of exactly what is meant to be achieved and how it will be achieved.

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demands the reduction of the chances of failure. But what connects risk and innovation? Innovation always involves some kind of risk – facing the degree of technical difficulty to implement, ignoring fear of ridicule, risking financial and organizational resources, and overcoming marketplace concerns.

And yet taking a risk does not always lead to innovation.

Let's take a simple example. It is certainly risky to jump off a cliff and hope to land on your feet without breaking a leg - but on its own that is not likely to lead to a sustainable innovation! You would be better to first design some kind of kite or hang glider, and then jump off the cliff. And if the design is robust, other people can use it and improve upon it. In fact the risk is further alleviated by involving others in the development process, a point to which we will return.

More spectacularly, consider the balancing of "risk" and "innovation" in the successful development of **Space Ship One**, winner of the \$10million Ansari X-Prize for the first private space flight. The ship used unique materials, a unique launch platform (the White Knight), and an effective team management system. And the success was then consolidated with the announcement that the entrepreneur Richard Branson will offer **Virgin**'s first regular "Space Tourist" flights using the next generation space ships. Clearly the inventions involved led to value creating innovation, and many risks were balanced to meet the Ansari prize goals.

Both Burt Rutan and Richard Branson amply demonstrate the essential first step in all innovative and risky ventures – to have Leaders who commu-

nicate a clear vision of exactly what is meant to be achieved and how it will be achieved. Simply getting people in a room and asking them to "innovate" is not likely to do too very much! Better to say "let's get the \$10 million prize, using really novel composite technologies and building the best team in the world to do it", or "let's be the first to sell tourist flights choosing the most competitive space ship technology".

More prosaic, but equally important examples of defining a useful innovation vision include **3M**'s consistent exploration of products using various kinds of adhesive technology, and **IBM**'s more recent push to adopt open source Linux to build major new business services.

Net, unless you have some kind of idea where you are trying to get to, it is going to be hard to come up with new ways of doing things, or to assess the risk in the route you are planning to take. In the examples that I will discuss later – including the **iPod**, **Tesco**'s dominance of UK retailing, **Toyota**'s manufacturing brilliance, and **Procter & Gamble**'s R&D Networks – the people involved all have a very clear vision of where they are going, why, and how they will win.

So, let's now look at the three ideas – Customer centricity, Networking and "Sense & Respond".

1. Focus on the Customer.

Of course we all do this, don't we? So why do people continue to invent useless items, like lipstick cases that spread butter on toast, or food coolers for people using chopsticks, or hanging chin straps for Tokyo subway commuters to be, literally, hung from!



... the music industry's inability to figure out an attractive strategy, which met the needs of their Customers slowed down the whole process of "going digital".

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There are of course many ways to focus on Customers. I'd just like to pick two completely different businesses that have taken different routes.

- a) using data insights to drive Customer loyalty and help manage decisions

Tesco is now the UK's leading grocery retailer, with an estimated 30% of the UK purse. In the 1990's, they adopted a Customer centric approach – with "Every Little Helps" as their mantra.

Everything in the store's operation does something to help Customers – fewer queues, better prices on important items, right products on shelf etc. Perhaps the biggest breakthrough was the Club Card loyalty program, masterminded by dunnhumby, at that time a small data insights firm.

Whilst starting small, more than 12 million people now have Club Cards. This allows Tesco to send highly tailored direct marketing to their Customers, using dunnhumby's unique Customer insight techniques. But the depth of data insight derived also means that Tesco can design better instore ranging, compete more effectively against low priced competitors such as **Asda / Wal-Mart**, innovate in own-label products, work better with suppliers of branded goods to meet Customer needs, innovate in different store formats (superstores, petrol station forecourts, urban convenience stores) and so on.

"Every Little Helps" supported by the Club Card program has driven a whole series of innovations, both incremental and transformational. It is essential to the way the organization is structured, measured, and rewarded - and it is central to the way people are developed.

This Customer Centric focus using data-based insight thus makes business decisions less risky and value creating innovation more likely. Tesco is out-innovating their competitors, whilst also operating with significantly less risk in their decision processes – and, as a result, from their start point as UK number Two, they are now a very clear number One.

- b) integrating proven Customer "hot buttons" in a unique offer

Let's now consider the **iPod**. Nothing Apple did with this iconic device was an instantaneous breakthrough. Its predecessor, the ill fated Newton PDA was too complex, allowing **Palm** to simplify the interface and prove that a whole generation would carry pocket devices. And for years, file sharing with the MP3 format (mostly illegal, of course) has demonstrated the viability of digital files to record and play music, as well as shown the appetite of the public to find music online. And, the music industry's inability to figure out an attractive strategy, which met the needs of their Customers slowed down the whole process of "going digital".

Of course, the lack of effective file security got in the way, and slow Internet connection speeds in the 1990's also hampered things. But **Amazon** had already proved that people will spend money online once they trust the retailer, and as first-mover in the dial up days, they reaped massive benefits.

Along came **Apple**, with an integrated vision which included a beautiful and deceptively simple piece of hardware, secure digital files, a simple and attractive web store (**iTunes**) and a killer proposition for the Music Industry. "We'll protect your music rights, and make il-



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But management of risk and driving innovation demand more than hierarchical approaches.

legal file sharers unattractive to the majority of Customers". At 79c a track, available on Windows as well as Macs, and over a billion downloads later, the point seems to be proven!

iPod and iTunes are clearly meeting Customer's needs better than anyone else at this point. And note, just like Tesco and Amazon, iTunes is using real time Customer data and insight to help drive more sales – "if you like that album, you'll also like this". The iPod's innovative interface and cool design are legendary and crucial to the success – but I'd also argue that Apple managed the risk of the venture by taking a lot of components and services already attractive to Customers and then brilliantly integrating them.

2. Build Networks of internal and external resources to draw innovative ideas into the system

Walter Powell pointed out the distinction between **markets**, **hierarchies** and **Networks**. And Karen Stephenson noted that traditional hierarchies have qualities of the other two – governance (akin to market contracts) and repetition in activities (like Networks). So it is not that Networks replace current structures, but rather that they co-evolve with them. This is a crucial point for organization design. Most of our organization models today still relate to the industrial model of an Enterprise. And there are many aspects of business which are still very well suited to "industrial process".

But management of risk and driving innovation demand more than hierarchical approaches. And there is simply too much knowledge in the world for any one Enterprise to be able to identify innovations

which meets every Customer need in their chosen market-place.

My research has consistently revealed that effective Networks and real world organizations share two critical commonalities. *First*, both have purpose which can be pre-defined and then their value creating outputs measured. This is not the case with Networks such as the Internet. Rather, users of the Internet create the value. *Second*, Networks must be actionable in the sense that they are constructed in ways that allow something useful to happen. Both points might seem self-obvious, but simply getting people together without a framework for action will not lead to innovation nor will it lead to alleviation of risk.

First, some brief background on Network theory. Much has been written recently about "Scale Free Networks", meaning structures where nodes (individuals) can be added theoretically infinitely without affecting the structural integrity of the Network, its communication flow, or its resultant activities. Because of their hub-focused structure (think **Google**, **Yahoo!**, **AOL** and **eBay** as hubs) there is a redundancy of paths across which information or action can flow, and any random "attack" on the Networks will not succeed unless most of the hubs are destroyed simultaneously – an unlikely event. Theoretically, there is a model here which goes beyond the "structure follows strategy" dictum of today's Industrial organization, to help information (and thus innovation) better flow inside Enterprises irrespective of their formal organization structure.

A subset of "Scale Free", the famous "Small World" model suggests that building "weak" links between seemingly unconnected parts of Networks



Starting with the idea of a "Community of Practice", we first must define the domain of interest and then build mechanisms for working and learning together against common objectives.

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can better encourage the creation of new knowledge. If you think about it, "strong" links – friends, family, immediate work teams – are likely simply to confirm what you already know.

And "Scale Free" science posits that appropriate Hubs and Authorities (subject matter experts) can both improve search in Networks, and quickly and efficiently connect content into novel forms. This will dramatically improve the chances of connecting ideas, which are complementary, and then help to create new knowledge, innovations and action plans.

So, with this background, how can we build more effective human systems? Starting with the idea of a "Community of Practice", we first must define the domain of interest and then build mechanisms for working and learning together against common objectives. My work then suggests that attention must be paid to at least five issues.

1. Purpose. As noted above, effective organizational Networks have a human or organizational purpose which must be pre-defined and then its outputs can become both useful and measurable. This is not always the case with Networks studied in the scientific literature, nor is it immediately obvious when defining Networks simply in terms of "roles" or "linkages". In fact too much of "social analysis" work done today merely describes Networks without actually making them more effective.

Toyota offers an excellent example of a clear purpose for a Network which has evolved. In the first instance, their "Just in Time" manufacturing system was exactly that – focused on the building of cars more efficiently than their competitors.

But over time Toyota realised that this Network of suppliers can also be a first rate source of new ideas and innovations. They have thus now fully co-opted their suppliers into their innovation process, bringing in new ideas that they would be hard pressed to create alone.

2. Member / Nodal identity. Not surprisingly, the skills, knowledge, motivations, problems, geographic location, time linkages, goals and beliefs of every member of the Networks are critical to how they interact. But this must go beyond a simple catalogue of their roles, or a catalogue of linkages. Identity demands a deep data-based understanding of the capabilities and knowledge of Network members. Publicising these identities and proactively connecting "like" individuals will help form affiliation clusters from which useful work will emerge. Consider the way scientific papers cite each other, building Networks of experts who build on each other's knowledge. And the citation process also significantly reduces the risk that a new piece of knowledge is invalid or has little value.

In the business arena, think of **Linked In** and other such opportunity - focussed Networking sites.

Clarity on nodal identities will also help define where the Leadership should be distributed in an organization, depending on the topic or issue at hand. It is important to note that a Leader's role in such a system is more to be a facilitator than a "decider". And all members of the Network must feel empowered to connect with each other, learn together, and work together to find new solutions to challenges. They can only do that if they fully understand who they are working with and why.

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In my career, I have led many “virtual teams”. But I have always found it essential to get some serious “face to face” time at the beginning to be sure everyone can build their own personalised versions of “Nodal Identity”.

3. Actionability. The goal is to design Networks where something new actually happens – we don’t just want an extended club room. We must focus on actionability, and we have already noted that relatively “weak” links are the key to driving innovation. One corollary is that the links between members of the Network must each also be actionable - meaning that they have practical value in real interactions. Searchability occurs when a preponderance of links within an affiliation cluster are “actionable” in some way (i.e. have useful value).

For example, we may be technically within one “link” or “degree” of the Prime Minister of India, having met him in a conference. Whilst it still may theoretically be possible to engage him in a discussion about his Country’s economics, the probability of a serious talk about music is probably zero. This link is “closed” or “non actionable” in the domain of music. On the other hand, we may know many musicians who are able to have a conversation about the impact of the Internet on their business - so a conversation in that domain will be extremely easy. This kind of connections we define as “open” or “actionable links” and they will maximise idea flow.

There is another way to think about actionability, too.

Let’s go back to the **iPod**. The business model has spawned a host of accessory makers, has enrolled almost all music companies in providing the “album

software”, is open to users of **Macs** and **Windows** – and is now migrating into videos and onto mobile phones. So every partnership link has itself become actionable – all, of course, driven by clear strategic thinking about what is to be achieved by the system being created. **Apple** has built a value creation Network to drive sales of their own core products, without having to invent everything themselves.

4. Searchability. This is critical in finding existing data, generating new knowledge and thus delivering on the purpose of the Networks. Examples of the insight we may be seeking include:

- **Informational** – “Where are all the good Thai restaurants in town?”
- **Intellectual** – “What can I learn from the local history?”
- **Actionable** – “How can I get better sales results in this country?”
- **Relational** – “How can I work better with my team?”
- **Judgmental** – “How can I decide between two seemingly good options?”
- **Contextual** – “How can I balance the risks and ambiguities?”

“Small Worlds” aid searchability – my colleague might know someone in another department that can help short-circuit the solving of problems. That is a “strong” link for the colleague and a “weak” link for me. Dodds, Muhamed and Watts showed that successful search is conducted primarily through weaker links, does not require highly connected “hubs” to succeed, and in the real world disproportionately relies on professional relationships. And note that it is not necessary to predict an exact search path – just start it on the right trajectory by asking a few





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people who you guess might know someone who can help, for example. So, in designing Network, over-engineering linkages to make them all "strong" can pre-empt effective searching.

Ron Burt also showed that an individual must develop an understanding of any obvious "structural holes" in their Networks, i.e. in a given area of expertise, in order to "complete" their knowledge. So, for example, I might be working on team building in China, but might first need help in understanding the cultural aspects of the project.

We thus suggest that a prerequisite for actionability is that individuals must be able to engage in a useful "conversation" with other members of the Networks with appropriate interests, goals or affiliations – there is thus little "social distance" to prevent the communication of new ideas. This proximity must be built into the design of the organization.

An example is in the Pharmaceutical R&D world. Some years back, Contract Research organizations (such as **Kendle**, **Quintiles** etc) offered ways of "outsourcing" R&D and thus added speed and expertise to a Firm's internal capabilities. Now, companies such as **InnoCentive** offer web-based communities matching top scientists to the specific R&D challenges facing companies from around the globe. They thus match the R&D need against the right scientists to resolve it.

And manufacturers such as **Procter & Gamble** are developing their own, broad ranging Networks involving contract research organizations, professional communities of practice, firms such as InnoCentive, direct website solicitation of

technologies etc. to build their proprietary "connect + develop" structure. This searchable Network is leading to faster results, more innovative solutions, better risk management and even some completely new product ideas.

5. Trustworthiness. The concept of Network "authorities" raises issues about how we can trust their information. For example, my Leadership Development web site receives over 3,000 daily visitors, and is ranked global number 3 on Google. Why do people value what the site says?

Network trustworthiness is a combination of the nodal identity of an authority (which is transparently available to all affiliation cluster members) and the actionability of the links within the cluster contribute to a Network's "trustworthiness". So, in the case of the Leader-Values web site, the combination of quality third party work, breadth and ease of searchability and cross referencing, and usefulness all add to "trustworthiness". And, of course, it's all free!!

We also surmise that trust level of an authority relates to information flow – possibly it is a net exporter of information. This and the practical actionability of its information is critical to trust.

Amazon delivers exactly what it says, allows buyers to track orders, predicts delivery times, suggests relevant new items to buy, allows you to "scan before you buy", and has objective on-line reviews written by the Customers themselves. **eBay** has its vendors rated transparently by purchasers, with records open to all.

And open source systems (**Linux**, **Wikipedia**) are deliberately designed to "build in



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... there are many ways of building Network trustworthiness – but it is an essential component in all effective organizational design.

trust" in the checks and balances used. The approaches drive new action steps - buying more books and CDs, selling more merchandise, writing more articles, or developing new parts of the Linux operating system.

In other words, there are many ways of building Network trustworthiness – but it is an essential component in all effective organizational design.

3. Sense and respond systems, capitalizing on both Customer Centricity strategies and Network organizations

Much has been written about "Complex Adaptive Systems" (CAS), and I do not propose to spend a lot of time on the theory. Suffice to say that we are surrounded by such systems – biological processes, weather, stock market, plant and animal ecologies being prime examples.

What makes CAS of fascination to organization thinkers is their ability to create unexpected, novel outcomes based on only a relative handful of initial rules. You cannot plan-in a specific outcome – it evolves as a result of the interactions of the "moving parts" of the system. But supposing you can identify a few "golden rules" around which you can build your innovation processes? As noted above, Network theory suggests there are some rules which apply independently of the purpose of the Network.

Then we can add this Network understanding to a focus on the Customer - and the concept of "Sense & Respond" is born.

Within the CAS' of Nature, the mechanism of "Sense & Respond" is employed when stimuli are applied to organisms and even entire ecologies. The

stimulus could be as simple as, for example, strong sunlight leading to the lotus flower to close. Or it could be that the complex patterns of global warming will change entire forest ecologies. In each case there is a "Customer" who is responding to external stimuli, often in real time.

Clearly, business is a long way from managing all the implications of complex systems. But there are already effective examples of "Sense & Respond" being used. One such example is the credit card testing and rollout program used by **Capital One**. They create a vast range of new offers for testing, and, with rapid reading of uptake by Customers in test cities, they are able to efficiently roll out the "hottest" offers. Not only does this give them a speed advantage against their competition, but it also allows them to better tailor the offers next time. Not surprisingly they became the number one card issuer in the USA.

In the earlier examples, to one degree or another **Amazon** and **Tesco** also use "Sense & Respond", as does **7Eleven** in Japan and the Spanish **Zara Home** furnishing company.

The steady increase in massive computational power fuels the desire and capability of business to pursue such systems. The only limit is our imagination in what we want to "Sense & Respond". For those of you who have seen the movie "**Minority Report**", recall the ads beamed at Tom Cruise as he walked through the store – they only offered him products that would exactly meet his needs. This example is very close to reality today...

So, in summary, we suggest that innovation always involves risk taking. Effective Leader-

ship is a pre-requisite for success, but we must also define structural approaches which can help drive innovation whilst also balancing risk. We propose three ideas to help this structural balancing:

1) Customer Centricity: focus the entire organization on meeting Customer needs, and in particular using data-driven insights to build effective Customer-centric programs

2) Networks: proactively build Networks of internal and external resources, with structures that learn from the relatively new sciences of "Scale Free Networks" and "Communities of Practice"

3) Sense & Respond: extend both of these two approaches by creating an effective "Sense & Respond" system – using computational power and streamlined business processes to better sense Customer needs "in real time" and thus to more quickly meet those need

Thank you.



MARK MINEVICH

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Enamics Inc
Albert Einstein Award Recipient

Global Innovation and Growth fueled by Outsourcing

The real power in a globalized world is knowledge. We believe that Global Outsourcing = Knowledge Economy.

"The World Leaders in Innovation and creativity will also be world leaders in everything else" Harold McAlindon, author Little Book of Big Ideas

*"To those who continue to push globalization to advance the human potential in this ever-connected globe, I dedicate **Six Billion Minds™**. For those who continue, with unyielding faith, to push beyond the horizon, full of never-ending hope and enduring performance to change the world and bring us closer together, we have an obligation to do better"* Mark Minevich

Something new is coming to you: Global Innovation

Global Innovation. It's the latest buzzword and one of the hottest topics in corporate business. It is appearing everywhere - in business leadership forums, corporate retreats, transit points, and in global metropolis like New York, New Delphi, London, Shanghai and Moscow. Whether the world has flattened or continues to create centers of excellence, it is quite clear that countries, developed or developing, must become competitive in tapping into the world's six billion minds if they want to be a part of the knowledge economy.

It used to be that information was power. Not anymore. Information is becoming a commodity. Globalization is a reality. Globalization seems to have woven a web around the globe, but we stand at the outset of the next step in globalization.

Global outsourcing is fast becoming one of the greatest organizational and industrial shifts in modern history. Globalization to me is not just about outsourcing . It is also about the innovation, geographical expansion of business for growth in turnover and earnings. This strategy is actively pursued and institutionalized by many economies including Singapore, Israel and the United Arab Emirates. For many, it is a question of survival and being relevant in the global context. The real power in a globalized world is knowledge. We believe that Global Outsourcing = Knowledge Economy. It turns out that a good deal of creative work - software development, accounting, legal work, engineering - can be outsourced to India or China. The solution to becoming powerful is to focus on innovation and to design new core corporate competencies. Global outsourcing allows companies to break complex tasks into many small parts, outsource each part to whoever can do it most efficiently, and then combine all of the completed parts into the final product.

Innovation is what keeps US strong and competitive in the global knowledge economy. The implications for the global economy are immense. We live in an increasingly fast-changing, unpredictable world - a world in which traditional planning and strategies will no longer work for businesses or governments.

In 2006, systemic global driv-



... we should focus not only on products, services or even processes but DNA of Knowledge. We must transform and reinvent our core capabilities, our values, our leadership, our strategic insights, business models, management systems, and policies.

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ers for innovation suddenly came together. Those drivers represent globalization, offshoring, new business paradigms, shift in international management order, increased mobility and advanced communications. The governments, NGOs (non-governmental organisations), and MNC (multinational corporations) are in a race to develop and execute new innovation capabilities to build a scaleable foundation for our future.

The leaders are continuing to emphasize that while not perfect, globalization has been extremely successful for the world economy. It has created millions of jobs, raised millions out of poverty and improved the quality of life in countries that once were considered incapable of contributing to the world economy.

At the same time, companies are throwing the words like innovation all over the place but what those large multi national organizations have actually done? For the last few years, most of the large MNCs have played a convenient lip service, and continued with its practice of its expensive maintenance on old software, its upgrades to old mainframes, and it is large conventional outsourcing contracts.

We must influence more people to think that global innovation is about much more than new product design. It is about reinventing global leadership, it is about knowledge workers, it is a global collaborative business systems and processes, and emerging customer markets. It is about leveraging global ecosystem cluster network and knowledge pools to select and commercialize ideas in rapidly changing world. It is also about corporate transformation focused on enhancing growth,

creativity and collaboration. What is new today is summed up in the term "knowledge economy." And this economy is about discovering and harnessing the knowledge that can spring forth from any mind, anywhere. Our new book, *Six Billion Minds* examines the global seismic shifts that threaten to engulf long-dominant nations like the United States, whose world leadership in innovation is now being rivaled.

One of the biggest issues is the development of global innovation leaders who understand the issues in the global knowledge economy. Most of the corporations need to find ways to unplug the old and proprietary business thinking and processes, and install the 21-century open innovation and transformation systems that accelerate growth and productivity.

We need to change the future of business, government and our economy. We need to reinvent our ways we deal with society and customers. This means we should focus not only on products, services or even processes but DNA of Knowledge. We must transform and reinvent our core capabilities, our values, our leadership, our strategic insights, business models, management systems, and policies.

