

What the Gurus Say

Brainovation® interviews by Anders Hemre



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Anders currently lives in Gothenburg, Sweden, where he specializes in how organizations best work with strategy, innovation, knowledge and expertise.

When time permits he cultivates his interests in art, history and science, enjoys reading Scandinavian crime novels and looks after his small but interesting collection of Chinese snuff bottles.

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Insights on Ignorance

A conversation with Professor Mats Alvesson featured in the October 2020 issue of the Brainovation® newsletter.

Anders Hemre: Mats, thank you for taking the time to share your insights. A couple of years ago you co-authored *The Stupidity Paradox* in which you and André Spicer share your observations of organizations and their sometimes perplexing ways of behavior. Could you briefly describe the concept you refer to as “functional stupidity”?



Mats Alvesson: It refers to thinking quite narrowly, within clear boundaries and based on taken-for-granted assumptions. It means box thinking, where the box can be prescribed by bureaucracy, various policies and regulations, the management, the current fashion, what others say and do and so on, without much critical reflection. Functional stupidity means you do things ‘correctly’ and smoothly, but not necessary what is meaningful and lead to good outcomes.

AH: You have obviously done deeper and broader studies of behaviors, which many have casually observed in their own organizations. Does functional stupidity then exist independently or is it in some ways related to other well-known occurrences in organizations such as e.g. incompetence or Herbert Simon’s bounded rationality?

MA: Well, there is some overlap with other concepts such as bounded rationality and willful ignorance. But bounded rationality is a more rational response to cognitive limits and time constraints. Functional stupidity is more about adaption to others, to social norms, to what is comfortable and to lack of critical reflection.

AH: Good to clarify that. So if a certain level of stupidity is really part of natural human behavior and even to some extent useful in organizations, what can or should you then do – if anything – to make sure it doesn’t go too far and becomes harmful to the business?

MA: Actually, you can work with anti-stupidity management: institutionalize reflective sessions, create an anti-stupidity management task force, make surveys about counter-productive systems and practices, appoint, on a rotating basis, a devil's advocate etc. See the last chapter of *The Stupidity Paradox* for many suggestions.

AH: Great, I'll include a link to [Amazon](#). Now, due to its general nature, is it reasonable to assume that functional stupidity exists not only in businesses, but in most organizations, institutions, political parties and even societies at large?

MA: Yes, it certainly does. It is even more central in many public sector organizations, politics, mass media etc. Within business, large companies often demonstrate more functional stupidity than small ones.

AH: Oh, I'm sure there's plenty of evidence around. On another topic, in recent years Artificial Intelligence has come of age and many applications have been introduced in a variety of areas. Have you done any research on AI or AI ethics and organizational behavior and how do you think artificial intelligence and functional stupidity will coexist e.g. in decision making?

MA: This is not my specialty, but technical solutions may make people stop thinking and rely too much on technology. The general belief in and hope that AI will create so many positive and great things, may be one-sided, uncritical and thus in itself sometimes be an example of functional stupidity.

AH: That's certainly something to be mindful of. Finally, what are your current research interests and projects?

MA: We are doing many in-depth studies of organizations and how irrational arrangements and beliefs dominate. We for example study leadership at close range, where many have rather naïve beliefs, unrealistic hopes and limited deeper understanding of the complexities and tendencies that leader action and follower responses are not aligned. A problem is that while many aspire to be leaders, many are not that interested in being followers. Leadership is sometimes more an ego-boosting fantasy than a specific practice.

AH: That's an interesting conclusion. Mats, thank you for sharing your thoughts.

MA: You're welcome. And thank you for having me.

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Mats Alvesson is professor of organizational studies at the Lund University School of Economics and Management. His research interests include critical theory, gender, power, management of professional service (knowledge intensive) organizations, leadership, identity, organizational image, organizational culture and symbolism, qualitative methods and philosophy of science.

He has served in several international academic positions and has published extensively in his field of research: [Lund University Research Portal](#)

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Inside Silicon Valley

A conversation with Dr. Annika Steiber featured in the October 2018 issue of the Brainovation® newsletter.

Anders Hemre: For quite a long time now, Silicon Valley has been almost synonymous with innovation and has inspired the establishment of many other science and technology parks around the world. In your opinion, is Silicon Valley today still the world's leading place for technology innovation and if so, what has enabled this region to maintain its vitality and creativity?



Annika Steiber: Silicon Valley is still the world's leading innovation hub considering e.g. the number of unicorns created, available risk capital and the density of graduate engineers. There is increased global competition though and several new regions have taken great steps in terms of the same measures. China is a good example with its huge domestic market, just like Silicon Valley has in the US.