The recent Business Week survey shows that Asia will be on the rise in global innovation. 44% of MNCs will increase R&D spending in India and China. Global Leaders continue to look for the U.S. and EU for idea generation, but the situation and explosive growth in India and China may change this picture.

US and EU Competitiveness is being challenged



The advantages of an advanced education degrees are erased when the only source of employment is domestic non-tradable services.

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For more than half a century, the United States has led the world in scientific discovery and innovation. It has been a beacon, drawing the best scientists to its educational institutions, industries and laboratories from around the globe. However, in today's rapidly evolving competitive world, the United States can no longer take its supremacy for granted. Nations from Eastern Europe to Eastern Asia are on a fast track to pass the United States in scientific excellence and technological innovation. We must create products and services that satisfy needs consumers don't even know they have yet. Mastering new innovation is the key to corporate success, if not survival. Smart companies now have a senior level executive charged with driving innovation or sparking creativity.

We are seeing some different and alarming characteristics that are beginning to develop; Falling pay and rising prices of foreign made goods squeezing existing US and EU living standards. We recognize that a country cannot provide superior living standards to all its citizens without an advanced knowledge economy. Global outsourcing is rapidly converting US and EU MNCs into brand names with a sales force selling foreign designed, engineered, and manufactured goods. People who do not participate in the innovation, design, engineering and manufacture of the products that they consume lack the incomes to support the sales infrastructure to keep the national economy running.

For the past decade the U.S. had been leading the bandwagon of creating jobs in international locations, mainly India, China, and Brazil. Let's look at the latest trends of the very firms that acquired outsourced work from U.S. companies.

Indian and Chinese firms like Infosys, Lenovo, and Tata Consultancy Services, to name a few, have been busy setting up centers in locations like the Czech Republic, Holland, the Philippines, and China. Considering that the search for low-cost, high-skilled labor is the prime motive behind these decisions, one is inclined to believe that this activity is but a bellwether for the second level of outsourcing, when these so-called offshore companies could further outsource nonstrategic work so as to concentrate on strategic issues that their audiences (the U.S. firms) would be more interested in.

Once a company completes its loss of proprietary innovation how much intrinsic value resides in a brand name? The outsourcing of, design and innovation has dire consequences for higher education in developed world. The advantages of an advanced education degrees are erased when the only source of employment is domestic non-tradable services.

Some critics are going further to say that the US and the EU are starting pay for their outsourced goods and services by transferring its wealth and future income streams to foreigners. Foreigners have acquired \$3.6 trillion of US assets since 1990 as a result of US trade deficits. Foreigners have a surfeit of dollar assets. For the past three years their increasing unwillingness to acquire more dollars has resulted in a marked decline in the dollar's value in relation to gold and tradable currencies. Economists worldwide have a reason to be concerned where the US dollar will not be able to maintain its role as world reserve currency when it is being abandoned by that area of the world that is rapidly becoming the manufacturing, engineering and innovation



The innovative ideas will ultimately come from India or China. If American engineers or computer scientists don't get ample practice time, their innovation skills will atrophy and the innovations will simply stop coming.

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powerhouse.

Developing world and Global outsourcing- global innovation model

Today China graduates four times more engineers and computer scientists than the United States. America is facing serious problems with both its education system and its immigration laws, and it wonders how to attract more students to science, improve education and open its borders. It is vital that tomorrow's leaders have a multi-disciplinary education - training in both business and technology with a global perspective - so that we can eliminate the disconnect that exists in too many organizations today. The future is leaders who understand how business and technology have converged and who know to manage both in a global knowledge economy.

Today, more than 70 percent of the products we buy in Wal-Mart are made in China, but still there is no equal distribution of wealth. The United States, with six percent of the population, has 50 percent of the wealth. Meanwhile, 47 percent of Chinese and 86 percent of Indians make less than \$2 per day. How does this impact the growth of the global economy and how will this change? It always has been a global economy. Many wars have stemmed from trade disagreements.

Indian and Chinese people are growing up in much harder conditions than those of the people they provided services in West. While an average American may be concerned about gas mileage, millions of people in Asia must think merely about surviving until the next day. Today, America hires Indian and Chinese workers to do otherwise expensive IT and business process outsourcing

(BPO) work more cheaply than American resources.

Countries such as India and China, where wages remain low and new engineering graduates are abundant, likely will continue to be the biggest gainers in knowledge economy employment and become increasingly important suppliers of intellectual property. This leads us to the emergence of a new Global Labor division.

Just follow a certain chain of events with a computer scientist who starts by working on commodity process tasks and may eventually have the motivation and passion to transform and innovate. A plausible theory could develop in such a way where all the actual process work is being done in India or China; there is no inherent reason that American people will keep having innovative ideas. The innovative ideas will ultimately come from India or China. If American engineers or computer scientists don't get ample practice time, their innovation skills will atrophy and the innovations will simply stop coming.

Today in the developed countries many computer specialists and electrical engineers, who were well paid at the end of the 20th century, are unemployed and cannot find work. Many technical and engineering jobs, they said, have become "commodity jobs," routine work that can be performed cheaper offshore.

By 2005 standards, India is the most competitive and popular technology outsourcing destination in the world. However, by 2015, China will surpass the Indians to become the locomotive for growth as it did in manufacturing - only this time it will be in IT related services - boosting world economic output and productivity. The world

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economy will certainly benefit from China's lead function, but what will happen with all those workers, IT engineers, and managers losing their jobs in the United States and in Europe? Places like Singapore and Israel will continue to specialize in research and development outsourcing. Russia eventually will evolve as a major R&D outsourcing giant. The political and economic dimension is still not entirely clear, as policy makers around the world have not thoroughly thought through that maze. But one thing is obvious - we are witnessing a sea change of what the future division of labor will look like. The old working class in the West is disappearing as developed nations provide capital and opportunities for the developing nations of the East. And the former underdogs may have a sustainable solution as more of their people have access to higher education.

It is this struggle for survival that provides the framework for the next knowledge revolution of Six Billion Minds™ with a focus on global innovation. The design and innovation are starting to be outsourced. Our new book, Six Billion Minds , argues that the "left brain" intellectual tasks that "are routine, computer-like, and can be boiled down to a spec sheet are migrating to where it is cheaper, thanks to Asia's rising economies and the miracle of communications. Six Billion minds goes further to say that even "right brain" work that entails "artistry, creativity, risk taking and customer support and interaction may also slowly migrate to Asia. However, we have an opportunity to keep the competitive advantage with creative and knowledge centric work. It looks like the model for the EU and US is to focus on the highest levels of knowledge management, and all the routine jobs of turning

concepts into actual products or services can be globally outsourced.

Global Innovation and Outsourcing is about flexibility to put resources in the right places at the right time. Western MNCs are on the cusp of a sweeping overhaul of R&D that will rival the offshore shift of manufacturing. Majority of programmers and engineers tasks that can easily be outsourced - like software programming, translating prototypes into workable designs, upgrading mature products, testing quality, writing user manuals, and qualifying parts vendors.

Emergence of global innovation successes

We are seeing some incredible global innovation successes. Today we can find thousands of American multinationals in Asia and thousands of Asian companies in the U.S. The sell-off of IBM's PC business to Lenovo is an historical example of seamless integration. Just extrapolating from this trend shows that the Asian tiger has much to offer, and it is good for the world if we won't put chains all around it. Asian contract manufacturers and independent design houses have become forces in nearly every technical device, from laptops and high-definition TVs to MP3 music players and digital cameras. Examples are companies such as HTC Corp., a developer of multimedia handsets, a Taiwanese company developing latest wireless devices. Flextronics Corp, a very innovation company that developed its own basic platforms for cell phones, routers, digital cameras, and imaging devices. And Cellon International that has various product offerings like eye-popping software/device. When you cradle the device



The most successful players will be the ones who adopt the model of 6 Billion Minds encompassing the knowledge workers, knowledge skills and resources around the world.

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to your ear it goes into telephone mode but when Peer through the viewfinder and it automatically shifts into camera mode. Boeing Company is working with India's HCL Technologies to develop software for everything from the navigation systems and landing gear to the cockpit controls for its upcoming 7E7 Dreamliner jet. Pharmaceutical giants such as GlaxoSmithKline are teaming up with Asian biotech research companies in a bid to cut the multi million-dollar cost of bringing a new drug to market. IBM is outsourcing its research brains to help customers develop future products using next-generation technologies and concepts. GE is reaching out to build a better wind turbine, it first built an international team of researchers in Germany, China, India and the USA. Procter and Gamble has improved R&D productivity by co-developing brands with other companies from around the globe. Chinese engineers in the Beijing lab from Motorola conceived a Linux-based mobile phone, now a crucial part of its software strategy. The revolutionary (non processor frequency based) technology behind Intels Centrino wireless technology was developed in Haifa, Israel where challenging orthodox ideas is rooted in the culture. Swiss-based Novartis is developing new medicines in a Shanghai laboratory, specializing in ancient remedies. Dutch electronics giant Philips got the idea for a core product, their new home heart defibrillator "HeartStart", via a US-based research lab. Offshoring company like Wipro are focused on various R&D initiatives including designing prototypes for mobile phones, HDTV and satellite equipment.

For the first time ever the publication of the BTM Institute - *Six Billion Minds: Managing*

Outsourcing in the Global Knowledge Economy created a wake-up call to global leaders regarding global outsourcing and innovation. It is a global collaboration among the most accomplished academics and global leaders (over 60 top international figures). We have interviewed the most accomplished business leaders in the world and included not only methods, processes, and practical tips, but also human stories of success and survival – creating this unique exploration of the global knowledge economy. We examined management challenges and innovation opportunities in light of the profound impact of globalization and the emergence of the knowledge economy. We show how to build excellence by leveraging the vast global knowledge pool of the "six billion minds" that make up the emerging knowledge economy. We provide great insights and blunt realities from the business leaders pioneering and setting the pace of global outsourcing as the next big element of the knowledge economy.

US and Western Economies must control the brain parts and access points of the global innovation networks to maintain its competitive position. They must continue to innovate, provide leadership, facilitate complex management processes, and provide linkage with customers. The most successful players will be the ones who adopt the model of 6 Billion Minds encompassing the knowledge workers, knowledge skills and resources around the world.

Many companies are still multinationals - traditional companies with distinct operations in different countries, rather than a single company operating globally as a seam-



The United States and Europe must act now, or face a diminished global leadership, and the talent pool required to support our high-tech economy will evaporate.

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less entity - which is the preferred business model of the future. We recommend they take the necessary move to become global companies. We must transform global industries by reshaping our management for the next generation and aligning business and technology to produce global innovation.

A robust educational system to support and train the best U.S. and EU scientists and engineers and to attract outstanding students from other nations is essential for producing a world-class workforce and enabling the R&D enterprise it underpins. Research, education, the technical workforce, scientific discovery, innovation, and economic growth are intertwined. To remain competitive on the global stage, we must ensure that each remains vigorous and healthy. That requires sustained investments and informed policies. Early adopters, whether outsourcing IT or the miniskirt, get significant benefits either in profits or popularity. As others follow suit, the competitive advantage erodes and people who frankly shouldn't have been seen dead in that style start appearing on the street. And then the world moves on. As outsourcing becomes more widespread and matures, and as the competitive landscape changes, some bad or disappointing experiences will happen, and some services will come back in house. The best outsourcing contracts now explicitly recognize this fact. We should expect more sophisticated models - shared services, for example, is making a major comeback - as companies try to get the best of both worlds.

We must develop better strategies to compensate the Western workers who lose in the global trade game - and cru-

cially, boost education and training efforts so they acquire the "skill premium" they'll need to get or stay ahead.

Clamping down on globalization by any country or company will ensure its own demise that much quicker. International money will always go to countries and companies that are most efficient and effective, wherever they are. If the U.S. becomes protectionist, it will only hasten the departure of innovations to other countries like India and China. Smart U.S. corporations know this and offer the chance to innovate in Bangalore, Shanghai, or Silicon Valley. Google, Microsoft, or Intel, you have these choices.

This call to action in Six Billion Minds leads us to establish a permanent global forum of thought leaders from businesses of all sizes, academia, NGOs, government, public interest groups, the investment community and other members of the ecosystem to look into the future and identify major trends, insights and opportunities. More than ever we must bring people together as a global community, and to collaborate with 6 billion people and their leaders in a discussion to focus on insights and plan for the future as part of the global community dialogue. The United States and Europe must act now, or face a diminished global leadership, and the talent pool required to support our high-tech economy will evaporate. This is not just a question of economic progress. Not only do our economies and qualities of life depend critically on a vibrant R&D enterprise, but so too does our national and homeland security, as pointed out by the Rudman Commission on National Security in 2001. We call on politicians, economists and entrepreneurs to conceptualize the future world economic paradigm - of a world

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filled with knowledge clusters, innovation and global outsourcing! American national leadership must understand these deficiencies as threats to its national security. If we do not invest heavily, wisely rebuild our core strengths and invest in homeshoring, EU and America will be incapable of maintaining its global position well into the 21st Century.

America and EU needs more sweat equity, more time back at the drawing board, more quality-driven testing, and core research. It needs more attention to its real future — its children and their education. We know there will be a future. We know that global outsourcing is here to stay. But we don't know what it looks like.

There are six billion minds on this planet, all with their own beliefs about how to make the world work, and most of their beliefs are different, so there is bound to be conflict. In fact, conflict is inevitable. Yet, the greatest resource of all is people, and that's why a population increase is to be celebrated, not lamented. Six billion people on the face of the earth? They are also six billion minds capable of discovering the new knowledge economy with billions of resources and twelve billion hands to extract and refine them. The vast majority of people contribute far more to the world than they ever take away - and that's just in material terms. In a world with over six billion minds (and climbing), sustainable globalization is a miracle.



GEORGE PÓR

Founder, CommunityIntelligence Ltd.
Former Senior Research Fellow at INSEAD

Innovation Architecture

Excerpt from "Liberating the Innovation Value of Communities of Practice"

Sound innovation management relies on a well-designed architectural framework that integrates the business, social, learning, and technology innovation into a coherent whole that can inform the parts.

A major booster of the organization's innovation performance is an explicit innovation architecture configured for synergy across its four domains: the business, organizational/social, learning, and technology innovations. Both barriers and enablers in each of these domains can reinforce one another to foster or inhibit innovation. This is why we focus our attention on understanding the whole innovation architecture.

Innovation Architecture

Did you know that teams of coaches and other sports professionals carefully study the performance of top runners from all angles: from the best-performance shoes to the ergonomics and aerodynamics of their movements? If you want to become the most admired innovation company in your industry, you have to cultivate the same systemic approach to innovation performance, and do it corporate-wide.

By sharing their mental models, innovation champions can develop a shared understanding of and capability to grow and strengthen an innovation culture. Hoping to help you realize that potential, we invite you to explore the Innovation Architecture framework outlined here. It is designed for helping you differentiate and consider the technological, organizational, business, social, and other conditions that facilitate or hinder innovation.

"The science and art of architecture lie in skillfully relating parts to a greater whole, creat-

ing a form uniquely appropriate for the exercise of a specific set of functions." Sound innovation management relies on a well-designed architectural framework that integrates the business, social, learning, and technology innovation into a coherent whole that can inform the parts. A carefully constructed innovation architecture will allow your organization to:

- Accelerate its innovation cycle
- Reduce mistakes in innovation management, which are due to not accounting for the complexity of radical innovation and what is required to harmonize the interaction across its four domains
- Orient evaluation of choices and trade-offs among numerous innovation options
- Coordinate collaboration between innovation management, CoPs, executive sponsors, facilitators, and all those who have a stake in the innovation's success
- Let spontaneous emergence co-evolve with intentional design in innovation projects

The innovation architecture of each firm is different from the one used somewhere else, but the framework that we suggest for building them provides some common benefits to all. Innovations in each of the four domains may strengthen or weaken each other, depending on how well they are designed for mutual enhancement and the emergence of multidimensional synergies. The **four do-**



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mains of innovation - most relevant to the purpose of our learning journey - are:

- **Business**
- **Organizational/Social**
- **Learning**
- **Technology**

They do not stand by themselves, rather, as parts of the whole architecture, and each domain is an interdependent component. The diagram below shows some examples relative to the four domains of innovation pertinent to organizational performance.

This map is in continuous change and evolution, the same way as the territory it is trying to reflect is in constant flux. A number of specific innovations labeled on the map will be eclipsed by more dynamic ones, probably even before this book leaves the print shop. This simple four-fold model will be offered as a pattern of continuity and coherence throughout this section and a framework for innovating the innovation process.

Older innovations get replaced by newer ones, if their users can derive more value from them. They feed on one another, and breakthroughs are occurring in their interactions in their second and third order cross-impact. The strategic management of radical and disruptive innovation requires visual tools for attenuating and understanding the complex, interdependent forces at play on the innovation field.

The next map can be used for investigating the key value-adding relationships, two-way value flows, across the four domains of innovation.

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Business Innovation

transformation as market offer
new standards of corporate governance

new engines of value creation
ecosystem of business model

markets as conversations
value networks and webs

relationship marketing
local currencies

wearable computers
large-scale video chat

extreme programming
adaptive tech. platforms

simulation in virtual worlds
automated taxonomy tools

disruptive technologies
home media systems

social software
M2MIS

Learning Innovation

knowledge cafés
emergent taxonomy

attention management
self-organizing k. ecosystems

learning trajectory management
corporate learning alliances

virtual knowledge fairs
global classrooms

k-log syndication

innovation networks
project communities

distributed leadership
open source movement

Social Network Analysis
strategic communities of practice

multi-community membership
swift trust

Technology Innovation

Organizational and Social Innovation

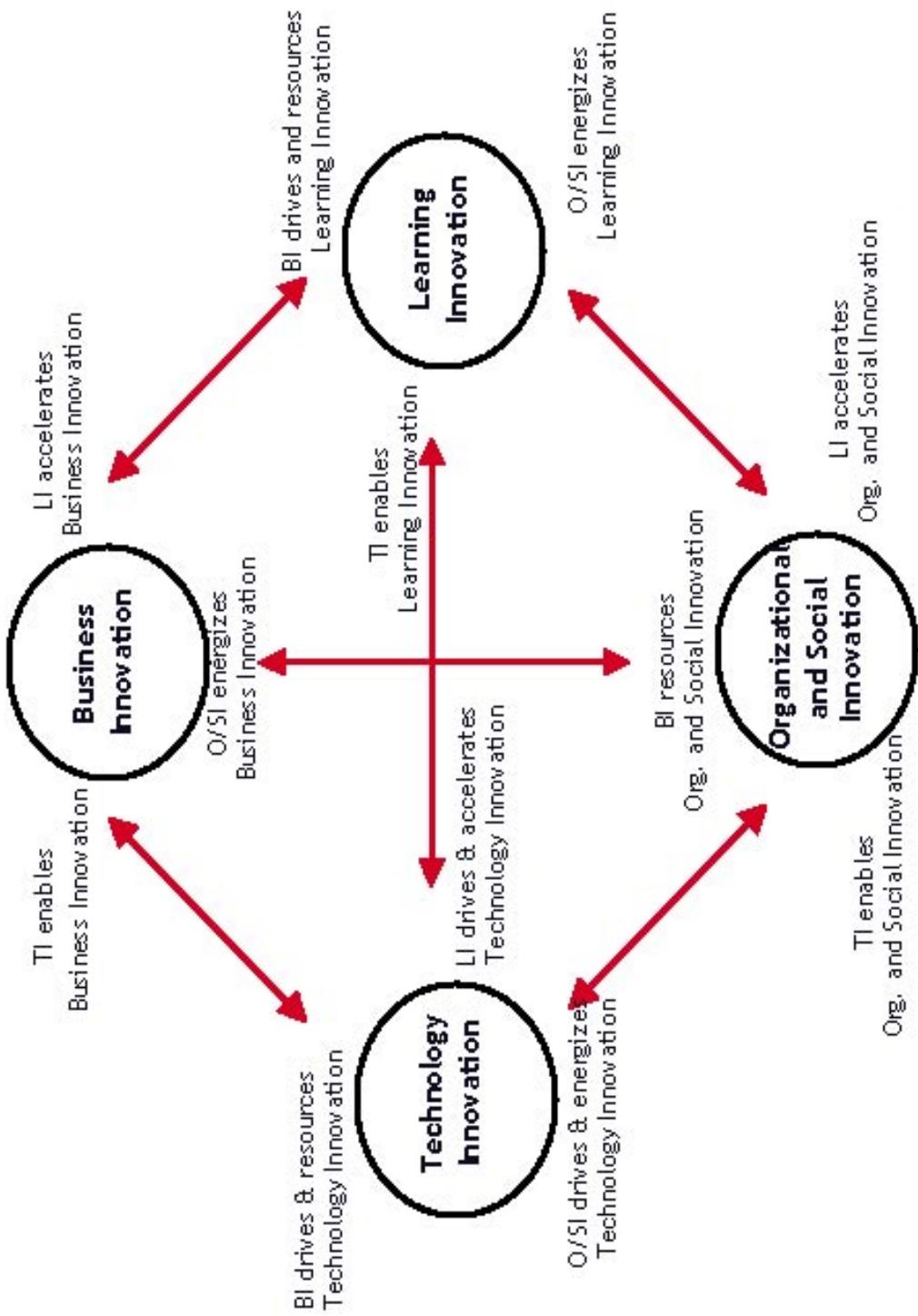
Figure 1. Innovation domains with examples



Figure 2. Ecosystem of innovation value flows

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Ecosystem of Innovation Value Flows



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Here, we shift our attention from the *structure* of large domains of innovation to the nature of interactions between them. Some of the combinations happen spontaneously, but achieving a dynamic balance across innovations clustered at the four poles can lead to a sustainable raise in the company's innovation performance.

For instance, the good health and vibrancy of a firm's knowledge ecosystem (learning innovation) is a strong factor in the success of its business ecosystem (business innovation). But how does one grow a robust knowledge ecosystem? Research shows that knowledge flows better within and across communities of practice (organizational/social innovation) when it is shared in the context of trusted relationships. It is well summed up in a recommendation of "HR Strategy for Knowledge Management", published by the European HR Forum: communities of practice are the way forward."

Understanding the value flows between the four domains is a key to optimizing them for supporting radical and disruptive innovation. Not all four domains need to be involved with all innovations, but cultivating capabilities in all four is essential to sustainable innovation leadership in any industry. The sweet spot for radical innovation is a project that draws strengths from going beyond the state-of-the-art in all four domains.

Imagine that the propeller blades below start turning — the wind picks up momentum and creates a vortex of innovation fed by and feeding innovations in each of the four domains, each supported by the combined power of the other three. How would technology innovation look when the enterprise learns to engage the

full power of business, social, and learning innovation to support it? How would business innovation look when the enterprise learns how to put into its service the combined power of technical, organizational/social, and learning innovation?

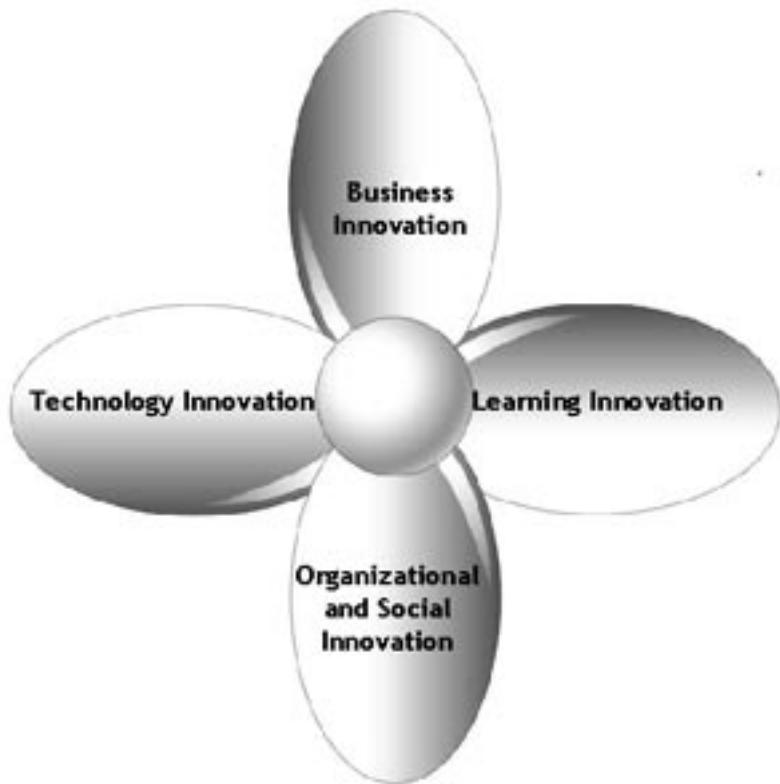


Figure 3. Jump-starting a vortex of innovation

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Using those domains of innovation as lenses, we see different things when we look at the whole architecture through one or another lens. The art of innovation leadership is in the capacity of seeing the whole, understanding the interdependence of the parts, while maintaining a keen sense of what combination is needed for the best results, in any particular case.

The CI Innovation Architecture can be used by companies for self-assessment of all four innovation domains. The re-

sults can be benchmarked and visualized into a radar diagram (shown below), which provides an overview of what the current state of innovation capabilities are and what the difference between present and desired levels is. (We borrowed the idea of using a radar diagram for assessing the four high-level innovation dimensions from Debra Amidon, who developed the more operationally focused, 10-axis Knowledge Innovation® Assessment tool.)

INNOVATION AS RISK TAKING

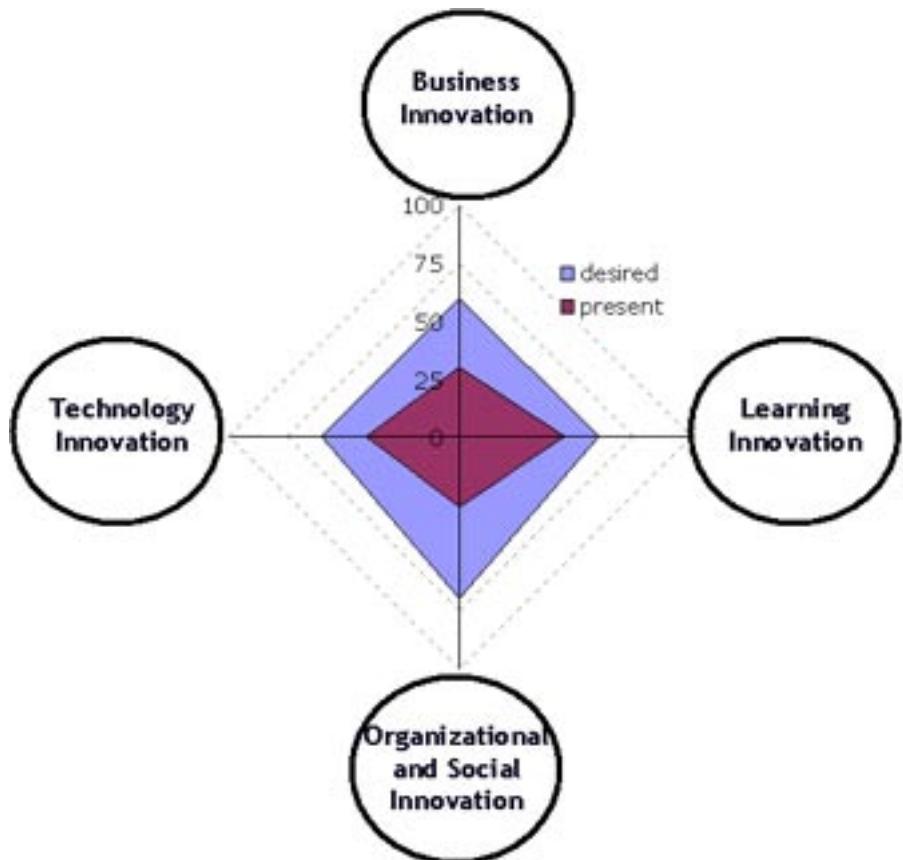


Figure 4. Assessment framework based on the CI Innovation Architecture™

Having seen the gap between the present and desired levels of innovation performance in the four domains, the leadership team can reorient the innovation strategy with the aid of the “ecosystem of innovation value flows” (shown in Figure 2). Here is how:

Let’s say, the team agrees that the company scores too low on learning innovation. The signs are loud and clear:

- Training methods are slow to catch up with the requirements of increasing variety in the capability repertory of everyone and every organization.
- Networks of productive conversations are disjointed, fragmented, and frequently inaccessible by those who could contribute and create value with them.

- Centralized tools for complex knowledge work are not tailored to, and fail to account for, the real knowledge needs of individual professionals and executives.

What should the Board decide about how to tackle the situation? What would you decide?

Using the “ecosystem” framework, you can easily generate a set of useful questions, starting with: *What does the Learning Innovation domain need to receive from the three other domains of innovation so that it can inspire and support the whole enterprise?*

Seeing into it gives rise to more specific questions, such as:

- What are the successful experiences in organizational/social innovation (O/SI) that can boost business per-



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formance?

- What will accelerate and amplify the flow of value from learning innovation (LI) to selected breakthroughs in O/SI that will result in high business returns?
- Applying LI to which business driver could create results beyond expectations?
- To perform its functions well in relation to the three other domains, what resources does LI need to receive from each of the others?

The balanced way of moving radical innovation further outward on any one of the four axes — thus intensifying the value-creation from it — is through specific projects that support innovation and transformation in the three other directions. Exactly for this reason, communities of practice are a natural vehicle for radical innovation because they have the ability to span all four domains of the innovation architecture at the same time, as well as build on the relationships among all domains.

For instance, when the leadership of the organization treats its CoPs as valued strategic partners (Business Innovation), then the faster filling of the innovation pipeline with good content by communities of practice (Organizational/Social Innovation) will be more likely. What will be required to liberate the innovation value of communities of practice is probably not less than that.

Rapidly benefiting from understanding the innovation architecture

Here is a direct way to check and deepen your understanding of this framework. Not only the development of radical in-

novation is nonlinear and looping through spiraling cycles, but also so is our understanding of the innovation dynamics, its barriers and enablers. Test the impact of looping, by going back to the Innovation, Drivers, Barriers and Enablers section and applying the “four innovation domains” perspective gained here. Looking again at the list of barriers and enablers through the lenses of the four domains, you will be able to map them in a more systemic way and, because of that, discover new barriers/enablers or new insights about what you have already read.

Innovating the Innovation Process

The work with the highest-payoff in improving innovative performance is to actually innovate the innovation strategy and processes themselves.

Are you among the courageous change champions who focus on the challenging but high-value work of innovating innovation? If so, look at the following four models introduced in this chapter so far as tools for innovating the innovation process:

- The “architecture” model (Figure 1) that provides a systemic framework designed for coherence and sustainability
- The “ecosystem” model (Figure 2), which can be used for optimizing the relationships among the innovation domains
- The “vortex” model (Figure 3), which is useful for invigorating the dynamics of increasing total innovation performance
- The “assessment” model (Figure 4), which can serve as a framework for develop-



ing audit tools for the four domains, at the level of the team, community, organizational, or nation

Putting those four models to work in the organization requires commitment and energy: the commitment of the leadership team to reach new plateaus of community-enabled innovation and the energy and enthusiasm of communities of practice that are appreciated and valued partners of management in boosting innovation.

While the classic methods of top-down innovation management have been useful to create incremental or even breakthrough innovation, it frequently fails to mobilize the energy needed to create radical or disruptive innovation.

To innovate the innovation process itself, we have to marry the rigor of formal innovation selection and evaluation processes with the power of collaborative learning and discovery in communities of practice. In the next section of this chapter, we explore the innovation value of various kinds of workplace communities that are key to innovate the innovation process.



SPECIAL REPORT

Innovation: The DNA for Growth

By B Vijayalakshmi, Hedda Pahlson-Moller, Evaluerseve

You can't solve a problem on the same level that it was created. You have to rise above it to the next level – Albert Einstein

This quote by Albert Einstein clarifies the common misconception about innovation. Innovation is not only about developing a product or service from scratch but is also about adding value to an existing product or service. Organisations across the world have focussed on innovation in order to achieve the competitive advantage required for creating and sustaining growth. The effect of globalisation on the world economy has also played a significant role in fostering innovation. Organisations soon realised that without innovation they faced the possibility of extinction.

Research and development (R&D) and innovation go hand in hand; however, R&D is only

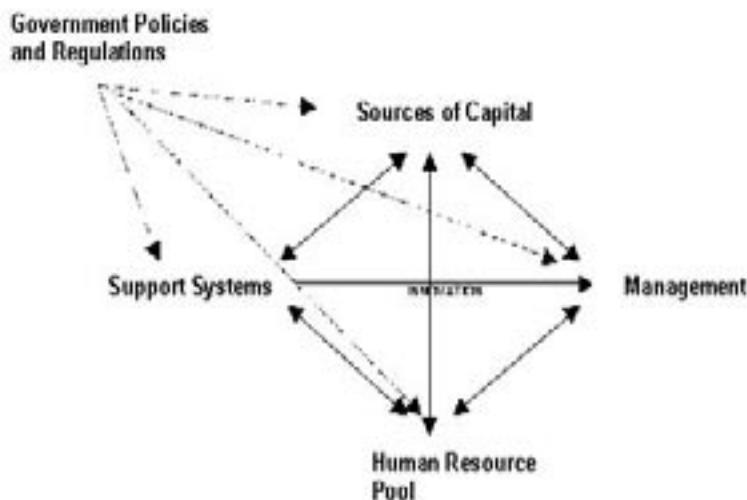
one aspect of innovation. While innovation is about introducing a new idea or process to the end customer or developing and improving an existing product or service, R&D is about conducting original investigations to gain new knowledge for improving products or services.

Risks and Rewards come in a package

Innovations and the risks associated with them are directly proportional. On the other hand, the rewards of taking these risks are high. All resources employed for successful innovation are subject to some form of risk. These resources vary from the capital employed to the use of raw material, time, manpower and technical skills.

A successful innovation is subject to various external and internal factors. (Figure 1)

Figure 1: Factors Affecting Innovation



Source: Evaluerseve Analysis

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These factors include government regulations and support, availability of skilled labour, the firm's internal management and its sources of capital. India and China attract large investments in R&D due to the availability of highly skilled manpower. The UK has an average innovation performance as its firms are less inclined to change. Therefore, they lag behind other geographies such as the US in adopting new and innovative business practices.

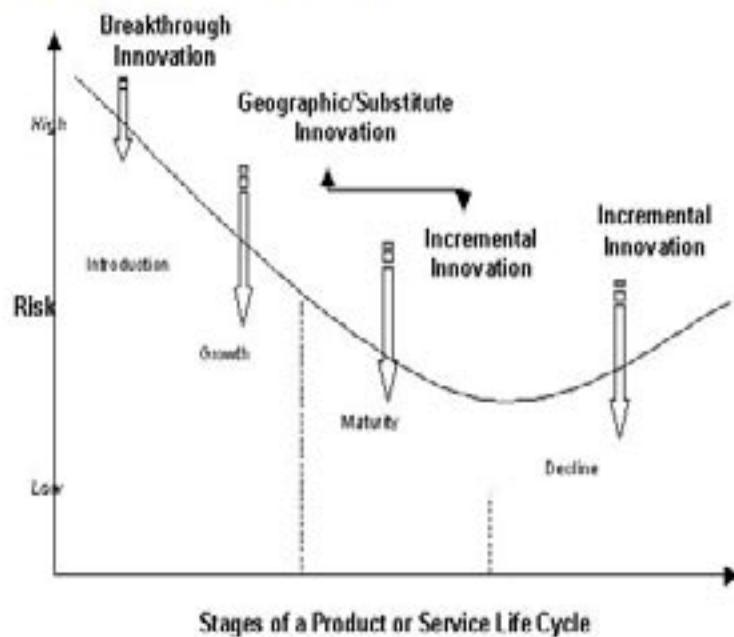
Collaborations such as that of Tata Consultancy Services in India with Stanford University for research in data privacy are examples of pooling existing expertise. Government involvement is a key factor as it influences all other factors. A government's fiscal measures and macroeconomic policies

promote access to capital. It has a role in developing science and technology centres, and associations. It also has a role in encouraging R&D in institutes that provide the support system required for innovation and R&D. The government is also responsible for providing funds for quality education and sourcing the required human capital. This can be seen in the United States where the government has increased the number of H1B visas in order to increase the skilled labour pool for its IT sector.

Extent of Risk in Different Stages of Innovation

There are four stages in a product's or service's life cycle. Innovation can take place at any of these stages as can be seen in Figure 2.

Figure 2 Levels of Risk at Various Stages



Source: Evalueserve Analysts



INNOVATION AS RISK TAKING

However, innovation or the introduction of a new product or service in a new market will always involve a considerable amount of risk. These risks will vary, depending on the stage of the life cycle in which the innovation is implemented.

Innovations can be classified into four distinct types. Breakthrough innovation, which is the first type, involves the generation of a complete new range of services or products for a new market or user. Breakthrough innovation is always implemented in the introduction stage of a product life cycle. In this type of innovation, a firm will succeed in attracting the right financiers and customers only if it invests adequate time and resources for the same. However, when an innovation is introduced, it can have two consequences: it may face outright rejection or it may be well received and go on to be a resounding success. Yet, there is no way of estimating the time that an innovation will take to ultimately become a success.

The second and third stages in the life cycle of a product or service are growth and maturity, respectively. If a firm decides to innovate in the growth and maturity stages, it can do so either by introducing the product or service to a new user or market (geographic innovation) or by introducing a substitute product to an existing market (substitute innovation). Geographic innovation helps to increase the market share for a firm while substitute innovation helps to increase its product line. Both types of innovations are less risky as compared to breakthrough innovation. This is so because by then the firm would have developed a greater understanding about its innovation. It would not only have awareness about the product's success, but

would also be aware of market needs.

The decline stage marks the final phase of a product's or service's life cycle. In this stage, an organisation usually faces a financial crisis, and its product or service may be on its way out from the market. An incremental innovation, which is the fourth type of innovation, can be most appropriately implemented at this stage. Incremental innovations refine existing ideas, products or services by adding certain features or characteristics. Yet, it involves some amount of risk because an innovation is at all times a risky proposition. Therefore, by implementing innovation in the decline stage, the organisation is taking a calculated risk. The innovation may earn a temporary reprieve for the product, or the money expended on the innovation may not fetch any returns.

Incremental innovation can occur in both the maturity and decline stages of a product's or service's life cycle. Most organisations opt for incremental innovation in three circumstances – to tackle increasing market competition, to change product features as per a felt need or to boost revenues.



Knowledge based Risk Management



SIMON JONES

Moderator

Director, HCS, University of Amsterdam, former Managing Director, M.I.T. Media Lab Europe

Summary: Knowledge based Risk Management

This session addressed an area of increasing importance in the rapidly-changing business environment we all face, namely the quantification and management of risk.

The first speaker was Kalle Kahkonen from the Finnish VTT, an organisation generally considered to be in the forefront of risk management. Kalle outlined a practical and practised method for risk assessment, management and containment. The development of software tools to assist this is a major step forward in enabling these techniques to be deployed by planners and project managers or indeed anyone concerned with the consequences of risk.

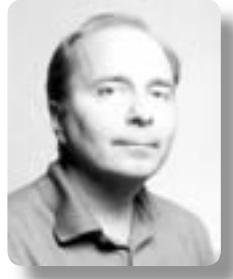
His discussion focussed on the main body of risk and opportunity management pinpointing several shortcomings and proposing improvements. In particular, localised risk and opportunity definitions, holistic paradigm for wide-scope risk and opportunity management together with the core process where focus is on risk and opportunity identification were reported. The emphasis on balancing risk and opportunity was considered particularly important in the ensuing discussion with the audience.

Our final speaker came from Evaluateserve, a leading innovation company. Global market and product risks represent a large part of today's companies' total risk exposure. The key risks that companies face are (a) Financial Risks, (b) Strategic Risks, (c) Operational Risks and (d) Hazard Risks. To

combat these risks, risk management has become a core business process that companies need to address seriously.

The risk management process comprises 6 key stages, namely (a) the organisation's strategic objectives, risk reporting, decision, risk treatment, residual risk reporting and risk monitoring. To support this process 2 key elements of data analysis and business research are essential. His talk provided a number of convincing examples of how this can be used.

Ever shorter product development cycles and an increasingly global competitive environment require continuous monitoring of markets, products and technologies. Quickly changing customer behaviours and shorter product lifecycles force companies to react ever more quickly to competitive threats. A good example of this is how Skype's P2P VoIP solutions revolutionized the global telecom markets. The presentation showed how using advanced analytics of company-internal data and external market dynamics, companies can significantly reduce their exposure to risk levels.



KALLE KÄHKÖNEN

Chief Research Scientist, Technical Research Centre of Finland,
(VTT)

Fundamental enablers for wide-scope risk and opportunity management

Abstract

In this paper we shall focus on risk management in projects. The main motivation for this is the crucial importance of projects in modern business. Projects are widely seen as main means for implementing unique operations requiring prompt actions.

The solutions covering whole project life cycle require wide scope risk management solution, which is one main research and development target at present. Additionally risk management suffers still from conceptual complexity and its models and tools are inadequate. These a somewhat discouraging currents shortcomings need to be understood but also one should recognise that the evidence from many useful cases, practices and tools are providing a basis for successful risk and opportunity management. This paper and its presentation shall provide a discussion on the main body of risk management pinpointing several shortcomings and proposing improvements. In particular, localised risk definitions, holistic paradigm for wide-scope risk management together with the core process where focus is on risk identification are presented as new contributions.

Introduction

Projects as a vehicle for implementing company business strategies are a phenomenon of an obvious significance that seems to be still strengthening all the time. Projects are around us in different forms

and in big numbers. Increasing share of company personnel work for projects and their management, and, this may easily be the case for individuals' whole career. Due to the significant role of projects it is crucial to put attention on practice how projects are carried out in a company organization. Projects need to be integrated with a somewhat more stable company organization. Otherwise projects shall remain "enemies aside real operations" which are not tempting for key people to enter and do not provide tempting career possibilities (Figure 1).

Modern businesses and projects are increasingly carried out in dynamic and turbulent conditions. This phenomenon seems to be caused by a more top-level change in general business conditions. In particular company structures and company ownerships are constantly changing. Competition is also increasingly global and the emergence of new players can rapidly change the markets that are in our focus. For projects and their management this situation is causing more pressure and threats most of which can be characterized as project risks or potential problems that can dramatically affect project performance.

The situation described above appears in different ways. First, aspects to be discussed here are networked operations and the level of commitment in such operations. During the last decade outsourcing has been perhaps the most significant restructuring principle for



KNOWLEDGE BASED RISK MANAGEMENT

companies wishing to have an organization that would be better focused on core business. For projects this means that operations are increasingly networked, since a single partner can only provide a very limited contribution. A contractor that provides such a contribution normally has many subcontractors who in turn can have subcontractors of their own. This results in very complex networks where each player's own contribution is less than before, since subcontractors increasingly provide supplements for each contribution. In practice the development or delivery of one contribution is broken down into smaller contracts than used to be the case. The level of interest or commitment towards such smaller deals can be questionable and can change during the project life-cycle, which can cause a serious threat to the project.

projects is constantly shortening. In this situation a projects' start is based on assumptions rather than specifications, and all projects are constantly under threat of major changes or even of being halted.