What then drives the capacity for innovation in Silicon Valley?

Well, I think the engine for innovation is very much embedded in the culture itself. A culture based on Schumpeter's philosophy and theories about how economic development is driven by technology innovation and entrepreneurship. There is a high degree of trust and respect for entrepreneurs here.

The second important factor is human capital with well-educated and entrepreneurial people drawn in from all over the world. And perhaps even more important are the successful entrepreneurs who have remained in the region using their experience to launch new startups or serve as risk capitalists and mentors.

Closely associated with human capital are of course the leading universities of the region such as Stanford and Berkeley as well as public institutions like San Jose University and Foothill College, all graduating a great number of new engineers every year.

In addition, about 50% of the nation's risk capital is in Silicon Valley. The region also has a strong support system for startups providing e.g. banking, legal and accounting services, marketing and the like.

AH: That's a very good summary of what keeps the Valley going.

Annika, a few years back you had the unique opportunity to observe Google's innovation process from the inside at the company headquarters in Mountain View. Google's way of working with innovation appears to have worked well for them. To what extent do you think their way can or should be adopted as best practice by other firms around the world and what should firms think about if they try to do it the Google way?

AS: The Google way is already copied by others in my view. A number of other companies in Silicon Valley have been looking at Google and learned from Google but they have also hired Google people that then brought the Google way with them. Also the new generation Chinese firms are in many ways similar to the Google Way of running their companies. In some perspective they are even more quick learners and willing to experiment and test, than the Silicon Valley companies.

For an older generation company it can be hard to try to copy the Google Way as this new Way could be 180 degree different than what they've done historically, e.g. who to select in the hiring process, or how to think about organizational structure and design. Some older generation companies have tried though and in some cases succeeded in getting more focus on innovation, speed, constant learning, etc. However, what usually works best in these companies' transformation is to start something based on this new Way in parallel, separated from the older generation firm. It's not so hard to imagine why this is usually required. It's like asking Elon Musk to change an older generation company from within. The only way he would succeed would be either if he got the CEO position with complete support from the board OR if he would start something aside of the traditional business.

AH: Good point. One might certainly wonder what an Elon Musk would have been able to do at Kodak or Nortel.

On another topic, at the annual ispm innovation conference earlier this year in Stockholm, Artificial Intelligence was a topic of discussion in terms of its impact on innovation management. No definite view was promoted except a need for legal and ethical guidelines and the general notion that we could learn a lot about ourselves by working with machines that learn.

Do you think AI will fundamentally change how we look at innovation and how innovation managers work?

AS: Yes, I think we see the beginning of this already at companies like Google that already can study user behavior by having access to data on them and e.g. their search behavior. They can see things that are desired before there even exists a product on the market, covering that need.

The question is if human beings even are needed in the innovation process in the future. We tend to hope that the creativity of human beings will be one of the things that humans are still needed for in the future with intelligent machines, but I am not sure. Isn't creativity based on association, pattern recognition, putting information together, accessing information from several sources and couldn't that be done by machines?

In addition, in areas where innovation really pays off, the machine supported innovation processes might start first, leaving human creativity to areas of less economic importance.

AH: Intriguing thoughts. I guess time will tell. And probably soon.

On yet another topic, most governments have national and regional innovation policies in place involving funding and e.g. various tax incentives. At the same time, innovation isn't normally associated with governments themselves or other actors in the public domain.

To what extent do you think governments should act as risk capitalists and how do you think public funds should best be used to stimulate innovation for the good of society?

AS: Generally I think Government could play a role in developing an overall high-level strategic plan for the country to keep the country being an attractive country to live in. They can also play an important role as a trigger to get change happen faster, e.g. in certain sectors or industries, or overall environmental development. This could be done by tax incentives or make capital available to certain areas.

I do not however think that Government in general should act as the lead investor and venture capitalist but rather match the funding that e.g. VCs are investing in certain technology companies.

However, there is an exception which is areas in which innovation is necessary but maybe not economically sound right now, e.g. in certain new generation energy solutions. Here Government need to provide certain funding to research institutes, universities etc. The requirement however should be to develop something that is applicable and will be used by the society and provided by private companies.

AH: Sounds like a very sensible take on the issue.

Annika, thank you for sharing your insights.

AS: My pleasure.

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Dr. Annika Steiber is founder and CEO of Stockholm based A.S. Management Insights and Professor at Menlo College, the Silicon Valley Business School. She is the bestselling author of [The Google Model](#) , [The Silicon Valley Model-Management for Entrepreneurship](#), *Management for the Digital Age: Will China surpass Silicon Valley?*, and *METAVERSE-a book about VR/AR*.

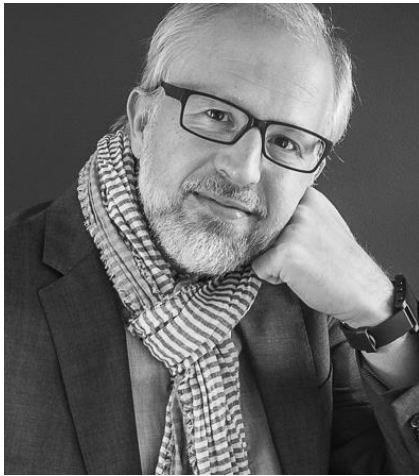
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From Scenario to Strategy

A conversation with Martin Börjesson featured in the April 2016 issue of the Brainovation® newsletter

Anders Hemre: Martin, you have worked with scenario planning and future forecasting for quite some time. Looking back, how has the field of futurology developed since you started with this?



Martin Börjesson: Most things change over time. That's true for scenario planning as well after Shell made it popular some 40 years ago. It used to be about constructing different possible futures and then trying to answer the question "now what?" Often this didn't really work. At least not for corporate decision making.

Cutting edge scenario planning projects today are not really focusing on the future per se, but rather about how we think about the future and how we transform that thinking into action. In other words how we can create the future we want. This is a very important shift. In fact, it turns scenario planning into strategic planning. The scenario essentially becomes the strategy. This also ties in with competitive intelligence and monitoring the business environment, which is about what's happening, why it's happening and why it's happening now. It's an interpretation and understanding of the current situation. You must not ignore that, but rather use it as the starting point for the future scenario, i.e. the strategy. Smart anticipation if you like.

AH: That makes sense. There are also some specific techniques that have been used to help make forward looking decisions. I'm thinking of prediction markets and real options valuation. It appears these have only met with partial success. The SciCast prediction market e.g. seems to have been suspended. What is your take on these techniques?

MB: I think real options valuation will continue to see limited use mainly due to the math involved. At the same time real options are indeed real and have likely been used in various ways without being thought of as a technique. Maybe this type of value thinking can be formalized a bit and

applied more deliberately in conjunction with investing in new projects or judging the potential of a start-up company. Only without the actual math.

Prediction markets on the other hand are more interesting. Perhaps not so much in the original form though, where people buy and sell future outcomes. But asking people to do something in ways they find interesting or rewarding basically makes sense. You see this in gamification and in social media. You see it in crowdsourcing.

Driving behavioral changes can be done in subtle ways too. The book "Nudge" by Richard Thaler and Cass Sunstein published in 2008 popularized the concept of *nudge*, i.e. changing people's behavior without mandating the change. And why wouldn't it work? It has been known for a long time how people respond to subtle – and sometimes not so subtle – cues. Governments sometimes use it to promote public policy. Of course, there could also be uses of this with objectives in mind that are morally questionable. It's something to be aware of.

Another area to keep in mind here is Artificial Intelligence, which is increasingly being applied to social media. There is more and more intelligence in AI and I'm sure we will see more developments along these lines.

AH: Most likely. Hopefully we will see more of both artificial and natural intelligence. Speaking of intelligence, society is increasingly characterized by socioeconomic and technological complexity. Do you see a significant role for think tanks in today's society?

MB: At least there is a definite need for thinking. The question is always what to think about and how the thinking should be organized. And most importantly, what the expected outcome is and what impact is being sought.

We can certainly see developments, where systems and behaviors in society are deviating from what's fair and reasonable. Much of this is in plain view. Then there is change that happens slowly, less visibly with long term and uncertain impact. Scenario planners and other thinkers need a voice. And they need to be heard.

Obviously there is a difference between a think tank and a discussion forum. The latter could be rewarding for its members and help develop their thinking, but wouldn't have much impact outside the forum. Whether

sponsored or independent, a think tank wants to produce an opinion or a call for action to a targeted audience. Or at least publish studies of certain topics.

I think one of the challenges involved is to forge a strong opinion while both reconciling differences and avoiding group think. Another is getting the message across to the right people. Being an effective advisor can be a tricky thing. Those who need advice the most are not always most willing to receive it. You learn this as a competitive intelligence analyst and of course generally as a consultant. Successful interventions need to be socially engineered.