The aspects covered above may at first glance seem to be solely of a negative nature but we should approach them as challenges. If managed successfully we can meet the major requirements set by modern businesses. It is obvious that these aspects have in, an important manner, given rise to the current significance of project risk management. Presently, risk management is widely acknowledged as a main element of project management.

Currents shortcomings in textbooks and standards

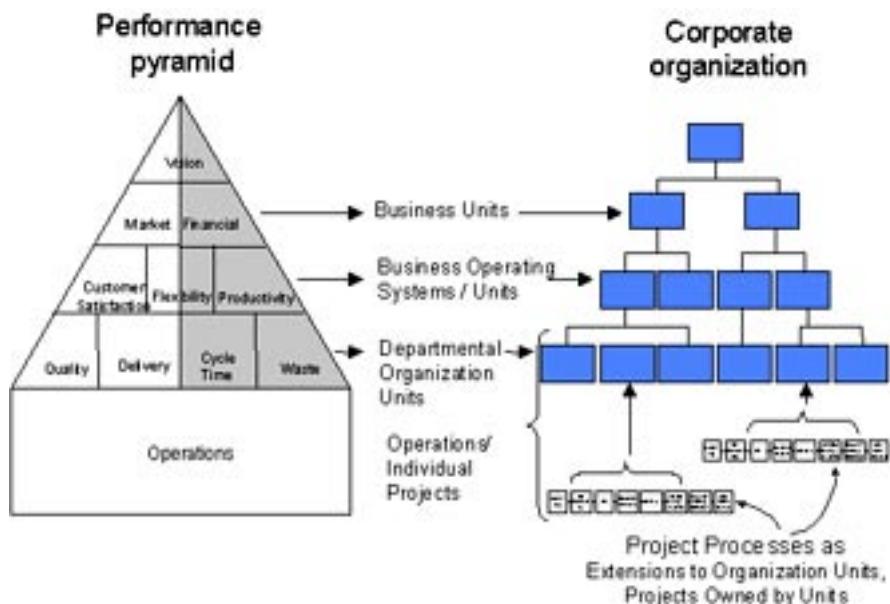


Fig. 1 *Company performance pyramid and its relations to company organization and operations that are often in the form of projects (modified from the original in Artto, Kähkönen &*

Another aspect to be discussed next is the business life-cycle. Business viability of services or other products is increasingly difficult to anticipate. Thus, the time for completing

Traditionally project risk is defined as an uncertain event that can have negative consequences. This demonstrates how people, in a general sense, associate the term risk with



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Generally, there is a need for risk management that has wide scope in the terms of better managing the positive and negative chances concerning our business.

adverse outcomes or situations. Indeed, the above definition suffices if we limit our risk management to cover potential threats for the success. If a broader risk management viewpoint is taken it becomes apparent that such a narrow definition no longer is satisfactory. This may, for example, result in overpricing when the expected outcome of potential threats is analysed and summed up for inclusion in the project estimate.

As a consequence an increasing number of researchers and other experts have proposed that risk management needs to cover, in a well-balanced manner, both potential downside problems and upside opportunities. The term uncertainty has had a central role in this development. As the term risk has had a fundamental negative association the term uncertainty is being explored as a more suitable concept to cover widely uncertain events and their management. However, "Every word or concept, clear as it may seem to be, has only limited range of applicability" (Heisenberg, 1959). This is not only the case with the term risk but also true with the term uncertainty. Uncertainty is a universal term that can be understood to cover general variability and ambiguity around us with or without our involvement.

It is generally considered that the biggest difference between the basic interpretations of risk and uncertainty concerning business operations lie in the level of individual or organizational involvement. Usually a risk is understood to be present in a situation where a certain level of involvement is present, for example, a pricing decision for a bid, while uncertainty means potential variability and ambiguity without context. Uncertainty can,

however, be put into context by having, for example, a decision making need or a project to be implemented as a starting point. Such a study of potential impacts from uncertainty, results in identification of risks and opportunities. This underlying conceptual difference has caused a situation where, due to practical reasons, we keep on using the terms risk and risk management, although an obvious conceptual dilemma exists when opportunities are herewith included. A recent example of this is PMBOK (2004).

Wide scope risk management and its solution

Generally, there is a need for risk management that has wide scope in the terms of better managing the positive and negative chances concerning our business. In simple terms, this wide scope risk management needs to cover the project life cycle from early studies to final business operations. Additionally the wide scope risk management needs to provide solutions that meet the needs of various organizational levels and stakeholders. The solutions termed as Enterprise-wide Risks Management systems (ERM) are moving towards this direction. The ERM systems take a company value driven approach for managing risks in different organizational levels in order to maximize the total operational value of the company (Thieke, 2000).

Three important aspects for forming holistic enterprise-wide risk management are system, organization and human aspects. The system approach is the one we may call risk engineering but without a careful inclusion of two remaining aspects any enterprise-wide risk management is unlikely to succeed. A system centred approach will only allow for local solutions, thus meeting only



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the needs of a few groups of people and being capable of handling very limited risk types and situations. What is needed is a holistic paradigm that takes into consideration all three aspects, thereby creating a well-balanced approach for forming enterprise-wide risk management (Figure 2).

A thorough understanding of

the nature of risk management forms the basis for focusing on most important subprocesses and their content. This is the way to make the final solutions valuable. To have simple-to-use tools is another important aspect for wide scope risk management solutions. Such tools have proved to be most successful ones in temporary project organizations.

SYSTEM	ORGANIZATION	HUMAN
<ul style="list-style-type: none"> • Common R&O definitions • Rigorous R&O identification and measurement • R&O transparency and communication • Timeliness and quality of information • Clearly defined role for system and its use (capabilities, limits) 	<ul style="list-style-type: none"> • The effectiveness of internal R&O policies and control • The degree of line management oversight • R&O management skills and knowhow • Diversification possibilities and avoidance of R&O concentrations 	<ul style="list-style-type: none"> • R&O understanding: loss, gain • Cognitive biases: <ul style="list-style-type: none"> i) retrievability, ii) confirmation bias, iii) illusion of control • Personality: inborn set of dispositions affecting on preferences, habits and reactions

Legend: R&O = Risk & Opportunity

Fig. 2 Holistic paradigm aspects for forming enterprise-wide risk and opportunity management



Fig. 3 Strategies for the development of systematic risk management practice.

Localised risk and opportunity definitions

Due to practical reasons it is very important to define the term risk in a way that provides practitioners with a common starting point for risk management tasks and a basis for shared understanding. A multitude of definitions can be found from different textbooks. See Olsson (2001) for a review of various existing definitions. It seems that researchers and other experts have tried to

successfully". Some examples of company practices for risk management can be found in Kerzner (2000).

Chapman and Ward (2002) are concerned that terms and concepts are being used that are restrictive and limit the potential for wide scope risk and opportunity management. A generic conceptual foundation is needed, but on top of that we can build local definitions, which can appear not to be a single definition but several

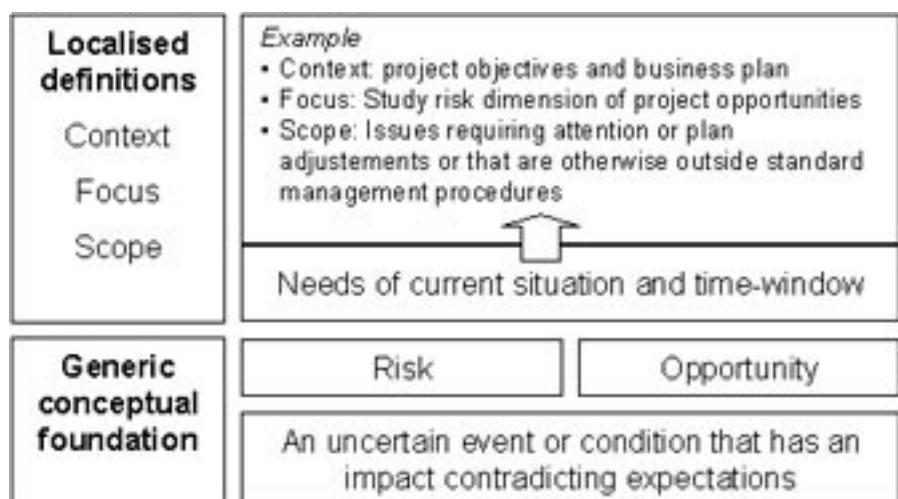


Fig. 4 Localized definitions of risk and opportunity

reach a single risk definition that would be generic enough to cover the scope of risk management in question. Yet, we have plenty of evidence from company practices where risk management has been built strongly on a situational context. This means that company management is focusing on particular risk management needs that they consider crucial. It is also a way to make risk management easier and more effective in the short time available within context of other work. For example, several companies have built their risk management practices around project WBS (Work Breakdown Structure). Here the starting point and definition for risks and their management can be "Identify WBS linked threats for meeting project objectives

situation specific definitions. Together these localised definitions can cover wide risk management scope and they can make risk management tasks easy and effective (Figure 4).

Discussion

This paper has provided a discussion on the cornerstones of modern risk and opportunity management. It has not been the intention to cover or classify various appearances of uncertainty management in project-oriented business rather this paper has presented some recent insights for modern and continuously developing management of uncertainty. It looks obvious that we are still too often facing conceptual and terminological problems with the management of un-



... companies applying systematic procedures for management of uncertainty should move towards localized definitions of risks and opportunities.

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certainty. This can also be seen to be the case in this paper. Despite the need for having a holistic solution, the terms risk and risk management are still used widely and it seems that these terms are here to stay. Due to various practical needs, it looks obvious that a simple single definition or term is not enough. It has been proposed in this paper that companies applying systematic procedures for management of uncertainty should move towards localized definitions of risks and opportunities. These situation specific definitions can vary within a company.

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MIKE TAYLOR

UK Managing Director, Evalueserve

Global Risk Management - Role of Business Research and Data Analysis

Risks are classified as financial risks, strategic risks, operational risks and hazard risks.

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Risk is the probable damage, which may happen for any ongoing process or some future event.

The topics dealt with in the presentation are stated as follows:

- Drivers of Key Risks
- Risk Management Process
- Risk Analysis Methods and Techniques
- Risk Management in New Product Development
- Risk Management pertaining to the Business Environment
- Risk Management pertaining to Data Quality

Risks are classified as financial risks, strategic risks, operational risks and hazard risks. Some of these risks are externally driven while some are internally driven.

Risk Management Process

Risk Management is a process, which is carried out in accordance with the organization's strategic objectives to mitigate risk. The key components of this process are risk assessment and risk evaluation. In today's competitive and dynamic global business environment, business research and data analytics play a very important role in risk management.

Risk Analysis Methods and Techniques

Business Research includes techniques such as business impact analysis, modeling, PESTLE and SWOT analysis, which help in risk analysis.

Examples of some data analysis methods and techniques are profitability and productivity analysis, scenario analysis and cluster analysis.

Risk Management in New Product Development

New products have very high failure rates. Products fail, not because of technical shortcomings, but due to absence of market. Over 60 percent of new product fail before entering the market, and out of the remaining 40 percent that do see the ray of light, 40 percent fail to yield profit and are withdrawn from the market. Timely and reliable knowledge about customer preferences is most important and such data is obtained from business research.

New product development is linked with very limited historical or preliminary data. Hence, risk is involved in the process. Risk could be in the form of market, technical, or organizational issues. Risk analysis solves such problems through flexible modeling, primary and secondary research.

A good strategy is required for evaluating and dealing with the associated and unavoidable risks.

Business Research at Kellogg's

Kellogg's investment in new product development resulted in strengthening its global brand. It carried out business/market research to understand the market and 1000 consumers were questioned about the Kellogg's brands. The focus



of the research was to understand how 'Special K' could be extended into different variants to grow the brand, keeping the core product strong.

This business/market research initiative helped the company to develop variants of Special K, resulting in a low risk project offering prospect of a good rate of return.

Risk Management pertaining to the Business Environment

Companies operate in a dynamic business environment, which forces them to adopt risk management measures. The business environment is both external and internal to a company and an adverse change in entities such as technology, competition, structure, processes and culture could increase the risk levels for a company.

Scenario Analysis at Shell

Shell makes use of a strategic planning process in which a series of "what if" scenarios are created. The management at all levels is made to think about the company's business environment. The steps involved in Shell's scenario analysis are:

- Identify the trends and their drivers
- Develop the what, why and how of different scenarios
- Identify parameters to monitor the environment
- Develop contingent strategies to tackle each scenario

Risk Management pertaining to Data Quality

Data Quality has been emerging as a major concern for organizations. Some facts highlighting this issue are listed below.

- One third of the data in the enterprise level databases

are corrupted within a year.

- Over time wastage of resources and money on the CRM initiatives exceeds the initial investment.
- CRM spending has been increasing annually by 15 percent, but nearly half of all CRM initiatives have been unsuccessful.
- Every 100 Euro spent in marketing/CRM initiative is worth only 66 to start with when working with poor quality data.

Data cleansing is an efficient solution for managing risks pertaining to data quality. Following are some examples of data operations, which form a part of the data cleansing and maintenance initiatives:

- Data Profiling – Inspect data for errors, inconsistencies, redundancies and incomplete information.
- Data Quality – Correct, standardize and verify data
- Data Integration – Match, merge or link data from a variety of disparate sources
- Data Augmentation – Enhance data using information from internal and external data sources.
- Data Monitoring – Check and control data integrity over time



Values & Spirituality



JOHN RENESCH

Author, Getting to the Better Future: A Matter of Conscious Choosing

Conscious Living, Conscious Work: Becoming Global Patriots

While listed in the Summit for the Future 2006 schedule as a keynote talk by John, he started his presentation by suggesting a dialogic format, allowing everyone an opportunity to participate as an equal. Moderator Jonathan Marks and fellow keynoter Bill Liao, who followed John, agreed. Those attending (40-50 people) expressed their approval of such a change in the agenda. John talked some about his experience hosting monthly dialogues in the states as co-founder of *The Presidio Dialogues* (www.thepresidiодialogues.org) over five years ago. He explained how dialogue was distinctly different from intellectual discussion or lecturing, more about inquiry than about delivery of knowledge, more about collective discovery of new ideas, new wisdom, than about individuals being informed of existing information or theories by a lecturer.

After a few minutes of explanation and suggesting guidelines, John offered a small bit of content on the subject listed in the Summit program to begin the dialogue. He mentioned some of his background and work in exploring the role of consciousness and work, systems dynamics and social and organization transformation.

He also mentioned that his work as a futurist was more about looking at futures people wanted rather than predicting futures based on current trends or planning scenarios. As part of his talking about possibilities for the future, he read this quote by Spanish philosopher George Santayana:

*"We must welcome the future
Remembering that soon it will be the past;
We must respect the past
Remembering that once it was all that was humanly possible."*

He also mentioned the role of legitimacy and cited his former colleague Willis Harman who said: "Society gives legitimacy and society can take it away." ... "Perhaps the only limits to the human mind are those we believe in."

He read a few more quotes (below) and then invited everyone to speak whenever they were so moved, based on the content he had provided and the context of the session.

"Of all the creatures of earth, only human beings can change their patterns. Man alone is the architect of his destiny...Human beings, by changing the inner attitudes of their minds, can change the outer aspects of their lives." -- William James

"Those with visible responsibility for leadership are nearly always too visible to take responsibility for change..." - Harlan Cleveland, author, *Nobody in Charge*, former U.S. ambassador to NATO

After a few requests for clarification about how dialogue was different from the format for most exchanges between and among humans these days, the energy level in the room start-



"By adopting a new worldview, human beings can take advantage of the extraordinary possibilities that are inherent in what has been referred to as 'a communion of technology with spirit,' or co-creation.

ed rising to a palpable level. As more and more people started expressing their own thoughts and grew in comfort with the process, the resonance built until, at one point about 20 minutes into the session, John asked everyone if they could feel the energy, the difference between the electric-like buzz then and the near stagnant energy at the beginning. Most nodded affirmatively than they could feel the difference.

Approximately half the people in the room spoke at some point, with some remaining silent the whole time. John explained how silent listening was just as valuable to dialogue as speaking so long as everyone was being authentic, speaking when so moved and not speaking unless so moved. Exchanges were energetic and stimulating, with people feeling open to being in the spirit of "not knowing" and incredibly receptive to new ideas.

When the moderator suggested a break was due, the dialogue wound down and John concluded by pointing to the opportunity facing humankind to consciously evolve to a new and unprecedented level of maturity, and create a just, sustainable and compassionate world. "By adopting a new worldview, human beings can take advantage of the extraordinary possibilities that are inherent in what has been referred to as 'a communion of technology with spirit,' or co-creation. This option has never before been available in human history and, if recognized and acted upon, can launch us into a new era of maturity, wisdom and consciousness," he said.



NICOLAI PEITERSEN

Founding Director of Actics Limited

'Actics in the Ethical Economy'

¹ Today, the political philosophy of the productive forces follows the neo-liberal model that stresses competition and private property. But this model has already been surpassed by the real development of the productive forces. It is continuously disproved by new applications like Skype, Google, Wikis or the Open Source and P2P movements; by the creativity of 'underground' subcultures (brand value, e.g. and, not least by the present craze about 'user led innovation'. All of these examples present cases in which the creation of value instead builds on sharing, social utility and cooperation.

What is this real development of the productive forces today? There have been lots of terms tossed around in recent years in order to describe, the 'New Economy' that is replacing the old, Fordist, industrial society: Information Economy, Knowledge Economy, Creative Economy, Experience Economy or New Economy (tout court) are some of the most frequently seen of these terms. We would like to introduce the concept of an Ethical Economy, not just to add another term to the list, but because we think that the Ethical Economy describes something more fundamental, something that lies beneath the surface of all of these concepts: cooperation.

Of course cooperation has always been the secret productive force of capitalism. Both Adam Smith and Karl Marx stressed how the efficiency of industrial production rested mainly on its ability to create

new and more efficient forms of co-operation, like the division of labour in manufacture, and latter the assembly line and the complex production and distribution systems that developed around it. Marx was particularly foresighted in this respect. In an obscure passage from *Grundrisse* (a collection of sketches and notebooks that he never intended to publish himself) he argues that as large-scale industry develops and becomes more complex, the main productive force will be cooperation itself. He called this General Intellect, by which he referred to a sort of social intelligence, a collection of competences, know hows and skills that arose organically out of the complex forms of cooperation and social interaction that the large factory made possible. Machines were an important part of this General Intellect, but they did not exhaust the concept. Firstly, Marx argued that machines (or technology) was the result of this social intelligence, they were a materialization of knowledge and skills that had already developed through previous forms of cooperation. Secondly, he argued that the most important contribution of machines and technology was that they permitted more complex forms of cooperation, and thus further unleashed the key cooperative, or ethical productive force.

Marx wrote this in the 19th century. When he thought of General Intellect he thought of the transmission-belts of huge steam-driven factories. But today's Information and Communication Technologies has gen-



.. ethics has become the trigger of value creation in today's economy. Proactive companies understanding this will be tomorrow's winners.

eralized this enhanced capacity for cooperation across the whole social body. The General Intellect of the factory has become a mass intellectuality that empowers the cooperative potential of social relations generally. This is the fundamental element of the new economy. The production of knowledge, of experiences, of creativity of all the immaterial goods is in every case premised on the ability to activate and utilize the productive potential of social cooperation. It is the cooperation of the many, of the networked multitude, its ability to produce an ethical surplus, social relations, experiences, knowledge and styles, that supplies the raw material for the new, ethical economy. We would go as far as to say that the main economic contribution of information economy has been that it has enabled these new forms of productive cooperation, this new ethical economy.

The ethical problematic is intimately linked to the issue of cooperation – in fact not only linked but is the trigger. There has been published some interesting research findings that “altruism is in-built in humans” where it has been found that people do want to help regardless of any personal rewards unless the other person violates their values. Hence, ethical values are the human qualities in the other person that matters to you and that triggers you to help or cooperate with that person.

Thus, ethics has become the trigger of value creation in today's economy. Proactive companies understanding this will be tomorrow's winners. And even reactive companies have no choice but to incorporate ethics into their core business strategy, as each and every stakeholders is increasingly expressing ethical demands to the company.

Table 1: Stakeholder Ethical Demands

Push factors

- Corporate scandals – Sarbanes Oxley
- EIA (Ethical investment focus from investors with €364 billion under management) – a general trend in investor demand
- Consumer behavior: 85% believe companies have ethical responsibility
- Employees: 75% will not work for corporate with weak ethical profile
- Legislative code of conducts etc.
- Intense communication activity from NGOs through media (reputation at stake)

Pull factors

- Ethics as a competitive differentiator
- Long-term return from companies with ethical focus above others

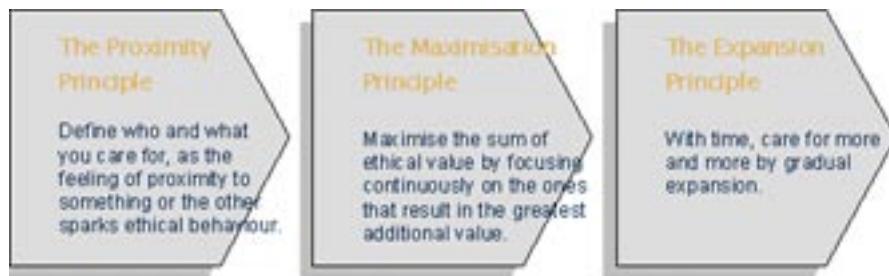


The introduction of ethics into mainstream economic thought is precisely a response to the new economic centrality of co-operation, as it is evident with ethical consumerism and corporate ethics. The approach has however been self-defeating, as consultants have harked back to historical philosophers and tried to adapt them to modern life. This has led to very general, universal and

static principles, evident with code-of-conduct and human rights that are all well & fine in terms of lowest common dignity denominator, but does by no mean drive the value creation in companies and society today.