AH: I couldn't agree more. Thank you for taking the time to share your thoughts.

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Based in Gothenburg, Sweden, Martin Börjesson is a futurist, strategist, scenario planner and creative analyst. He has a long experience of innovation, technology/business intelligence and strategy as an industry professional and as an independent consultant. Martin regularly teaches scenario planning, strategy and business development at Gothenburg IT University, IHM Business School and the Chalmers University. He shares insights and opinions at www.futuramb.se and can be reached at martin@futuramb.se.

Knowledge Economics

An interview Leif Edvinsson featured in the February 2016 issue of the Brainovation® newsletter

Anders Hemre: Leif, it's great to have another opportunity to converse with you. It's been eight years since our last interview – a long time in today's world – so let's get right to it.

Japanese scientist and economy philosopher Dr. Hiroshi Tasaka once suggested that the knowledge economy is a misunderstanding – the argument being that knowledge is developing more into a free commodity than a priceworthy good. What is your take on this suggestion and – beyond research and education – where do you see the biggest returns on knowledge, if such a concept can be defined in economic terms?



Leif Edvinsson: Thank you for again letting me share my views. I don't think the knowledge economy as such is a misunderstanding. But I do think we need to increase our understanding of it. The knowledge economy is not just about knowledge and knowledge work. Most importantly it is about how and where value is created. And this has shifted.

As suggested by Professor Csaba Varga at the Institute of Strategic Research in Budapest we may even be moving into what he calls the "mind era" – an era increasingly characterized by intangible perspectives. Of course, industrial infrastructure, transportation, energy production and so forth are still required and knowledge has always been an important factor in economic activity. But the point is that such activity has changed. The role of small firms, networks and collaborations has increased significantly. Manpower is no longer the dominant enterprise performance factor. Mindpower is. Just look at the big internet names and e.g. the Swedish gaming industry.

Breakthrough innovation is where great returns on knowledge should be expected. This may involve not only entirely new discoveries, but also novel applications of technology. A good example of this is bioelectronic medicine and electroceuticals – the use of microelectronic waves to replace pharmaceuticals. This is being researched at the Feinstein Institute in New York in collaboration with the Center for Molecular Medicine at the Karolinska Institute in Stockholm.

And beyond economic returns, it's easy to recognize also the human benefit from advances in life science.

By and large, it's difficult to see any innovation with a significant impact, where knowledge has not played a key role.

AH: Indeed. But what about knowledge work itself? It has been argued that the biggest management challenge of the 21st century is to increase the productivity of knowledge work. Is this happening and how would we know?

LE: It is probably happening, but accounting for the productivity of knowledge work is not particularly easy. Knowledge work is more about outcomes and impacts than it is about output. Even though individuals can be more or less effective at work, on enterprise level it's always the combined effort of many that creates the result. So it's a lot about the performance of teams, networks and communities and how people collaborate and share knowledge. In general, we know how it works, we just need to get better at measuring and managing intangibles.

AH: Gross Domestic Product (GDP) has been used for a long time as the key measure of national economic performance. Is GDP still a relevant performance measure considering how value is created in today's economy?

LE: Of course GDP might still be a relevant measure. But GDP numbers are what they are and they don't take knowledge into account. That's why there is also a need to address a nation's intangible assets or NIC, National Intellectual Capital.

We can now see larger knowledge entities being subject to thinking and planning. Smart Cities is an obvious example of this. It is also possible – and in my opinion necessary – to account for National Intellectual Capital. This has been done early in Asian countries like Japan, Korea and Taiwan – all with strong national identities and agendas. Clearly, the wealth of nations increasingly comes from their intellectual capital. There are countries in which 70% of their GDP depends on Intellectual Capital.

I have worked with this for many years. It's still in progress with NIC data now available for around 60 countries.

You can find information about this at [National Intellectual Capital](#) as well as on the new web www.bimac.fi

And this article in the Journal of Intellectual Capital summarizes 21 years of work: [Reflections from 21 years of IC practice and theory](#)

AH: Innovation is often hailed as the premium way for firms, industries and even nations to stay competitive. In comparative studies of national innovation performance, Sweden consistently rates high. Do you find Sweden's national innovation system and associated government policies particularly effective and how would they compare with those of other developed or rapidly developing nations?