Thus, we have set forward an ethical system that can achieve this:

Figure 1: The Actics Principles ²



The **Proximity Principle** breaks ethics down from a universal level to a company specific set of ethical values. The **Maximisation Principle** helps to prioritise all available values and pick the ones with greatest ethical impact. The **Expansion Principle** points to the fact that ethics is a process that you can revise, improve, and expand.

Based on these principles we've launched free online social software on Actics.com allowing every ethical agent – be that individual or company – to:

1. Take a position by expressing the values that the agent feels most close to.

The screenshot shows a software interface titled "Take a position...". On the left, there is a vertical list of values under sections like "Define", "Capture", "Select a", and "Value 1" through "Value 6". A green arrow points from a central dialog box to the "Select the values that most..." section. The dialog box contains the text "Select the values that most... the most for your company". At the bottom, there are "Cancel", "Back", and "Next" buttons. To the right, there is a sidebar with a list of values and a note: "Step 1 of 2-3-4".



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2. Define the actions that improves the agent's impact on these values

...define your implementing strategy

Choose your Actions		Step 1 of 3 ->
<p>Choose the actions that best reflect your ethical values and maximize the impact of your members. Numerical, concise descriptions provide the best guidance for action!</p>		
<p>Select Actions</p> <p>Action 1 <input type="checkbox"/> Support or defend the proposed rule.</p> <p>Action 2 <input type="checkbox"/> Encourage public input.</p> <p>Action 3 <input type="checkbox"/> Encourage cost-effective public power.</p> <p>Action 4 <input type="checkbox"/> Encourage utility companies to self-regulate.</p> <p>Action 5 <input type="checkbox"/></p> <p>Action 6 <input type="checkbox"/></p> <p>Action 7 <input type="checkbox"/></p> <p>Action 8 <input type="checkbox"/></p> <p>Action 9 <input type="checkbox"/></p>	<p>Selected Values</p> <p>Transparency</p> <p>Efficiency</p> <p>Environmentalism</p> <p>Openness</p> <p>Integrity</p> <p>Respect</p>	<p>The Optimization Principle Maximize the sum of the relative value for focusing on the actions that result in the greatest additional value</p> <p>Level of Outcome</p> <p>100%</p> <p>80%</p> <p>60%</p> <p>40%</p> <p>20%</p> <p>0%</p>  <p>For each of the acts and/or goals that you will in the goal test stage it</p>
<input type="button" value="Send"/>		

3. Invite all the agent's stakeholders into a community around the

Multistakeholder Community

A screenshot of the Acties Beta software interface. On the left, there's a green callout box with white text that says "Invite all your existing users into your community". To the right of this box is a large blue arrow pointing towards a dropdown menu. The dropdown menu is titled "Choose the importance of public feedback" and contains several items: "Public", "Friends", "Family", and "Friends & Family". The "Friends" option is highlighted with a blue border. At the bottom of the dropdown, there are two buttons: "Add this source" and "Add".

4. Evolve through intelligence and management

Ethics is no longer a matter of reactive communication but proactive innovation that you can quantify, integrate and optimise.

Hence, the system empowers every agent to define the playing ground (their values), the players (stakeholders), the tactics (the actions), and master the game of improvement through dialogue & data.

Ethics is no longer a matter of reactive communication but proactive innovation that you can quantify, integrate and optimise. How good an agent is to manage and turn ethical demands into opportunity increasingly determines its economic value. Get started!



¹ Parts of this text were originally published in the Kesera Working Paper 4/2006, Ethical Economy, by Adam Arvidsson and Nicolai Peitersen (<http://www.kesera.org/ethicaleconomy>).

² The ethical system was originally published in the Kesera Working Paper 3/2004



SPECIAL REPORT Values and Spirituality

By Aditya Joshi, Anshuman Dash, Evaluerseve

Terrorism and conflict dominate the political landscape of most countries around the world. From Nepal to Columbia and from the Parisian suburbs to the streets of Grozny, Chechnya, differences between people and their opinion have transformed into bloody conflicts.

These conflicts originate mainly because of intolerance and a lack of commitment to a peaceful resolution of differences. Such a commitment to peace and progress through dialogue has to be brought about by restoring public faith in the immense potential of human values and dialogue as the means to resolving differences.

Values form the core of any individual. Application of these values results in development of ideas, formation of opinions and establishment of beliefs, influencing relationships with surroundings and one's kind. These values inspire an individual to be virtuous as well as to be imaginative and inventive in his or her approach, leading to advancement.

Dialogue and Conflict

A continuous interaction between the values of an individual and those of other members of society gives rise to the collective thought of society. This continuous dialogue on values and collective thought processes is the fundamental mode of their evolution. Evolution thus reinvents these values and thought processes to make them relevant for their subscribers as the times change. This dialogue is essential to the progress of humanity. According to Amartya Sen, Nobel lau-

reate professor of economics and philosophy at Harvard University, from his book *The Argumentative Indian*, it is due to the tradition of open argument and public dialogue that India has been able to create a plural society with many religions co-existing and flourishing. In fact, this argumentative tradition has contributed to cementing the integrity of this vast and diverse nation.

The halt of the dialogue amongst thought processes leads to a lack of mutual understanding amongst people and consequently, significantly increases the risk of conflict between the subscribers of different thought processes. This establishes the necessity of dialogue as the fundamental mode to avoid conflict. At this juncture, it is important to note that conflicts that continued for years, such as the struggle for abolition of apartheid in South Africa and the struggle for India's liberation from the British Empire, were resolved through dialogue and peaceful means. It is also important to note that in both these struggles, armed conflicts, in form riots or wars, did not result in any significant progress.

The Role of Faith

Faith is a result of the comfort that an individual finds from a relative certitude displayed by kin and surroundings. Faith promotes greater interdependence amongst people. In return for this peace of mind and sense of security, the individual aspires to be more responsible and useful to those whom he depends on.



As a result, faith establishes bonhomie amongst people and facilitates the continuous dialogue process, which is essential for evolution of their values and thought. Also, faith ensures civility by reposing the trust of people in society, authorities and governments. This establishes faith as a fundamental ingredient in maintaining peace and harmony and as a driver of human progress.

Understanding Identity

It is an innate need of an individual to communicate and to be understood. This necessitates proper avenues where he can express himself as well as an audience that is willing to understand and appreciate his or her views. A lack of such forums, leads to marginalization of people, leaving an individual dissatisfied and frustrated. Such a situation may force them to resort to violence in order to make themselves heard.

In order to understand an individual completely, a complete understanding of different facets of this person's life is important. Identity should not be ascribed to only profession, religion, ethnicity or nationality. In fact, such a reduction of one's identity also leads to marginalization. Often, discrimination is a result of their identification with a certain religion and not with their identities as teachers, engineers, parents, students or scientists etc. This highlights the importance of plural identities of people. Understanding plural identities is key to keeping away dissatisfaction and hopelessness and thereby ensuring peace and progress.

Leadership and Progress

In order to resolve the wars and conflicts in the world today, bold decisions need to be taken

on several issues, ranging from nuclear non-proliferation to environment, from street crime to religious freedom. A creative and pragmatic stewardship is very important to handle these issues and resolve them with the agreement of all concerned. Such leadership will not only have to find solutions to the problems of the present, but will have to think beyond to address the problems of the future; these leaders will be fountainheads of ideas.

Umpteen examples of phenomenal leadership are buried in the annals of history. The role and the leadership of Mahatma Gandhi in the Indian freedom struggle is one such example. Till the rise of Gandhi's movement against the colonial rule of the British, except the US, no colony had liberated itself. The methods chosen by the Americans were that of armed struggle and wars, but what Gandhi was going to propose was revolutionary. His choice of passive non-violence as an aggressive posturing to achieve an independent peaceful India was result of his foresight that a civil and peaceful society cannot be founded on bloody wars. His realization that the disunity and lack of self-esteem amongst Indians is the major cause of India's continuous subjugation to the British rule. These were the targets of his movement. He never preached hatred towards the British. By liberating India, he not only ended two centuries of British rule but also gave the world an example of what peaceful means can achieve.

The leadership of Rev. Martin Luther King of the civil rights campaign in the US is also exemplary. His commitment to achieve equal rights for the African Americans through peaceful protests achieved more for his cause than violent racial riots. Also to be noted is



The new age leaders must look forward to lead the global thought rather than leading only a particular country or a section of society.

VALUES & SPIRITUALITY

his urge to integrate his followers with American society; he did not preach any revenge or retribution of any section of society to achieve his goal.

A last example is of Dr. Mohammed Yunus, the founder of Grameen Bank, a microfinance organization in Bangladesh. His diagnosis that the cycle of poverty is vicious because the poor do not have the facilities to save any portion of their earnings revolutionized the approach to the issue of mass poverty. He conceptualized and executed a plan to extend financial and banking facilities to the poor led to the dramatic alleviation of their economic standard.

The sheer novelty of the ideas of such leaders not only addresses the issues at hand and but gives the world a new perspective to address issues of the future. The outmoded ways of leadership, of securing selfish interests and of exploiting public sentiments, should be relinquished. The new age leaders must look forward to lead the global thought rather than leading only a particular country or a section of society.

A greater integration of world's peoples is an imperative for further progress of mankind. A pre-requisite for such integration is maturity in the global thought process that helps the mankind to move beyond the differences and focus on the synergies. Global thought needs to be led in a direction where we learn to value each individual, give him chance to flourish and resolve our difference with mutual respect and amity. The path to such a level of maturity would come through faith, understanding, compassion, persistence and at last, courageous leadership.

Cross-Cultural Competence



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Cross Cultural Competence in a Globalised World

The Logic of Logic - and the Role of the Premise

What role does culture play in international and multilateral cooperation? How can we demystify culture itself, and put it back on a truly multilateral track? Although culture has always been a target for debate and research do most researchers focus on specific cultures, whether social, national or political. Where social scientists in general typically study cultural phenomena, social anthropologists often study entire cultures. However, rarely is culture as a phenomenon put in focus in order to analyse the role culture plays in our daily lives in general, and the traps it provides for multilateral cooperation in particular. A parallel and equally rare debate is the one regarding the everyday link between culture and logic, and how we by exploring that link can better understand how to engage in cross-cultural interaction.

In his 2001 collection of thoughts titled 'The Meaning of Things', A.C. Grayling wrote:

Reason is merely an instrument which, correctly employed, helps people draw inferences from given premises, without inconsistency.

To put this quote into a truly cultural perspective one should however consider anthropologist Melville Herskovits' conclusion that:

Given the premise, the logic is inescapable.

Herskovits view, gained from a lifetime of research among African cultures, stands out as a strong advocate for a flexible view on both logic, moral and culture. From this conclusion we can also enter a discussion on what can be seen - from a more philosophical perspective - to be the components of logic, as well as the impact logic has on both conscious and sub-conscious decision-making processes. Nevertheless, as Grayling in fact referred to reason rather than logic, let us start with the links between these two.

Ever since the Enlightenment era in European history, has 'reason' been at the core of the intellectual debate. One person who probably can, more than most, be identified with this orientation is the French philosopher August Compte, the originator of Positivism. This theory, claiming there are certain objective facts that underpin everything we experience, is hardly disputed as critical for modern science - although Thomas Khun's introduction of 'research paradigms' in the early 1960's opened up for a far more nuanced debate also beyond the circles of committed post-modernists. But when talking about logic it becomes more like strolling in a minefield. This term has many meanings and ramifications, and which one is 'correct' will largely depend on which discipline one represents. In this paper does the term logic refer to the everyday logic we as human beings (rather than as scholars or scientists) tend to apply when responding to



... when linking the concept of logic to the concept of culture, it soon becomes clear that although some premises we use are learned from experience, and hence consciously accepted by the user, other premises are mainly culturally derived ...

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situations we are faced with, whether a situation we planned for or not, or whether a situation we consider ourselves willing or ready to deal with or not. This notion of logic is hence the same as we assume when we in any given situation casually claim that '*it is only logical to do X*', where our decision to do X instead of Y is sometimes a conscious one and sometimes a more or less sub-conscious one. The claim here is that the formula for this kind of logic can be written as follows: *Observation + Premise = Conclusion*. The interpretation of this formula shall be that everybody makes observations of various kinds, and that two or more persons who are at the same place at the same time also are, normally, able to make the same observation. Some observations can even be so tellingly described to us - and/or documented - so we are willing to accept somebody else's observation as if it had been our own. What we often do, having recorded our observations, is to draw conclusions, thinking they are based on these observations. However, if it was at all possible to draw conclusions entirely based on observations, would our observations in fact equal our conclusions. This is, nevertheless, not the case.

What makes us take the step from 'observation' to 'conclusion' is the premise. This is what Herskovits indicated with his statement. It is the premise that will decide our logic (or 'logical conclusion'), not the observation itself. However, when linking the concept of logic to the concept of culture, it soon becomes clear that although some premises we use are learned from experience, and hence consciously accepted by the user, other premises are mainly culturally derived, i.e. something one is brought up to think from early childhood, and therefore hardly

ever reflects upon. So although some premises are down-loaded into our consciousness by processes we are fully aware of, and thereby have the possibility to critically evaluate (and hence accept or refuse), other premises are downloaded into our consciousness by processes we are not aware of, and hence have no real possibility to accept or reject. Psychologist Harry Triandis described such culturally derived premises as "*unstated assumptions, standard operating procedures, ways of doing things that have been internalized to such an extent that people do not argue about them*".

Viewed from this angle, logic all of a sudden comes alive as something that is in fact relative our culture. The consequence is that as long as there is more than one culture prevailing in our global community, there is also more than one 'logic'. This influences the way we actually respond to different situations, as well as how we view the ideas and actions of others. In other words, it not only affects our own behaviour, it also influences our ability to understand others'.

Enculturated Models – the Need of a Globalised World

A string of 'formulas' may help to explain the links between culture as a phenomenon and the action we take in the name of it. Let me here suggest that our everyday logic is heavily influenced by the following inter-related developments:

On the Social Level (L_s):
+ Cultural Values (C^V)
+ Environment (E^1)
= Cultural Application (C^A)

On the Empirical Level (L_E):
+ Cultural Application (C^A)
+ Experience (E^2)
= Cultural Premise (C^P)



On the Logical Level (L_L):

$$\begin{aligned} &+ \text{Observations } (O_{1-n}) \\ &+ \text{Cultural Premise } (C^P) \\ &= \text{Cultural Conclusion } (C^C) \end{aligned}$$

On the Action Level (L_A):

$$\begin{aligned} &+ \text{Cultural Conclusion } (C^C) \\ &+ \text{Resources } R^1 \\ &+ \text{Resolve } (R^2) \\ &= \text{Cultural Behaviour } (C^{Be}) \end{aligned}$$

Explained in simple English this means that the application of our cultural values will be shaped by the environment we operate in. For instance, a newly arrived Chinese immigrant to the US may act differently in a given situation in the US, compared to what s/he would have done in China, not necessarily because of an immediate change in his/her cultural values, but because the US environment (in which s/he now operates) is very different from China, making the 'normal' behaviour impractical, or even unrealistic. As s/he gains experience from operating in a 'new' environment, this experience will also start to affect his/her premises (underlying assumptions). This means that instead of assuming a certain type of development based on past experiences, s/he will now begin to assume different types of developments, based on fresh experiences in the new environment, combined with the 'old' references that s/he still retains. Once these new premises start to 'stick' in his/her consciousness, a new type of logic will develop, one that most probably can be said to position itself somewhere between the old logic s/he used to apply, and the prevailing logic in his/her new environment. Armed with this new logic, and given whatever resources and resolve s/he has and/or can muster, s/he will act in whatever way s/he now finds 'logical'. No doubt is this not at all a linear process of development or change, nor one where the different steps always will

reveal themselves as individual steps. However, all of them must be passed through before his/her action will change as a direct consequence of the new cultural influences s/he is exposed to.

Having accepted this it soon becomes understandable *why* it is so difficult to introduce e.g. governance models developed in one cultural setting into another cultural setting. As all models constitute the 'essence' - in fact the distillate - of all the thinking that went into its creation, the model itself equals the 'cultural conclusion' in the formula outlined above. To simply try to share the observation (such as poor competitiveness or low profitability) and then force the model (i.e. the conclusion) onto the situation, is bound to fail - no matter how well it worked in the environment where it was first developed. If the cultural premises (developed from the 'social' and 'empirical' levels preceding the 'logical' level where it is applied) upon which the model is based, are not in place in the culture in which it is going to be applied, it is not going to succeed. Instead we need to use enculturated models in general - and *enculturated governance models* in particular - adapted to the targeted cultures in question, helping people in culturally diverse societies to actually see the causalities of globalisation.

By carefully analysing the processes that created the models in the first place, then identifying and replacing those premises that are invalid in the targeted society, the task must be to develop enculturated (governance) models based on each particular culture's uniqueness and strong points - still making best use of the vast research, experience and know-how that went into the model in the first place.



In a multinational organisation (MNC) however, the overwhelming part of the activities tend to be organised in a manner that stems from the culture prevalent in the society where the company was founded ...

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Corporate cultures in a global community

Although cultural diversity is a desirable fact, there are nevertheless instances where a certain degree of cultural streamlining is indeed valuable - if not necessary. The corporate culture is one such instance. When looking at corporate cultures as 'cultures', there are two important generalisations to be made. One is that all companies actually *do* have one, whether it is recognised or not, the other is the significant difficulty any corporate management will encounter when trying to create and 'sell' components of a corporate culture to other members of their organisation. Although these two issues are perennial and most corporate managements are both aware of and actively engaged in them, several lessons can be learned from the more general cross-cultural discourse.

In most 'single-site' organisations the corporate culture may not mean all that much to those working there, since the corporate culture in these cases are more or less the same as in the surrounding community, plus minus some ideas brought forward by a charismatic owner or manager. What shaped the society also shaped the corporate culture, and everyone working there has similar (cultural) points of reference. In a multinational organisation (MNC) however, the overwhelming part of the activities tend to be organised in a manner that stems from the culture prevalent in the society where the company was founded - which typically also is where its Head Office is located. However, as the Head Office organisation in most MNCs are far smaller than the accumulated size of the overseas sites it controls, there is always a risk that the Head Office culture it-

self ends up a *minority culture*. In all overseas subsidiaries the corporate culture is bound to become a combination of the corporate culture that the core organisation emerged from - and/or its HQ managers stand for and actively pursues - on the one hand, and the culture of the local society in which the subsidiary is located on the other. This spells problems for Head Office managers who insist on remote-controlling their subsidiaries without enough knowledge about the culture of the society where the subsidiary is located. However, this is also where the problems start for those local employees who fail to understand that their performance will - to quite a degree - be assessed along cultural value-systems they may not even know existed. In addition to this do corporate buzzwords like *vision*, *mission*, *delegation*, *service-orientation*, *transparency*, *feedback*, *strategy*, etc, often mean one thing to people from one type of culture, but something different to people from another. Although it is, no doubt, the management's task to help overcome these differences, such a delicate task first of all requires those assigned to it to realise the challenges involved, and that these challenges are more of a social than a managerial character. These issues have, at least initially, less to do with achieving the corporate goals and objectives themselves than with achieving a common platform for how to assess any given situation - i.e. how to develop shared premises.

Although most MNCs offer their HQ-staff crash-courses in 'foreign cultures' (often held by non-native 'experts'), enabling them to cope as well as possible when visiting and/or working in alien markets, are overseas employees on the other hand typically offered training only in those procedures that



the Head Office singles out as necessary to enforce – in order to make sure that also overseas staff can comply with specific routines and internal do's and don'ts. However, what rarely happens is that local staffs in overseas subsidiaries are trained in the underlying culture of the society from which the Head Office culture stems. Whether the objective is for local staff to better comply with internal company rules - not only because they are instructed to do so, but also because they understand them well enough to internalise the ideas and systems these rules intend to reflect - or it is to create a more fruitful dialogue between HQ and local subsidiaries, are better background-knowledge as well as joint premises important keys. By offering this type of cultural training, the employer will get not only greater sympathy for - and adherence to - its rules and regulations, but also develop a more homogeneous corporate culture across the board, leading to less internal conflicts, better market performance and, consequently, stronger bottom lines.

The second concern mentioned above is the problem any Head Office team will have when trying to develop and 'sell' new corporate culture components to its colleagues - and especially to those overseas. The '*We versus Them*' syndrome is well known, whether the 'we' is interpreted by Head Office staff as '*We are - after all - those who keep it all together*', or by subsidiary staff as '*We are - after all - those who do all the work*'. This is a truth as old as the concept of managed organisations itself, and presents no new challenges per se to those who are put in charge of promoting certain aspects of a corporate culture. However, another and more compelling problem does. Although

both geographical distances and time differences are getting less and less problematic to corporate life, cultural distances still prevail. Therefore, when e.g. an American, French or Scandinavian manager may think that what s/he and her/his team came up with in terms of global procedures is in perfect line with corporate policy and ditto culture, it may be completely misunderstood or even dis-approved to, once conveyed to a subsidiary in e.g. China, India or Thailand, because of the cultural back-drop against which it is reviewed. And whereas the Chinese staff may reveal their critical views - in the same way e.g. French staff could do to a new procedure based on a Scandinavian culture (which is markedly different from the French) – Thai staff would probably not say anything at all that could reveal dis-approval. They would instead continue as before, hoping the negative development would '*go away*' over time - leaving the Head Office without any feedback whatsoever from this subsidiary - even if the Thai colleagues were asked directly as a consequence of critical comments from China. Indian subsidiary staff may in turn simply implement the procedure '*the Indian way*', assuming this would be the best way forward.