LE: I don't think Sweden's innovation system is particularly better or worse than those you find in most comparable nations. Sweden is a small country allowing policies to have both reach and impact. But we can do better. There also needs to be a capacity for renewal. Since quite a few years back, the Finnish Parliament e.g. has a Committee for the Future with the mission to generate dialogue with the government on major future problems and opportunities. The Aalto Camp for Societal Innovation (ACSI) is another initiative with international reach. See also its impact on innovative urban planning, www.espooinnovationgarden.fi/en.

Overall, there is a growing need to think about quite fundamental issues such as the nature of work and the organization of socioeconomic systems. Innovation "boot camps" for politicians is not a bad idea.

Sweden needs a more deliberate and engaged debate about change and renewal in society. Fifty years ago the establishment of a Research Policy Institute at the Lund University was groundbreaking. With the complexities and challenges of today's society, it's important that such research continues and has a real impact on policy making.

The recently established National Innovation Council and the expressed preference for innovative solutions in publicly funded projects at least indicate that the need for effective innovation policies is being recognized by those responsible.

AH: OK, but are Swedish policies not often derivatives of EU policies or dependent on EU rules and regulations? Overall, has the innovation performance of European nations benefited from the EU?

LE: It's a bit of a mixed picture. When the EU was initially formed, it was in fact in itself a regional societal innovation representing peace, stability and cooperation. Innovation is of course promoted by the European Commission and there is plenty of money dedicated, but there are also plenty of rules and regulations to deal with for those trying to develop their ideas. Innovators both in Europe and elsewhere seek high value opportunities and many aspire to build globally competitive businesses. European innovators need all the help they can get. And certainly no bureaucratic choke collars.

Societies evolve, but legacy also weighs heavy. There are growing incongruities in several areas. It's in the gaps where you can often find the most fertile ground for innovation. And the higher the risk, the higher the potential return.

Both the young and the old are known to be higher risk takers than others. Why not recognize this and find deliberate ways to combine the energy of the young, the experience of the older and the willingness to take risk of

both. Maybe there is a case for mid-career temporary retirements. At least we should be seriously thinking about these things.

Gary Hamel talked about rule takers, rule makers and rule breakers. The takers and the makers usually don't rock the boat. It's the rule breakers who need a break!

AH: I agree. Thank you for sharing your thoughts.

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Lund University Professor Emeritus Leif Edvinsson is known for his groundbreaking work on Intellectual Capital. He was recognized Brain of the Year 1998 by the Brain Trust foundation, listed in The World's 50 Most Influential Thinkers 2006 and received the 2013 Luminary Award for Innovation Thought Leadership by the Peter Drucker Foundation, Intel and the European Commission.

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On Creativity and Innovation

An interview featured in the August 2015 issue
of the Brainovation® newsletter

We're excited to talk creativity and innovation with Dr. Bettina von Stamm, founder and director of the Innovation Leadership Forum (ILF) and author of *The Innovation Wave* and *Managing Innovation, Design and Creativity*. This continues our series "What the Gurus Say".

Bettina, welcome to "what the gurus say". We appreciate this opportunity to get additional perspectives on our favorite topic – innovation and innovation management.



It is my pleasure entirely, and I feel honored to be considered a guru :-)! By the way, when being invited to contribute to the Brainovation Newsletter I was immediately reminded of one reason why I like working in the field of innovation so much: fellow travelers on this journey of understanding and enabling innovation (which is how I always describe what I do) are always happy to share and collaborate. Collaborating and 'taming the competitive spirit' is something that I consider essential in our times - and feel that we have a long way to go yet to make this the dominant mindset.

Collaboration and competition are certainly two of the most interesting dynamics of business environments. At Brainovation, we have prepared a few questions on a third fundamental business topic – innovation. We know you're a passionate *innovator* and we're eager to hear your views.



Pablo Picasso once described his way of working as *"I start with an idea and then it turns into something else"*. It seems to suggest something basic about the creative process. Is there in fact a useful general definition of creativity, what aspects of creativity do you think are most important to business organizations and do you think such organizations can learn something useful about creativity and creative work from the fields of art or design?

What Picasso's words communicate for me are two essential ingredients for innovation (for which creativity is the starting point): a willingness to experiment and start journeys where the destination is uncertain, and to be open and willing to embrace any changes or opportunities one encounters on the way. Neither of these sit comfortably with dominant mindsets in many organisations...

This is why I am such a strong believer that business can indeed learn a lot from art and design. The rise of Design Thinking - which for me refers to a mind and toolset customary used by designers - is one demonstration of that. Let me elaborate a little on why I think that design has moved up the agenda for business recently and why Design Thinking finds such resonance. Back in 1984 Kotler & Rath wrote an article in the Journal of Business Strategy titled 'Design: a powerful but neglected strategic tool'¹ - given publication cycles for academic journals this means that they must have had this realization a good few years earlier ... Over 30 years ago there was an awareness that design has something to offer in the context of business. However, at the time business did not quite understand why it should bother with design. Then interest in innovation grew as a way to grow and differentiate one's business. Many organisations set out to improve their innovation performance just to experience that their managers, excelling with cost cutting and efficiency drives, were not necessarily the best people to innovate! Designers on the other hand seem to have a perfect profile for innovation - and a set of tools to support them.

"While the collaboration between art/design and business is hugely beneficial, it is not easy"

¹ [Philip Kotler, G. Alexander Rath](#), (1984) "DESIGN: A POWERFUL BUT NEGLECTED STRATEGIC TOOL", Journal of Business Strategy, Vol. 5 Iss: 2, pp.16 - 21

I find the speed with which business are embracing Design Thinking quite amazing. Business Week was an early promoter of design in the context of innovation, and places such as the D-Schools (Design-Schools, as opposed to the Business-Schools) in Stanford and Potsdam are places where design and business come together. Interesting that both D-Schools were made possible by business' fascination with design's potential: SAP's founder Hasso Plattner had heard IDEO's² notion of Design Thinking, and decided that engineers in general and his software engineers in particular would benefit hugely from this approach.³ Awareness of the benefits of businesses' exposure to arts is not new, organisations such as 'Arts & Business' (<http://artsandbusiness.bitc.org.uk/>) here in the UK date back to 1976, and conductor Benjamin Zander is a hugely popular speaker with business audiences⁴.

One thing I would like to mention though is, that while the collaboration between art / design and business is hugely beneficial, it is not easy. Back in 1990 Academic and designer David Walker wrote an article titled "Managers and Designers: two tribes at war?" in which he points out that the different values and preferences of managers versus designers should leave no one surprised that collaboration between these two can be such a challenge. Having said that, I can only encourage everyone not to give up, as I have seen first-hand what amazing things can happen if individuals overcome such differences to find some shared ground from which to truly bring their different areas of expertise together. If it works, you get a situation where one plus one equals ten. If such share ground, based on trust and respect, cannot be found you probably get one plus one equals minus one!

² For those who don't know IDEO, they are a leading design and innovation firm, formed in 1991 by a [merger](#) of David Kelley Design (founded by [Stanford University](#) professor [David Kelley](#)), London-based Moggridge Associates and San Francisco's ID Two (both founded by British-born [Bill Moggridge](#)), and Matrix Product Design (founded by [Mike Nuttall](#)).

³ The first d-school was founded by Stanford [mechanical engineering](#) professor and IDEO founder David Kelley in 2004 and is a joint project between the university and the [Hasso Plattner Institute](#) of [University of Potsdam](#) in Germany. The d-school in Potsdam was set up in 2007.

⁴ I can really recommend his book: The Art of Possibility which is full of insight and wisdom.



Innovation is largely viewed as a generic art or discipline. You have done research, spoken with innovation leaders and reviewed many business cases. Are there any significant differences in how firms approach innovation e.g. in different markets or industries, are firms willing to share their practices and how can practitioners best learn innovation management from others?

I am sure there are differences, though from my interview-based research into 'Innovation Best Practice & Future Challenges', conducted in 2000, 03, 06 and 10 there is an indication that there are certain steps most organisations go through, independent of industry and background. A common flow once the desire to become more innovative has been formulated is as follows: an individual is appointed to figure out what it takes to become more innovative; most likely one of the first suggestions is to introduce some processes that formalize innovation, such as an idea management systems or a more formalized approach to selecting and developing projects, more often than not based on the stage-gate model. I believe processes are the first step because that's what organisations are comfortable and familiar with. While processes are certainly important, on their own they do not do the trick, on the contrary, they can have negative implications for the innovation climate.

“Processes, while certainly important, can have negative implications for the innovation climate

For example, take idea management systems. When employees are first invited to offer their thoughts and ideas a tsunami hits the individual tasked with dealing with reviewing and assessing these ideas; as a result there is a failure to provide sufficient feedback; on top of that, guidelines for the assessment and selection of the ideas are often lacking so no one understands why certain ideas are selected above others; what started out as a big unleashing of engagement and empowerment turns into disengagement and frustration.