Culture - the one factor that may change but never go away

As discussed here is culture, in one way or another, always present. Reflecting upon historical social developments in the societies involved is one way to better understand the always unique components that constitute both a globalised world and a multilateral organisation. Although both China and Thailand are Buddhist East Asian societies with truly hierarchical traditions, is China also Confucian - and for a few genera-



*Only when the premises
are the same can the con-
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tion take in its name be
the same.*

tions strictly Maoist. Thailand is on the other hand a historically fairly egalitarian society, and the strict work ethics that both Confucianism and Maoism (albeit very different from each other) builds on, were never imbued in the same way in Thailand. India is again different, with a dominant Hindu tradition, and a social cast system that still forms an integral part of society.

Those who feel comfortable in retaining their own worldview will probably be better off at home - where that worldview is less likely to be challenged. To assume that 'others' will be impressed by efforts to export social and cultural values, and hence willingly import them as they stand, is a remedy for global disaster. Every conflict, whether in a corporate or political environment, must be resolved with Melville Hesrkovits' quote in mind. Only when the premises are the same can the conclusion be the same. And only when the conclusions are the same can the action take in its name be the same. World leaders - may they be corporate or political - are therefore bound to return to their drawing boards, or at least compare notes far more carefully than they have done till date.

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The above is based on extracts from Professor Olsen's book "Traffic - A Book About Culture", published by Raidier Publishing International and distributed by Ingram Books International (ISBN: 0-9772054-1-X)



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Cross Cultural Intelligence

The problem

For many recent generations what has been called the “west is best syndrome” has meant that there was an implicit assumption in international trade and commerce that when it came to business matters western ideas, concepts and theories were in some almost mystical way superior to those from elsewhere.

One result has been that the English language became and remained the lingua franca of international trade. This is fortunate for me, for as a typical Englishman I seem to have been born sadly lacking in language skills.

A second result was that basically western organisations such as the World Bank and International Monetary Fund sent their emissaries to all parts of the world usually to preach the simplistic gospel of “tighten your belt” – often to those that could not even afford a belt to tighten. Meanwhile many international conglomerates marched into rapidly evolving markets with a neo-colonialist attitude that the “natives” would clamour for their goods and services regardless of a benign lack of understanding of the culture or even the real needs of the growing market.

Third, and a focus of my present thoughts is that many countries sent their brightest and best young people to the business schools and univer-

sities of the west in order to learn the arcane magic of western business practice. They learned, as bright young people tend to do, often in spite of out of date and irrelevant curricula based on Case Studies of time long gone by and sometimes firms long gone to the wall. Those, by no means always the majority, that returned home carried with them concepts and ideas many of which did not fit with their culture any better than the World Bank or IMF initiatives fitted with the needs of the people on whom they were imposed by the all conquering dollar and misplaced missionary zeal.

We at the International Centre for Consulting Excellence (www.icfce.com) believe that the solution to this problem may lie in gaining and applying a little cultural intelligence. It may seem an easy solution, but I fear for many of us cultural intelligence is almost as defined by its absence as the lack of language skills that seems to make us British mumble incoherently if we try another’s language abroad or shout if we prefer to stick to our own.

Similarly cultural barriers to understanding and action exist elsewhere. A recent report from China suggests:

“Consider cultural barriers: Five thousand years of history, Confucian respect for authority and 50 years of a planned economy have combined to create an avoidance of risk that



permeates both local and FIE organizations. People look up to their immediate superior for knowing what is important, as well as what to do next. Independent out-of-the-box thinking is shunned as too risky. An organization will have difficulty competing if the thinking is restricted to only what is considered standard and traditional by superiors."

Strangely in the UK and USA we saw a similar situation when the prophets of the "let my people go!" school of empowerment were moving under full steam – or hot air. People in organisations were either paralysed by the lack of direction from above, or anarchic as they tried to test the limits of what they could get away with.

The foundations of culture

I am being less than fair in demanding any great degree of deep intelligence concerning other cultures from myself or even from the World Bank – and heaven forbid that I should be unfair to the World Bank. Culture may show itself as "the way that we do things around here", but the way of doing things at a national level has emerged from a complex mixture of history, religion, dominant philosophies, values and to attempt to put things simply what works for us – whoever "us" may be. To add to the complexity there are cultures within cultures so that in the end your culture or mine may result from a basic national culture mediated by our ethnicity, education, gender, age, profession, place of work and even our sexual orientation.

The lure of anthropology

My friend the anthropologist William du Toit argues that the further you are from a foreign culture the stranger it appears to be. Conversely the closer

that you get to people the more you come to realise that the world really is my brother. We tend to all love our children. Many of us worship the same God whilst calling Him by different names and often we share the same values of honesty, truth and peace – or at least we do until an "outsider" seems to threaten our culture.

We British had a strange love affair with an arcane sport called cricket until we introduced it to the world and most of the world started to beat us at our own game. Strangely it is the French that tend to look most askance at our love of a game in which privileged players get to rub the ball against their thighs and which, much of the time is so static that a British comic actor Tim Brooke-Taylor caused great amusement by sitting, apparently for hours, in front of a television showing a still photograph of a cricket match. It is odd that the French have never taken to cricket since in 1789 a England team was about to cross the Channel to tour France when the late great unpleasantness subsequently known as the French Revolution put paid to their plans.

Margaret Mead famously and erroneously reported strange sexual behaviours not realising that her informants were mischievous teenagers who rightly assumed that a touch of the arcane in sexual matters goes down well with us from the West even though it has no foundation beyond the imagination.

Sample differences

Even close up behaviours spawned of culture differ. Some of the most obvious behavioural differences between cultures include:

Directness – a tendency to

You can imagine the frustration of western businesspeople that think that they have heard a promise rather than a negation.

come quickly to the point or conversely to imply meaning. I have been told although thanks to my lack of language skills I have been unable to put it to the test, that in Thailand it is regarded as impolite to say "no" to a stranger so a question such as "Will you do as we suggest" may be answered with a word most readily translated as "soon". You can imagine the frustration of western businesspeople that think that they have heard a promise rather than a negation.

Hierarchy – the degree to which groups respect "authority" and respond accordingly as opposed to starting a debate. Certain combinations of syllables in English can convey a vulgar and dismissive message while appearing to be entirely innocent. British soldiers in World War II were no doubt aware of the wisdom of "prompt and cheerful obedience to orders" under battle conditions, but in the safe surroundings of the barracks the Argyle and Sutherland Highlanders adopted a silly song that they would whistle after being given an order. It went:

"The finest of fish
When served in a dish
Are soles!
Are soles!"

A soldier, especially in wartime, is in no position to argue with a superior officer, but in some cultures they find ways of making their feelings felt.

Consensus – a great deal has been said and written about consensus in business publications over the years and many experiential "games" are used in training with the aim of demonstrating that "consensus" is best. In Anglo/American groups this is misleading. In general finding consensus is a time-consuming exercise and where there is a genuine expert within the group the best solution can be lost or watered down. That

is why the games in training are of the "Lost on the Moon" variety where what knowledge exists is widely spread and it is unlikely that the group includes an expert. In Japanese business, however, the ability to build consensus has long been recognised as a desirable leadership trait.

Individualism – cultures differ in the degree to which they value the individual over the group. When Mrs. Thatcher said, "There is no such thing as society" it was part of an orchestrated attempt to justify individualism within a culture that, for the most part, had traditionally sought "the maximum good for the maximum number". For a while and within a relatively small but vocal part of the society that she dismissed she succeeded and yuppies took pleasure in repeating mantras such as , "Caring is for wimps". Fons Trompanaars has made concern for the individual versus the group central to his studies of culture.

Trust – in many Asian, Arab and African cultures trust tends to be built through a relationship before business can be considered, but in the European and American business it is the other way around. Trust comes from "doing things together and finding that it works".

The ICfCE solution

International partnership is the key concept that drives the **International Centre for Consulting Excellence** (www.icfce.com). We are sensitive to culture and are not such fools as to think, as some have, that we can succeed in other parts of the world by imposing our culture on others. Nor do we believe that we can immerse ourselves sufficiently in other's cultures to really understand them in less than several lifetimes. Finally, to be absolutely





The important factor is that we are avoiding the trap of assuming that there is no such thing as an Asian culture any more than there is a European.

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frank, we do not believe that the necessarily simplistic approach of popular books on the subject of culture can help. Anthropological research has rarely contributed to understanding other than by contributing a few wide generalisations. But true international partnership with those that understand the culture because it is their culture offers a way to avoid too many mistakes.

Our partners tend to be small to middle sized, successful domestic firms that are happy to join us because they and we contribute in no small way to each other's success. They deliver to us a sensitivity to their culture to which we could never aspire. They also understand more clearly than we ever could the local needs. We, in our turn, help them by providing global expertise and proven tools and techniques when they are required. We give their, sometimes small, firm a degree of status through an international accreditation system. They are enabled to compete with the biggest for assignments because they appear to be global in a market that increasingly thinks globally.

But what about the "brightest and best" that have been sent west to continue their business education? My friend and colleague Dr. Leif Olsen has studied the problems that arise from a lack of cultural intelligence for many years and has written an important, scholarly book on the subject. He is working to create Think Tanks in several Asian countries with the intent of identifying what works in imported ideas and western how tools, techniques and concepts need to be adapted to make sense in a different national setting. The important factor is that we are avoiding the trap of assuming that there is no such thing as an Asian

culture any more than there is a European.

West is best is, thank goodness, being consigned to the dustbin of history, but we are succeeding in showing that with a little understanding and a good many friends, the West can still make a valid and viable contribution.



FINN DROUET MAJLERGAARD

Founder & Managing Partner, Gugin

Release the power of cultural diversity in international business

How come that companies, who have been doing business internationally for decades suddenly fail? And how come that companies who wouldn't have had a chance 25 years ago suddenly become a global success?

This paper deals with the links between cultural awareness, corporate strategy and performance. It is based on my 15 years of experience in international business management, academic research in this field and experiences from our company Gugin, who helps corporations in Europe, US and Asia improving their international businesses.

But lets look at why it has become so important to take different cultures into consideration.

Globalisation

Cultural awareness has become important due to increased globalisation. The global political structures have changed. We do have a United Nations that almost all countries respect and honour and the post war division of the world has changed after the collapse of the Soviet Union. New countries have been born and we have a more diverged political picture. We create political/economical relations in new ways e.g. the ASEM (Asia-Europe Meeting) process, which is a direct result of these changes. By 1992 East Asia accounted for 24 percent of global production. By comparison, the EU accounted for 35 percent and North America

for 28% of global production. According to World Bank figures from 1991 – 1993 growth of real Gross Domestic Product (GDP) in East Asia averaged 8.7 percent. On the basis of growth rates recorded during 1978 – 1991, many economists including those from the World Bank projected that East Asia's GDP would overtake that of North America and EU in 2010.

Economically we are emerging as well. Europe is turning towards larger entities with common currency, one Central Bank and merges and close collaborations between stock exchanges. ASEAN (Association of Southeast Asian Nations) is another good example however different. But since its foundation in 1967 a lot has changed. Evolving relations between the EEC/EU (European Economic Community/European Union) and ASEAN have lead to a lot of initiatives, such as joint ventures in the exploration of AEAN resources, the possibility of EEC participation in ASEAN manufacturing activities and the mobilisation of capital for financing ASEAN projects.

Technologically the Internet has made it possible for companies to market themselves virtually everywhere and enabled the companies to establish inexpensive global infrastructures. And when you need to go abroad it is less expensive than ever before, so we travel much more than 20 years ago.

So from both a political, economical and technological point of view we are encouraged to discover cultures we have only



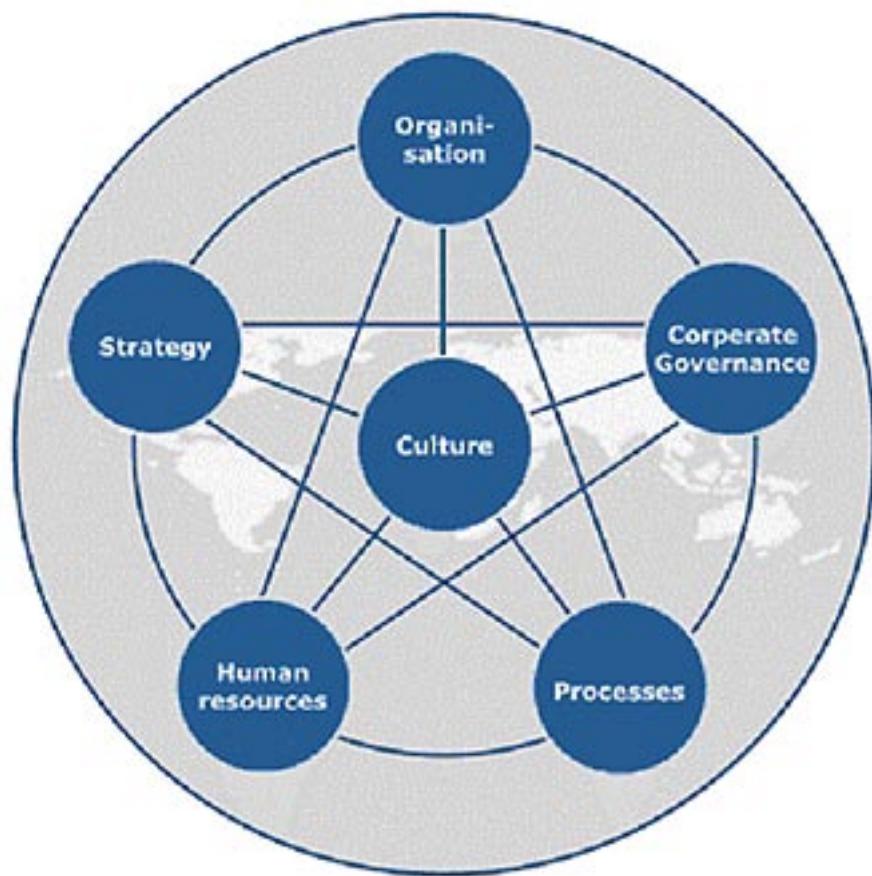
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little knowledge about. For the adventurer it is good news but for international corporations it might as well be bad news.

We have been working with two types of companies: Those who want to expand their international business in either Asia or Europe and those who have tried and faced a lot of challenges they didn't predict or could even imagine. We like the first group very much, because we can help them become successful before they

well without major changes to organisational setup, motivation and reward structures, management style and shared values. But expanding a business into a new country or region requires a lot of considerations concerning the assumptions behind the current strategy.

The business culture might be entirely different. In some cultures relationships are much more important than the actual contract and in others it is the



make any serious mistakes, however it is more interesting to look closer at the last group – those who tried and didn't have their expectations met.

It all starts with the assumptions behind the strategy process. A company might have been very successful in a country or region, so some CEO's tend to think that they will become successful in other countries/regions as

opposite. For example; Americans tend to focus a lot on the contract and pay only a little attention to the development of the relationship between the people involved. In most Asian countries it is opposite. In that respect most Europeans are much closer to the Asians than to the Americans.

A company might need to establish an overseas organisation, which is much different



from what they are used to. An Indian company which might want to establish a branch in Scandinavia will never succeed with a hierarchical organisation because the Scandinavians are very autonomous, egalitarians and demand a high degree of individual freedom. We have seen a lot of examples where northern European companies have failed in India because they didn't change the organisation and management style to apply to the Indian norms and values. A project-based organisation just doesn't work in India.

The cultural friction

In Gugin we work with a concept called the cultural friction. Lets say a British company have become very successful in Britain by rewarding its top performing employees with incentives and promotions. In India they replicate this successful motivation and reward system – and it doesn't work. Sales drop and the employees are

there is a conflict between the national and the corporate culture of an international company. Very often we experience, that senior management who is responsible for the global operation is focused on financial performance and making sure that everybody (employees) globally apply to the same rules within the same organisational setup. This is only natural and most of the global operating companies are very proud of their corporate culture. The only problem is that it suppresses the national cultures of the employees, which unfortunately leads to cultural friction, which inevitable leads to poorer corporate performance due to de-motivated employees and inefficiency.

An area of great interest is motivation. I spend a fair portion of my time discussing motivation and reward with executives in multinational companies. Motivation and reward is so closely linked to our national cultures and multinational companies ought to review their strategies in these areas very



leaving the company.

When something works in one culture, but not in another we define it as cultural friction. For international companies to become successful they should locate and minimise the cultural frictions. This is not an easy task, because it can be hidden in so many places and it requires a lot of intercultural skills and the right tools to deal with these frictions.

The frictions arise because

carefully for the following reasons:

- If they don't and they (continue to) motivate and reward their staff globally in the same unified way – they will in the best case waste a lot of money, and in the worst case harm their business seriously.
- A lot of money can be saved at the same time as employee satisfaction and operational performance in-



... seeing the cultural diversity as an opportunity for achieving goals that were beyond reach in a mono-cultural organisation opens a wide range of solutions, which can create significant competitive advantage.

CROSS-CULTURAL COMPETENCE

creases.

Lets take an American IT consulting company as example. They have several locations in US, Europe and Asia. It is company policy that all managers and staff directly related to sales have at 20% of their salary as a bonus dependent on the quarterly sales.

This makes sense in the US, because Americans in general are motivated by money and by individual recognition. However this is not universally true. To many Asians and Europeans money is nice, but it is not the most important thing in the world, and where this is the case, the bonus is wasted money.

How to make global strategies?

In my definition strategy is basically about using your strengths to utilise the opportunities in the marketplace in the best possible way, work with your weaknesses and protect yourself against the threats.

Going global adds another dimension to a process that is already complicated, namely the impact of local culture. When we are coaching management teams in international companies and they have discovered the importance of local knowledge, they initially tend to see the different cultures as a barrier and a threat. However – seeing the cultural diversity as an opportunity for achieving goals that were beyond reach in a mono-cultural organisation opens a wide range of solutions, which can create significant competitive advantage.

By using creative problem solving techniques and a multi cultural strategy development framework, an international company can start utilising its

resources in a much better way – respecting the local cultures and building its corporate strategy and objectives on the strengths in each culture.

The international companies should initialise a process where they force themselves to rethink the well-known paradigms and ask themselves questions like:

- Why are we in this business?
- Do we have the right strategy?
- Do we manage in the best way?
- Do we really acknowledge and respect the local cultures and the values of its people?
- How do we transform cultural frictions into cultural synergies?

These questions and others - might be quite difficult to deal with internally without assistance from a coach who can guide the management team through the process towards an improved strategy process, which takes the cultural implications into consideration at all stages.

And the change process will only succeed if senior management is willing to take a risk doing things differently tomorrow from what they did yesterday.

Once you have found out what to change – don't do it all at the same time. Take the time to plan the changes to e.g. organisation and HR policies carefully. Identify quick-wins and make sure that reviews are being carried out regularly in order to measure the effects of the changes and be willing to adjust the course when needed.



Creative Leadership



PETER MERRY

Evolutionary Change Facilitator
Partner, Engage! InterAct
Co-Director, Center for Human Emergence (Netherlands)

Evolutionary Leadership : creativity for emergence

Ladies and Gentlemen,

I'm an 'Evolutionary change facilitator', that's my current job title. I'm a Brit, but I have been living in the Netherlands for about seven years now, and work primarily in three areas, organizational transformation, societal transformation and teaching and training in these fields. I was asked to do this presentation, and the title was given to me as 'creative leadership'. I've been working along the theme of evolutionary leadership and so I was asking myself – now, what's the relationship between creative leadership and evolutionary leadership?

In fact that what does it actually mean, creative leadership and evolutionary leadership? From my perspective, they are pretty similar. The most fundamental energy of the universe is that of creativity. Ever since the big bang, we've been pretty creative to develop into multi-cellular organisms so you can sit here having conversations like this. Creativity seems to be the primary impulse of the universe, like these ties that we break down and this disintegration and reemergence and all those kinds of things goes along with it. The general directionality is one of creativity. Essentially, it comes down to how do we align ourselves with that most fundamental of impulses? If this is the most primary impulse in us, and the world around us, then how do we align ourselves with it. This seems to be the pole of the future, if this was about future, and creative leadership. And

there's a perspective and a consciousness rising at the moment, which is encouraging us to think of ourselves as on this evolving creative pole.

Yet what does that mean, to become aware of that? This kind of big picture first, our collective story, our collective history in 13.7 billion years of co-evolving together, since the big bang, through various different levels of complexity and the human story starts kind of unfolding around there... and this is a breakdown of that human story based on some work originally by Clare W. Graves, translated into something called 'spiral dynamics'. This is the story of our collective creative evolution over time (if you're familiar with László you're going to recognize some of this), which is that we move through mere survival into bonding into power and the emergence of the sense of self into a sense of bigger order and higher truth into a sense of opportunities and possibilities out there in the world, into wanting to reconnect with each other and talk more about who we are as human beings.

Let's not just go into detail about this now, but just to get this context of ourselves as part of the evolutionary story. We reach a little interesting edge around here, which is particularly where countries like the Netherlands and some of the Nordic countries seem to be at at the moment, and this is what Clare Graves called 'first tier systems'. Those systems can only see their own perspective, they find it very



hard to see the bigger context which they are part of - what begins to emerge here at the emergence of the integral perspective is a desire to reintegrate, to see the relationships between everything and to see ourselves as part of a whole and not just interconnected in a kind of flatland whole but interconnected in an evolving whole, in constant dynamic balance.

This is the perspective I want to speak about, this emerging consciousness and the emerging thinking that is out there. What does it begin to look like? This is from Ervin Lázló's work, he traces the evolution of society over time and sees societies as complex adaptive systems, fairly flat for a while and then you get these break-through moments, where evolution goes in leaps, in sudden leaps of emergence; and at each moment you get this rapid surge as we experiment with new ways, and then at some point we hit that ticking point and it crystallizes. So here we are again, we're in one of those spaces again - I see it a lot in organisations, and now in particular in the Dutch society: one of these moments of the old system not working any more and the new one not being in place. We don't know what to do - which is just the right place to be. It doesn't necessarily feel very comfortable the whole time, but it is the right place to be and we're right here, in one of these leaps, which we're looking to make.

Yet there is never a guarantee that we're going to make it through - so you can either break through to a higher level of complexity, or break down, often into the constituent parts. In this case you have to re-start with more violence and more stress in the system as whole, they tend to go hand

in hand. This is another way of looking at it, that we emerge into a way of being which works for a while, and then it seems to run out of steam. In fact what happens is that the solutions we created initially have sowed seeds for the next set of problems. The old way of thinking is no longer adequate to deal with those problems, because that's the thinking, which created them at the first place. So the old system starts to run out of steam and people then here begin to get a sense that there is something new trying to emerge but we don't know what it is. It's a place, which feels pretty chaotic, pretty stressful, because the old system has to keep running the show, things have to keep working, but at the same time we have to be nurturing the new down here. And that's what we call 'facilitating or nurturing emergence'; we're working for the emergence of the new.

From here we never know what the new system is going to look like. It's like if you look at atoms of oxygen and hydrogen, and then you try to work out what water is going to look like - you would never get it until they begin to interact with each other and something emerges, which is water, with emerging properties you can't see from the previous stage of development. We're in the same space, like Einstein's saying that you can't solve a set of problems from the same level of thinking that created them. We can't work out what the world is going to look like and therefore we do a big five-year strategic plan on how we're going to get there because we don't know what it's going to look like. If we do that, then we'll start creating solutions and plans from the old thinking and we'll just create more and more problems.



One of the key things is the capacity to be adaptive - as the new comes in we're being challenged in our old ways and asked to be open and flexible and fit to what the new demands out there, but at the same time we have to maintain and uphold integrity.

So what we're looking for is: how do we facilitate the emergence of this? What we do know how to do is to put in place conditions for that emergence; we don't know what it's going to look like but we do know how to put in place those conditions, and that is the essence of creativity. How do we put in place the conditions for the creative impulse to come through so that we can break through and go beyond the old system, and explore what it is that is trying to emerge in the new? Then, what is it that's being asked of us at this time? Even more so given the specific time that we're in, which is a time of great stress but also of great creativity - as Ervin Lazlo says, we're the first generation to be conscious of the fact that we may be the last generation. Where James Lovelock, author of the 'Gaia principle' of earth as a self-organizing system said 'we're past it, guys, we're history, we're part of the sixth extinction' Laszlo said 'well the one thing that he's forgotten is the human element', which is the fact that humans so far over time - as the stress grows - have the capacity to be able to rapidly self-organize, to achieve break-through. So he says there is still hope. But we're very conscious, even if we don't talk about it with everybody, that somewhere in ourselves and our being we're conscious of the fact that we're living in a period where there is no guarantee that we'll be here in 20 or 30 years time. I'm not attached to our collective survival but it would be a real shame if we didn't make it - we survived a 13.7 billion years, so we do have the capacity and the potential.

Yet the question is how do we get a new understanding, how can we facilitate the emergence of that next phase, whatever it might look like? What is being asked of us as individu-

als at this time? One of the key things is the capacity to be adaptive - as the new comes in we're being challenged in our old ways and asked to be open and flexible and fit to what the new demands out there, but at the same time we have to maintain and uphold integrity. That's the nature of a healthy living system, it maintains its boundaries, but at the same time it is able to be flexible and responsive to the world around it. Do we know who we are? Can we hold that identity but at the same time can we be flexible and responsive to what's happening around us? In that point of the centre where the old is breaking down and the new is yet to emerge, can we sit in that chaos, let the old go and open up to the new that is trying to come in? That's a capacity we need to develop in ourselves.

I've been describing it to people as sitting in the centre of a vortex which is swirling around you, chaos swirling around, but if you try to grab on to any of it to control it, you get pulled off, swept off your feet and your whole system crunches up with massive stress, and we become completely paralysed. We try to actually control what it is that is going on at the moment, the speed of change, the rate of complexity - so how do we develop the capacity to sit in the centre of that and be aware of this chaos swirling around, and in that space begin to notice some subtle order in that chaos? Ervin Laszlo said chaos is a misleading word since it really is about subtle order and that capacity to be able to see and sense what is beginning to emerge, in that this enables us to be active, which has an impact on a larger number of more surface issues. And we have a huge to do list, where do we begin to see that there is a pattern behind it and we can act on that and in that form

have a broader impact. This is a huge issue, particularly in organizations today - can we accept that from where we are now, we don't know the solution? You're going to be walking into a boardroom, say, as a consultant or whoever, saying 'the truth is that I don't know and you don't know'. Can you accept that, and can you enter a space of not knowing, of letting go of all the things, which you thought you knew? Enter a space which enables us to discover something which is trying to get through but which our old thinking and our old patterns are not allowing space for. That's very big for people who were being trained to know, as most of us have been, to know everything and to guide your companies - trying to see a problem and fix it immediately. Often the reason they come to us with this kind of thinking is 'we've tried everything and it's not working, our organizational climate, our culture, is still plummeting, we don't manage to get the creativity and innovation we're preaching to everybody about ... Why is it not working?' They're still trying the old thinking to generate something new. Part of what we're being asked to do is to be able to see the pattern that's in the future and begin to provide some sense of clarity for people about what it is that is actually going on.

It's about simplicity, the other side of complexity. As all this complexity begins to emerge we see those patterns, and we actually see that within those patterns there is something, which is really fairly simple. If you hear people talking about stories that seem immensely complex, I always find that there is something missing. Something very simple, very calm, which somehow really describes what it is that is going on. Can we see that simplicity beyond complexity? And

can we begin to communicate that? Often that will require new language, as the old language was designed to describe the old thinking, so a new language, maybe even new words.

Yesterday I walked out of the door - the weather forecast predicted it was going to be good, and it smelt different. You know yesterday, for those of you who have been around for a while it smelt different. The first day of summer, it felt like the summer was really actually happening now, when you can smell the blossoms in the air, and every year I have that. This is what that is about, as we're looking to develop the capacity to be able to pay attention to the signs, which are coming at us from the future, these signals of what the future might look like. And paying attention to those who may be coming in, so first of all being able to see them, means creating space in ourselves. Un-programming a lot of the old thinking and opening up space so that we can actually notice what it is as it begins to emerge, and then when it comes in, being present enough to be able to direct attention to it, because that's where it begins to form, to crystallize. That's the next step, as it were, as we begin to open up space to paying attention to those signals. It may be very weak at some point but you've got the space and you begin to recognize it - there are maybe a couple of people in the organization or the system who are trying something new, but are being ignored by the masses. If we notice that there is something innovative in that, how do we give these people space to be able to start to play and experiment and make mistakes? Another big issue in organizations today, are we allowed making mistakes and not be judged negatively for doing it, as long as we learn? Picking



It's a dance between your own responsibility and letting go.

up those signals, giving them attention, giving them space, and nurturing that U-curve underneath. When George (George Pór) talks about the u-process later on today, that's one of the ways and technologies and approaches that we can use to begin to nurture that emerging process.

For a long time this work can be below the radar screen, in fact it has to be because the old system has a new system built into it that will attack anything, which it feels, may be threatening. But at some point we have to start standing up, beginning to put your head above the meadow and stand up like a tall poppy and actually begin to express what it is that you think this next step this about. This causes a huge amount of fear around us as people are afraid they're going to lose friends lose colleagues, people will think they are a loony. But what seems to happen when we do actually step up and are really authentic about what it is that it's all about, is that this begins to resonate in others. And suddenly you find a whole lot of new people, a whole new community around you. This state of sensing is not a passive state or position to take up in any way, it's actually a very active position. Andrew Cohen talks about being 'being deeply relaxed and profoundly aware at the same time'. It's the capacity to be able to create this space, to see very sharply and clearly and distinctly what it is that is actually happening around us. And if we don't develop these capacities in leadership, then we're going to be in a lot of trouble.

At the same time, because we don't know what the future is going to be like, this whole space is an experimental space; it's a space of trying things out, of making mistakes, of being playful, of releas-

ing the creative spirit. The era of the radical campaigner on the street, that's not going to help this time. Why? Because the more attached we get to a vision of the future, the less present we are for what it is that is actually trying to emerge. I've been to protest movements on the street, and it's very much an anti-this and throw-this, and you've divided the world up again which makes it very hard for you to see the thing as a whole system. So how can we be able to develop the capacity to be able to hold what we do likely, but at the same time have a very clear intention about why we are doing the work that we are doing? That's an interesting balance to look into. What is your purpose is that really integrated into yourself? And on the other hand, how can we let the new emerge?

Part of that is going beyond the old, stepping into the space between what have traditionally been polarized pictures. For example, release and responsibility is this dance between letting go and not holding on to everything, and at the same time stepping in to take responsibility where necessary. If you let go too much then it becomes a very unemphatic position, like 'that's just the way it is,' but if you take responsibility too much then you don't give space for other people to take care of their responsibilities. So it's a dance between your own responsibility and letting go. Sensing and acting, that dance between being aware of what is trying to emerge, and when you feel the timing is right, acting fully in the moment to do what it is that needs to be done. That five-year plan process is history now. In a workshop a while ago Margaret Weedly said that we know from the new science that when ever we do anything it impacts on everything else, so you make a

People have found ways of creating organizations where they actually contribute energy back to the system, rather than taking from it.

five-year plan and take the first step and you've changed the world. The world, which your plan was based on no longer, exists. Bye bye plan! And the longer you try to actually hold on to your plan the more stressful it gets. We need to develop a new way of thinking about management and leadership and all of these things, it's fairly fundamental.

And then diverge and converge is this dance between allowing in all the diversity that's there, and at the same time realizing that we have to make sense, that we have to get clarity at certain points to be able to act, to make decisions. It's like breath – you breathe in and you diverge, and then if you hold it too much you have to eventually breathe out and you have to converge in again. A lot of process work I see today often allows anything to be there but if you don't put a boundary on it somewhere then it just disappears into the ether, and nothing actually emerges out of it. A dance between allowing in diversity and then looking for patterns in some way of bringing it together so you can start up again at the balance between chaos and order. It's in that space that the creativity emerges. Yet when you step into this space with your own idea, we'll never co-create something together, if you're too attached to your own idea. If you allow everybody else to step in and do his thing then also nothing emerges. But it's the moment when you step in and you begin to explore something together, when you're not attached to your own way of thinking. What you're interested in is what is trying to emerge at the centre, out of the interaction between the people in the space. Things begin to emerge that no individual could have created on their own.

To wrap off, I want to locate these issues in Ken Wilber's model of four quadrants. Down here, we've got the collective interior, which is what happens in the space between us, as individuals, and that's where the co-creating begins to happen. In the space where some form of collective intelligence can emerge where there is no individual ego involved in the sense of 'I'm attached to my own idea', but where in the interaction you're curious in what it is that's trying to emerge. The point of these four quadrants is really that we need to be working in all four; we need to be looking at our relationships here. This one here is about the collective exterior; it's about the systems and the structures that we build around us - so here we're looking for what we might call 'natural design'. Which is a way of creating organizations, which enable people to be who they are so that they can naturally carry out the functions, which need to be carried out. That's what something like spiral dynamics really helps to do, understand underlying value systems. These systems allow us to understand what people's fundamental motivations are. How do you get these natural alignments on the one hand, and on the other hand, how do we create designs which relate to the way the natural world naturally functions?

People have found ways of creating organizations where they actually contribute energy back to the system, rather than taking from it. Nike shoes now generate energy back to the planet rather than take from it. Why do they do it? Because it's good for business. It saves them money; they get motivated employees and all those kinds of things, creating systems and structures, which are aligned with people and with the natural processes of the



The trap of new age spirituality is that you lose your moral obligation because if everything is fine and the universe looks after us then what does it matter what I do with my life?

planet.

That's on the collective level. Now, when we shift up to the individual level, this is the individual exterior, which is our physical organism. The key here is looking after our own vitality. If we are going to be fully present and available for what it is that's trying to emerge, on this planet right now, then we need to look after ourselves. It's so often forgotten by activists or people who are interested in changing the world - a burned out activist is no help to anyone. The reason Steiner started the organic farming system was because he said the food that we're currently eating is not going to support the development of a higher level of consciousness. Seeing the relationship between these two upper quadrants, you've got to have a physical organism to support your way of thinking. Are we eating well, are we drinking our 2 litres of water a day? Are we looking after ourselves energetically? All these very basic things, which often we forget. If we don't look after our own vitality then we don't look after the vitality of the planet, right?

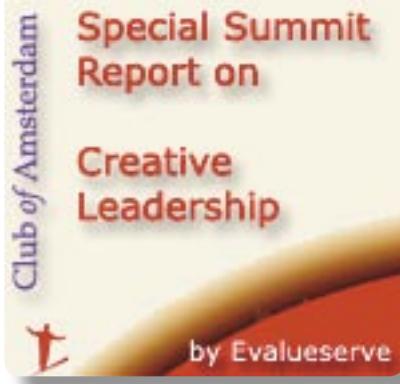
Key to this all are two concepts which underpin a lot of what I have said so far. The first one is non-attachment, which really means not being attached to anything, because the more you are attached to something, the less you are present to what is trying to emerge. Attached to old ideas how it should be, attached to how things should be in the future, or even attached to being non-attached! It's the way you relate to your experience and the reality around us and to our thinking and our patterns and everything else, so the more attached we get the less available we are. Any time you feel irritation in yourself, ask yourself 'what is it I'm attached

to?'. When you have water running through a river and you have a rock in the river, dropping a huge boulder into the river creates all sorts of turbulence around the rock. It's the same thing when you're attached to something; it creates turbulence in the evolutionary flow and all this stress in you and projected on everybody around you. Irritation is a sign of that turbulence. So becoming aware of what it is that we're attached to enables us to become even more present to what it is that is actually trying to emerge. Yet if that's taken on its own and too far, then non-attachment shifts into detachment which means I just sit here and allow everything to happen. The trap of new age spirituality is that you lose your moral obligation because if everything is fine and the universe looks after us then what does it matter what I do with my life? This can become a very detached position - the counterpart of which is the set of deep feeling and connection to people around us, and more broadly collective survival. A deep feeling about what is actually happening on the planet right now. Because it is in this space that our caring emerges, this is the passion that enables us to actually step into the world and make a difference. But if you don't have emotional connections to what it is that's going on, then we can forget about our passion for change. If however, we become too attached to feelings, because the crisis we're facing is so massive, you're ready to let it in every day, we become distorted. So it's this balance between really feeling and then seeing what it does to us, and then letting it go. Because if we wallow in the emotional, then we're no good for anybody else.

There is work to be done, and that work needs to be connected to a deep understanding



of why it is that we care. So these are some of the qualities which I feel is important for us to be looking at developing if we're going to enable creativity in this time of heavy stress and a lot of pressure on the ecosystem as a whole and our social system on ourselves. I don't think there's ever been more stressed out people in the industrialised world. So enabling ourselves to develop these capacities is essential for our own wellbeing. Creativity and creative leadership is thus not just a management concept.



SPECIAL REPORT

Creative Leadership

By Sooraj Mittal, Hedda Pahlson-Moller

Is leadership limited to the ability of a person to influence other people in getting things done, above their normal standard and quality, or does the society need a new breed of leaders who can evolve on a continuous basis, addressing new challenges?

Traditionally, leaders have been known to possess the ability to motivate people, identifying their strengths, nurturing them and making their team function in a synthesized manner, thereby delivering up to its true potential. However, over a period of time societies and systems evolved and so have the dynamics of leadership.

Over a period of time, many nations have struggled for independence, apartheid, etc while, most resorted to violent means to achieve their cause, leading to mass destruction on both sides. But, only a few creative leaders like Mahatma Gandhi, Martin Luther King, Nelson Mandela resolved such issues through their revolutionary idea of non-violence. Thereby, not only helping attain the objective but also creating an example and inspiration for the coming generations that there is always a non-conventional and perhaps a less traveled path.

There are three sets of situations from where a leader can be identified or nurtured:

- A person possessing a certain skill set and has the ability to take up the leadership role
- Lack or absence of proper leadership or certainly a cri-

sis situation brings out extraordinary leadership skills to handle the situation

- People who choose to become leaders constantly try to develop the required skill set

As the world becomes flat, it has become a level playing field for all the players, irrespective of the geography, cast or creed. The availability of similar tangible resources to all the players has made the environment into a place of cut throat competition. In order to develop in such a competitive environment companies have to heavily rely on the intellectual capital, primarily present in the form of its employees. They need leaders who can guide and bring out the best from its human capital.

Their role is not limited to merely guiding people in the right direction. They require creative leaders, who do not only limit their role to addressing problems through novel solutions, but by giving new viewpoints on how to resolve problems in the future as well.

This brings us to a pertinent question - can someone be taught how to think creatively? Organizations spend heavily on training their employees, especially training potential leaders and inculcating leadership values. However, this does not ensure imagination, creativity or ethical behavior in the audience. These qualities develop over a period of time with experience and exposure to various kinds of problems. In addition, it also requires a con-

Before any organization/society demands for a creative leader, it should ensure that an environment is created, where such a leader can be identified and groomed.

scious effort on the part of the individual to grow in that direction.

Creative leaders can be broadly segregated as Re-definers and Re-directors. The former being those who introduce a new dimension to existing ideas (such as Bill Gates redefining the computer), while the latter could be those who find a new way of working (like what Henry Ford did when he introduced the assembly line production system).

Before any organization/society demands for a creative leader, it should ensure that an environment is created, where such a leader can be identified and groomed. Society needs to be flexible in terms of accepting new ideas.

For instance, at 3M, scientists spend almost 15% of their time on personal activities. As a result, Fry, one of the scientists, invented the simple, yet innovative, 'Post-its'! During his free time, Fry used to sing at the church; however whenever he used small paper pieces as bookmarks, they would invariably fall. Fry recalled a weak adhesive developed by his company - he used it to develop easily detachable bookmarks, which we now see at homes and offices alike.

Essentially, the difference between a leader and a creative leader can be compared to the difference between Subash Chandra Bose, an extremist, and Mahatma Gandhi, a Moderate. They hold a significant place in the history books, as both had fought against the colonial rule of the British Empire. Yet both had adopted different ways to address the problem. While, Bose believed in the conventional way of violence (an eye for an eye), Mahatma addressed the problem by means of non-violence and non-coop-

eration movements. As a result, the approach adopted by Bose, resulted in fear amongst the British for some period of time and had a short-term impact on the people. While, the approach adopted by Mahatma Gandhi had a long lasting impact on British as well as the common public, leading to a united effort to achieve independence for the nation.

A society, as we know it, combines the likes of people from varied backgrounds, having differing skill-sets and divergent thoughts. Collective leadership ensures that this multicultural society moves in a cohesive and collective manner to attain the defined objectives into realistic and attainable goals. Today's world is very chaotic and complex. The skill set required to address these problems are not present in one person. Moreover, the problems are not just limited to one system or society. Therefore, in order to address such problems a collective effort is required.

For instance, the war against terrorism has to be a collective effort on part of all the nations across the globe, as the problem is not just limited to the US or India. It has an equal chance of striking any nation at any given moment.

For instance, the defense force of a country would comprise of the Army, Navy and the Air-force. All have their own skill set and strategic importance to the security of a nation. Yet, when it comes to a war, a collective effort is required from all the three arms of win the battle.

If the role of the leader has evolved, so have team dynamics. No longer can a group/department of people be necessarily classified as a team. These are a set of individuals, who are doing the job assigned



to them. Essentially, a team is a group of people who collectively collaborate to achieve one predefined objective.

The relationship of a leader with his/her team has evolved from a supervisory role to a multi-tasking role. The leader is a guide, mentor, motivator as well as a team member. Instead of moving ahead of the team, he/she has to move along with it. More than dependence, it is now a question of synergies and inter-dependence.

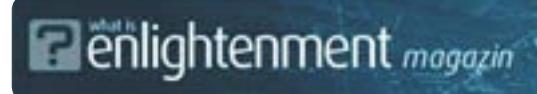
The only thing, which is constant, is change, over a period of time societies have evolved and so has the way in which people think and see each other. Yet the same old concepts still exist, although the ways they are handled and demanded by the society have evolved. From a leader who leads from the front and keeps people motivated, to a leader who can provide innovative solutions to new set of problems.



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Honouring a tradition in business studies that goes back to 1867, HES School of Economics and Business is one of the largest single-faculty institutes of professional business education in the Netherlands. It offers a wide range of business-related programmes preparing students for Bachelor and Master Degrees. Support courses are included in the degree programmes such as foreign languages, law and psychology.

The school also offers specially designed international programmes which are taught in English, including undergraduate double degree programmes with partner schools in Germany, France, the UK, Mexico, Spain and Sweden. As a result of this, nearly one third of the institute's international students gather in Amsterdam each year from all over Europe, USA, Canada, Mexico, Africa, Australia and Asia to complete their international business studies.

At the moment each of the double degree programmes are open to students who follow the programme Bachelor in **International Business and Management Studies**. Students who follow the programme Bachelor in **Latin American Business Studies** may participate in the double degree programme with the Mexican TEC de Monterrey Campus Estado de México. Students who follow the programme Bachelor in **International Financial Management** may participate in the double degree programme with the Fachhochschule für Wirtschaft Berlin. HES School of Economics and Business is a school of Higher Professional Business Education (in Dutch abbreviated to 'HEAO'). Preparing for their future in middle and higher management in the private and public sectors, students learn from a team of professionals who are keen to share their experiences in the hectic and exciting world of business. HES School of Economics and Business students are free to explore their own needs and follow a four-year course of study similar to that of American universities and of English Business Schools within a university. Classes are small, study is full time. Continuous assessment of international developments means that courses are geared towards the newest developments in business.

Applied Standard

All programmes are designed to meet the Dutch standard in Higher Professional Education (HBO). The HES School of Economics and Business is accredited by the HBO Council and the Minister of Education of the Netherlands, and is also recognised by a wide variety of international partners. HES School of Economics and Business attests that the curricula of her programmes match the agreed national standard of the curricula for "HEAO" education. HEAO is the Dutch abbreviation for Higher Professional Business Education.