A problem with the stage-gate processes is that many organisations have one standardized process through which all project are being fed, no matter whether they are incremental or radical in nature. These processes tend to ask questions around market size, return on investment and other specifics

at the first gate. If we are really looking at an innovation with a big I, i.e. of the more radical nature, we cannot possibly answer such questions, hence any radical idea tends to be de-selected at the first step. This has been recognized, and many organisations now have 'pre-project' phases or alternative decision criteria and development pathways for more radical innovation.

Once such initial challenges have been addressed, and if the company is ready to continue the pursuit of innovation, the next step then is often to put a team together, often multi-disciplinary in nature, which is tasked with generating radical innovation. Such a team is often detached from the main body of the organisation in order to be able to develop a culture that is more conducive to experimentation and exploration. It is amazing how quickly such teams are considered to be "outsiders" by the rest of the organisation, so much so that when ideas are to be transferred back into the main organisation they fall prey to the NIH syndrome and die a quiet death.

Most organisations eventually reach a point where they realize that creating conditions in which innovation can thrive depends on certain cultural attributes, and certain leadership behaviors. While no one should expect all senior managers to be keen innovators, the minimum requirement is that all managers have a deep understanding of what culture and behaviors conducive of innovation look and feel like. This tends to be the 'make or break' point: is the organization's leadership willing to take on culture change, and look in the mirror, or is that too uncomfortable and will the view 'we have done quite well as we are anyway' win over?

While I have observed a 'typical flow' on the journey to becoming more innovative, this does not mean that there is 'one right way' to improving conditions for innovation in organizations. This is something many find deeply frustrating and annoying. Indeed, it would be easier if there was a cookie cutter approach to creating innovative organisations, to copy an approach that has worked elsewhere. Yet this does not work. Otherwise, why do not all organisations replicate what has been written about extensively on organisations such as 3M, Apple, Google or Uber are doing.

*"Becoming, being
and staying
innovative is a never
ending journey"*

Creating a more innovative organization requires us to understand our specific context as well as our starting point and heritage so we know what we can build on and what needs to change.

A final point here that is really important to me is that creating a more innovative organisation is not about 'a tick in the box' though it is often treated as such. Becoming, being and staying innovative is a never ending journey. We need to keep asking ourselves whether what has worked for us in the past will work for us in the future. We need to keep monitoring our context - in the widest sense, not just our industry. From experience we know that disruptive innovation hardly ever comes from within an industry; it comes from the fringes where we often fail to look - or even if we look, fail to take developments seriously.



Since 2013, six innovation management standards have been published by CEN in the 16555 series and the ISO is currently working on the international standard. Have you been involved in any such work and what benefit do you think the standardization of innovation management brings to businesses?

I have not been involved in such work and have to confess to not really being familiar with the standards so I might do them injustice with my following comments.

Innovation benefits from guidelines and suffers from rulebooks. In my perception standards tend to fall into the latter category. For me the difference between guideline and rulebook is that the latter assumes that there is one right way. If I am not a great fan of 'the one right way' in generally, I believe in it even less in the specific context of innovation.

I always argue that there is only ever a most suitable approach, given the particular context, and given a particular point in time. This connects back to my comment earlier that innovation needs to be understood as a journey. This means that in the field of innovation we should focus on leading practice, not best

*“Innovation
benefits from
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practice. I should mention that the idea that in the context of innovation we should be concerned with 'leading' rather than 'best practice is something that I have realized only recently myself... As a consequence my 5th interview-based report, which I am working on, will not be called 'Innovation Best Practice & Future Challenges' but 'Innovation Leading Practice & Future Challenges'.

To come back to your question on my view of standards for innovation, I am not saying that standards are wrong or a waste of time, just that we need to be careful of how we use them. We should not expect Standards to be recipes that when adhered to, presto, create a lovely, sustainably innovative organization.



What is your current main focus and is there anything else you would like to share?

I have always been passionate about education, and about the many amazing people whom I have met on my journey. Indeed, I have always felt that I should find a way to bring them all together in some way, to create something that weaves the skills, insights and areas of expertise of a widely diverse bunch of people together. It has never gone anywhere - until recently. In a conversation with one of these amazing people the penny finally dropped, and I put my dissatisfaction with the state of education together with these amazing people who are all working at the leading edge of thinking in their respective fields.

I believe that education - whether it is for our children or for executives - is entirely insufficient in providing the skills that are needed to survive, let alone thrive, in the 21st century. The context is changing so fast, we have any kind of information at our fingertips within seconds, yet teachers continue educate and test knowledge in a way that seems to ignore the existence of the internet.