The diploma is the Bachelor's degree in accordance with the Dutch law on higher education and scientific research ("WHW" law). For more information check www.minocw.nl.
The Bachelor programme can be followed by a Master programme.

Studying in Amsterdam

A city, yet a village is how many people see Amsterdam. Studying at HES School of Economics and Business means living and working in the capital city of Amsterdam, the undisputed cultural and commercial centre of the Netherlands. With its approximately 700,000 inhabitants the city of Amsterdam is not as impersonal as many bigger cities can be, yet it has an unmistakable cosmopolitan aura combined with a relaxed and friendly atmosphere. Students will see that living among the Dutch, especially in Amsterdam, can be an enjoyable experience.



Institute for Media and Information Management

Media and Information Management (MIM) studies is the course that prepares you for careers in the professions of the future - for information is already the key element in our society. If you want to play a part in deciding what magazines and papers write about, what appears on television, which books are published or which information products end up on the market, then MIM is the course for you.

MIM is a full-time course spread over four years and divided into two parts. You begin with the one-year foundation course (propedeuse). You then move on to the main part of the course, which lasts three years, where you can choose between four final graduation options:

- Editor/Productmanager
- Informationmanager
- Publisher/Marketingmanager
- Advertising-, Marketing- and Communicationmanager

Editor/Productmanager

Editors and productmanagers play an essential role in the production of a publication or product. Your work centres on a tangible product, and you can influence the ultimate quality of that product. Your task as an editor is more focussed on content, while a productmanagers main concern is the physical product. Together, the two are responsible for ensuring that form and content match the needs of the target group.

Informationmanager

The work of an informationmanager involves collating data, carrying out research, processing and organising information, and turning that information into a "valuable" product. Information needs to be presented in a way that makes it easily accessible and understandable to the user.

Publisher/Marketingmanager

It is your task as publisher and marketingmanager to manage others within your organisation and take responsibility for producing information products. This involves translating trends into strategies that can be used to market products effectively and turn them into a commercial success.

Main features of the course

The entire MIM course is based on actual practice. As a first-year student you work together in project groups on existing practical problems. The faculty is there to provide support, but you are expected to take responsibility for your own study and your learning process. You need to be discerning, able to set targets for yourselves and to monitor your own progress and efforts. These skills will be of great use to them later on in your careers.

As you progress through the course, the practical situations you encounter become increasingly more complex, and periods of on-the-job practical experience provide you with the opportunity to work as a professional in your chosen field. After successfully completing the course you are ready to start out on a career in the rapidly changing world of information, communication and entertainment.



About Innenergy Creations BV

Innenergy Creations BV is focused on creating and deploying innovative software products for video online communication – oriented towards the new emerging markets on the Internet. Innenergy Creations offers also strategic services in the domain of innovation in communication for all sorts of companies.

Introduction

Innenergy Creations helps companies to generate superior customer value, build competitive advantage, and consequently acquire a stronger position on the market. We make the difference in the domain of video online communication by focusing on the entire process of obtaining the desired results for our clients, with the commitment to the systematic practice of innovation for them.

Innenergy Creations BV is developing innovative communication products following a complete development cycle: concept development, analysis and design of the application, projecting and implementation of the software application, testing and maintenance of the video communication tools.

In the process of developing innovative video communication applications we pay attention to the requirements of our customers, to the customization of the communication applications and functionalities in accordance with the communication needs of an organization.

We are creating not only the concept and the analysis of the innovative software applications, multimedia product/business case or video communication service for your company, but we also follow the entire process of developing the ideas into tangible results, of actually implementing innovative management strategies, innovative video communication services and tools in the company.

We create, analyze, design, develop, implement, deliver and maintain the best video communication solutions in the business world.

History

After working by France Telecom and Lost Boys, Igor van Gemert started (put the foundations of) Innenergy Creations BV in 1996. In this company he creates and produces innovative & interactive multimedia applications.

Innenergy Creations is a merger between two companies, InternetBrain.com and DMP-Digital Media Production. At Innenergy Creations there are working six specialists, and also for each project are attracted freelancers with different technical specializations. Due to the wide range of innovation Innenergy Creations has a pre-selected network of partners within science and corporations.

Vision

We believe we can help companies to innovate. An integrated offering on innovation and a service style that fits innovation are our two pillars. Innenergy Creations is pro-actively offering innovative ideas, covered by a firm business case. These ideas are well balanced and aligned between business, technology & marketing. That is, in our view, the way to avoid the classic blocks of innovation. Executing innovation is the real challenge. Therefore we work with prototypes while introducing new ideas. The introduction of new innovative concepts in a company can be very slow. One of the strong points of Innenergy Creations is to accelerate this process and to put into reality the practical concepts. We believe that ideas have to be sustained by tangible results and products.

Mission

The aim of Innenergy Creations is to challenge companies and their markets with innovative concepts. The focus is on the realization of the tangible results and products fully customizable for our clients.



Nowadays, organization is an ever – changing system of interactions and communication is the basic and most important process of an organization; it is the essence of organized activity.

Our mission is to implement in an organization the innovative tools for video communication that help in the development and maintenance of organizational purposes as its members, motivate, inform and inspire each other.

We offer you the suitable, focused solutions for solving the problems caused by ineffective communication in your company.

Communication is the “nervous system” that makes organizations and organizational units cohere and permit their members to coordinate all work efforts. This is why we are focused to constantly improve the communication within organizations with the innovative video communication tools that we design, project and implement for our customers.

Core values for us:

- ✓ Practice innovation
- ✓ Foster creativity
- ✓ Deliver superior customer value
- ✓ Build sustainable competitive advantage for our clients based on differentiation

Clients





EVALUESERVE

Expert Knowledge Services

Evalueserve is a global research company providing worldwide and multi-language Business and Market Research, Data Analytics, Investment Research, and Intellectual Property services to our Clients around the globe. Our heritage is based upon the background of our founders Dr. Alok Aggarwal and Mr. Marc Vollenweider, who respectively ran the IBM Technology Research Centre and the McKinsey Knowledge Centre - both in Delhi, India. The company started its operations in December 2000. Till date, we have worked in more than 192 countries, in over 65 native languages.

Evalueserve currently has a team of over 1050 full-time professionals and is growing at the rate of 10-12 professionals per month. The current team comprises highly educated individuals, most having an advanced business or technical degree with relevant professional experience. The team includes Engineers, MBAs, Intellectual Property Lawyers, Medical Doctors, PhDs, Chartered Accountants, Statisticians and other top-level professionals. These analysts are located in Gurgaon, India – supported by a worldwide team of EVS Client Executives located in N. America, Europe, Asia, S. America and the Middle East.

Our industry expertise lies in the following areas:

- Financial Services
- Telecom/ IT/ High Tech
- Pharma/ Biotech/ Healthcare
- Industrial Goods/ Engineering
- Energy
- Chemical
- Consumer Goods/ Retail
- Transportation/ Automotive

We operate in the sector termed as Knowledge Process Offshoring (KPO), which is the latest segment that's evolving in the Outsourcing/ Offshoring arena. The maturity and evolution of outsourcing strategies is leading businesses to shift towards the offshoring of high-end processes to low-wage destinations, a trend now referred to as KPO. The size of this sector is expected to grow from US\$ 1.2 billion (2003) to US\$ 17 billion (2010) – a CAGR of 46% worldwide, according to Evalueserve's estimates. At Evalueserve, we play the role of industry fore-runners as well as the industry analysts.

Leveraging from our expertise and technical knowledge of global think tanks in various fields we recently partnered with Club of Amsterdam in the "Summit for the Future". Evalueserve was represented by two of its European Client Executives –Hedda Pahlson Moller (Managing Director Evalueserve Benelux) and Mike Taylor (UK Sales Director), who gave a presentation on various techniques for anticipating and managing business risks, including case studies and statistics on data quality concerns and consequent management.

Some of the emerging trends and sectors were also explored in the knowledge papers created for the Summit, which included reports on the growing importance of outsourcing in Biopharmaceuticals, innovation as risk taking and corporate governance – A controlled way to success.



Partnership with Clout

Growth

A key growth area of business and the key to national economic growth is consultancy. In spite of the somewhat inconsistent results in the past, including the fads, fallacies and flawed thinking that have at times bedevilled the sector, business is booming. The important issue, however, is not the growth of consulting revenues and profits, but how well the client is served.

Partnership

If we now work and seek to thrive in a "global village" it is a village in which many cultures exist side by side and among those disparate cultures there are some that seem inexplicable to the outsider. At the same time the expansion of knowledge is almost of "big bang" proportions and it becomes increasingly difficult for any organisation, no matter how large, to have all of the expertise that they may need in-house. Global authorities may have little awareness of the vital cultural issues while those that have an intimate and sensitive understanding of the cultures may lack knowledge that is at the cutting edge of the information maelstrom. If an organisation chooses to assign subject experts from another country their knowledge may be of limited application in a different culture. If they assign local firms that live within the culture they may find that the skills and knowledge that they purvey are "old hat". The paradox that cultural sensitivity and expert knowledge do not necessarily go hand-in-hand needs an insightful resolution.

The International Centre (www.icfce.com)

We exist to establish and sustain global leadership in researching, developing and delivering state of the art processes to clients. We do so by making the best use of the best people through a genuine partnership of the best of the best at home and abroad. We welcome contact from the best of the best wherever they may be.

world summit **Award**™

The best in e-Content & Creativity



What is WSA?

The World Summit Award (WSA) is a global initiative to select and promote the world's best e-Content, started in 2003 in the framework of the United Nations' World Summit on the Information Society (WSIS). This is done through national contests, a global contest, held every 2 years, and numerous content-focused national and international conferences and workshops – the WSA Road Show.

WSA is an invitation project and a global hub for everyone, who sees the crucial importance of excellent e-Content creation within the new Information Society. In 2005, 168 countries were actively involved in WSA. New partners from all over the world are always welcome to join this global initiative!

What is the Digital Divide?

Digital libraries, new ways of storytelling and flash information have come to the living room. But what about people who are offline or do not speak English? Who don't even know what Web or Internet mean? No, the problem is not that they don't have a computer. The problem is that they don't have access to high-quality contents that could change their lives.

What is the Content Gap?

As world economies focus on creating and improving technological products, the issue of content is considered insufficiently. Technology and what technology produces belong together – one cannot exist without the other. The "what" however, the core of it all, remains a fraction of what it could be – due to an appalling lack of under financing.

The WSA contests

The WSA contests have been held in 2003 and 2005. In total, more than 1500 projects were entered and 80 nominations made. And while the WSIS has ended, the WSA will continue. The new contest will be held in 2007. But before that event roadshows, conferences and national contests will be held in Greece, Haiti, The Netherlands (during the Summit for the Future). The Grand jury will be held in Croatia in September 2007 and the Gala in November 2007.

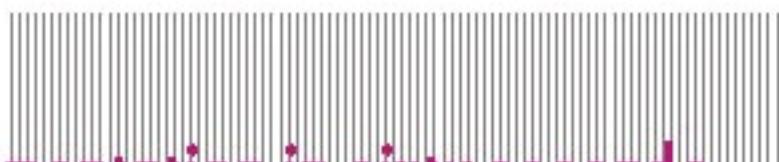
www.wsis-award.org



[ultra-future] is a first of its kind global entertainment super-association and collaboration network. Its focus is the impact of emerging technologies and shifts in consumer demand on entertainment creation, distribution and promotion. Its objective is to share ideas and foster collaboration, create tangible solutions and stimulate the imagination.

The [ultra-future] mega, held every two years, will be the critical entertainment, technology and consumer event for every relevant company, organization, country and consumer to attend and support. Staged as a 21st century World's Fair, the [ultra-future] mega will showcase an array of imagined entertainment worlds. It will present consumers, producers, industry professionals, investors, policymakers, governments and media, an array of possible "futures," both positive and negative, before and as they are emerging. It will directly enhance participants' ability to create their own future entertainment world.

The [ultra-future] association will provide an active, global collaboration network for companies, organizations, creators and innovators engaged in the funding, creation, distribution and promotion of entertainment. Structured as a self-propelled peer network, the association will combine virtual social networking with localized events in key cities.



fragmentation in sixty seconds

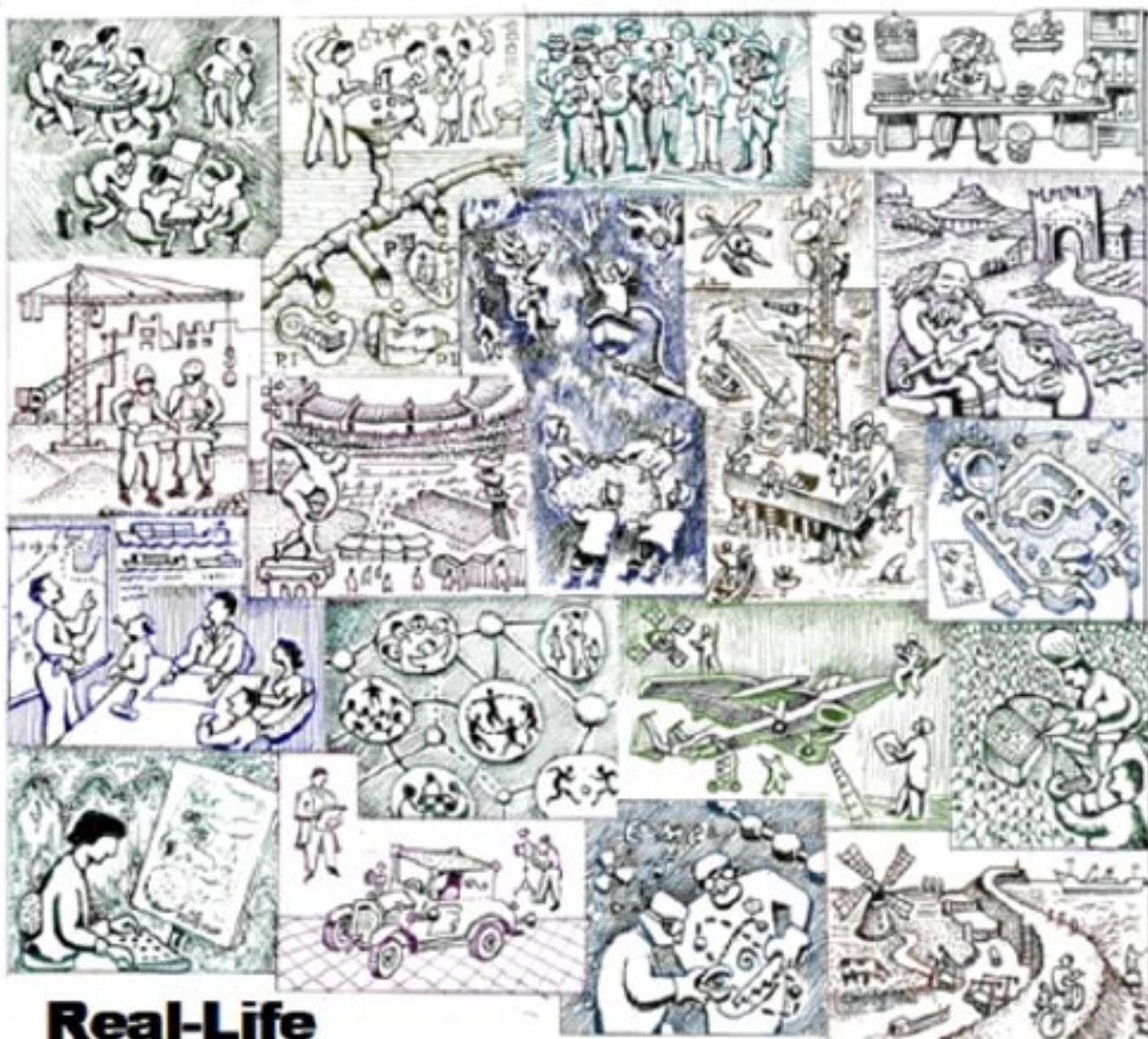


Interior view of the core [ultra-future] environment. This structure will be built for the [ultra-future]: a real life premiere. It's designed as an egg inside a womb. The outer orb opens to reveal a stage; the center is womb in an honor configuration. The center tube controlling the orb contains various abstracted environments.

[ultra-future]



The closer from the outside outward to access of the interior display areas.



Real-Life Knowledge Management

Lessons from the Field

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EnlightenNEXT



EnlightenNext is endeavoring to define the contours of a new human consciousness and

culture. Founded by spiritual teaching **Andrew Cohen** and fuelled by his visionary leadership, this international organization is bringing together individuals who are in search of a new direction for life in the twenty-first century.

Andrew Cohen is dedicated to igniting a revolution in human consciousness. As a 21st-century spiritual teacher and cultural visionary, he is exploring the outer reaches of human potential with the leading thinkers, mystics, scholars, and activists of our time. In 1988, he founded EnlightenNext to help catalyze the next great step in our individual and collective development.

www.EnlightenNext.org



What Is Enlightenment? magazine is the flagship publication of EnlightenNext. By asking the hard questions of the new science and the ancient traditions, of art and culture, of business and politics, *What Is Enlightenment?* seeks to create a dynamic context for conscious engagement with the greatest challenges of our times.

www.wie.org



Voices from the Edge is a nonprofit forum which hosts talks, dialogues, panels, and

presentations by thought leaders and luminaries working at the edge of their fields. With expertise in areas ranging from politics, science and business to philosophy, the arts, and religion, the individuals presented by Voices from the Edge offer new visions and values for our evolving world. Supported by EnlightenNext centers in Europe and the United States, Voices is creating a dynamic nexus for inquiry and evolution.

www.wie.org/voices

EnlightenNext Centers:

Lenox, MA (Worldwide Center) – New York – Boston - London – Amsterdam –
Paris – Copenhagen – Rishikesh (India)

EnlightenNext Amsterdam, Oudeschans 46A, 1011 LC Amsterdam
T 020 422 1616 F 020 422 2417 E info.amsterdam@enlightennext.org

Synmind

The amount of information grows faster than an individual's ability to absorb, let alone master it.

In dealing with this phenomenon, we are using datamining, collaborative filtering, recommender systems, on-line communities as well as social and informal networks.

The goal of such activities often is to reach a decision (e.g. solve a problem) on what to do with the information; in other words we start filtering.

An important part of the individual filtering machinery is based on knowledge and experience, which in combination is often called expertise or capability.

Such a filtering is regularly compromised during (semi-) hierarchical meetings designed to reach a decision.

Dynamic organisations permanently need more productive decision making.

A new decision support tool called Synmind (short for "synthesis of minds") contrasts with existing decision support tools and methodologies. It provides a continuous available virtual decision environment available on both inter- as well as intranet platforms. It distinguishes itself through competition based interactive dialogue while accommodating the mind-set of the contributing participants. This mind-set accommodating feature uses intuitive, rational and political aspects in decision making applying them in a sequential way.

As an example, a company considers a budget to develop a new radar system. Very likely an important management question will be: does the organisation has sufficient resources (both in- and outside) to complete the job within a set of constraints ? (e.g. time, money, expertise, radar system demands). Based on a first set of questions like, can we do it from your (the invited contributor) point of view, allows for an intuitive reaction. When the combined reactions are surpassing a set benchmark, management proceeds to the next level of reasoning: rationality, filtering and adapting through knowledge and capability based argumentation. The ranking or voting graphic displays allow participants to interact through dialogue based on arguments. The ranking and distribution of arguments and opinions, covering relevant aspects, enable both participants and management to use the third level of political considerations meaning aggregating around certain opinions or arguments or not. This allows the problem owner to make a considered decision whether the combined resources are adequate for the intended task. Using Synmind, the time required for such a decision is reduced in a significant way, when compared with the usual sequence of meetings; furthermore the nature of the decision will be largely accepted by the participants caused by the large degree of transparency of the decision making process.

Through a similar approach, assessment and selection of ideas, proposals, products or persons can be realised efficient and effective.

Current applications range from decision making in municipalities to industrial innovation.



Resources



[Summit for the Future website \[May 3-5, 2006\]](#)

[Summit for the Future *blog*](#)

[Summit for the Future *News*](#)

[Photos](#)

[Illustrations](#)

[Presentations](#)

[Summit DVD including videos, audio lectures,
presentations](#)

[JUKE BOX: download the lectures](#)

[Summit for the Future Report](#)

See: www.clubofamsterdam.com



RESOURCES

[Club of Amsterdam website](#)

[Club of Amsterdam Journal](#)

[Club of Amsterdam *blog*](#)

See: www.clubofamsterdam.com



Organisation

Club of Amsterdam

The **Club of Amsterdam** is an independent, international, future-oriented think tank involved in channelling **preferred futures**. It involves those who dare to think out of the box and those who don't just talk about the future but actively participate in shaping outcomes.

We organize events, seminars and summits on relevant issues and publish findings & proceedings through various off-line and online media channels. Our goal is to become a global player and catalyst for innovation in industries, science and society.

The Club of Amsterdam is a not-for-profit foundation registered in The Netherlands.

www.clubofamsterdam.com

Summit for the Future Organisation

Director of the Summit: **Felix B Bopp**, CEO, Club of Amsterdam

Chairman of the Summit: **Patrick Crehan**, Member of the Board, Club of Amsterdam

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Peter van Gorsel, Director, Institute for Media and Information Management, Hogeschool van Amsterdam

HES School of Economics and Business

Government

Soeren Jakobsen, Chief Transport Economist, Rambøll

Collaboration

The Summit for the Future has been organised in collaboration with many partners. We would like to especially mention the University of Amsterdam, HES School of Economics and Business, Communication Department and the Institute for Media and Information Management, Hogeschool van Amsterdam.

We would like to thank the dozens of helping hands, brains, eyes and voices, which made the Summit for the Future an exciting Event!