Executives are given formulas and analytical tools that are insufficient for navigating a world that is complex and highly networked. In the last century when the rate of the introduction of change, compared with today, was at a

snail's pace it might have been sufficient to work out the 'best way' and then stick with it. With today's pace of change that is no longer sufficient. In order to keep pace we cannot afford to rest but need to keep monitoring constantly, always moving and adjusting to the changes we observe. If we become masters in this, we are the ones driving such change!

As I believe that it is no good to complain about something without at least attempting to do something about it, I am currently working on an executive education program titled 'Leaders of A Future' - I just realized that it creates a nice abbreviation: LEAF. I have deliberately chosen 'a' rather than 'the' as I believe that, unless we have different leaders and a different way of leading we will not have a future. (OK, maybe we will have a future - but what about our children? And perhaps we will have a future, but how worthwhile will it be?)

To create this program I am collaborating with inspiring thought leaders from around the globe. The aim is to truly weaving our different strands of knowledge together - rather than letting them run in parallel, which is currently happening in the executive programs I am familiar with. The program will be longitudinal, interdisciplinary, experiential, challenging and provoking, and result in something real, a concept that can be taken forward by participants' organisations. It provides participants with a mindset that enables them to understand and embrace the challenges of the 21st century, and a toolset to engage and bring along others, and to turn the challenges into opportunities. That is the dream and ambition. While it is in its infancy, the exciting thing is that all those with whom I have shared this dream and whom I have invited to become part of it, have agreed to help make it a reality.

Thank you for sharing your insights. We hope your dream will come true.

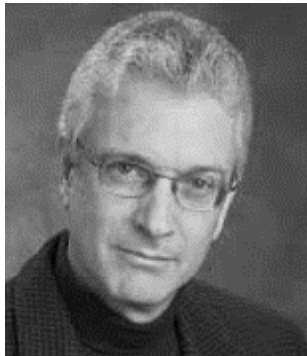
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Bettina von Stamm is a graduate from the London Business School with a MBA degree in Management and a PhD in Design Management. Based in the UK, she is Director of the [Innovation Leadership Forum](#) and a Visiting Professor at the DUESTO Business School in Spain.

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On Competition and Regulation

An interview with Dr. Benjamin Gilad featured in the October 2014 issue of the Brainovation® newsletter



[Brainovation]: Ben, it's a great pleasure to have you back again after seven years for another Brainovation interview. This time we would love to hear your views on competition and regulation, two powerful forces that shape the business world.

Let's start with the situation in Europe. In 2000, the Lisbon agenda stated that by 2010 the EU should become "the most competitive and dynamic knowledge-based economy in the world". It didn't. Instead the EU has become one of the world's most regulated economies. What are the best things governments can do to promote the competitiveness of national or regional economies?

[BG]: Government has an important role in promoting social goals such as aiding the weak and the poor. The problem is that when it comes to directing the economy, government is the most destructive of forces, not a promoter of competitiveness. That's because knowledge is dispersed and government substitutes the judgment of a few bureaucrats or activists for those of millions of investors, entrepreneurs and

consumers. The best government can do is *not* do. Regulations already killed Europe. It is gone. It will never be competitive. At most it will be even more insular and regulated as it tries desperately to defend its standard of living through protectionist policies, restrictive labor laws and higher taxes. The youth unemployment in Europe shows where its future lies, but voters will vote for anyone promising them more benefits and no one asks: who pays?

Instead of the US looking at Europe with pity, now the regulators are killing the US. Anyone who wants to be scared should read The Economist's Aug. 30's piece on "The criminalization of American Business." Anyone who

*“Regulations
already killed
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It will never be
competitive.”*

believes governments can create competitiveness should come see the bridge I am selling in Brooklyn. I am selling it half price! As Milton Friedman showed, the only government who has ever been able to create competitive conditions has been the US in the 19th century, mostly because it stayed out of the economy. The US global leadership today is still based on its phenomenal business growth in the 19th century.

Unlike general laws (which apply to everyone), regulations are the bedrock of crony capitalism and concentration of power in the hands of those well connected with politicians. The relationship between the regulator and business is quintessential corrupt. It destroys competition. Just look at Wall Street's Big Banks and its regulators. Do you know that large cigarette companies actually welcome regulations of the e-cigarettes? And the Big Pharma companies, too. They kill the smaller, innovative competitors who can't afford the armies of regulatory lawyers and cost of lobbying and compliance. Most of the 21st century consolidation and concentration in industries can be traced not to economies of scale, but the phenomenal rise in the cost of complying with regulations.

“The relationship between the regulator and business is quintessential corrupt.

The model of crony “capitalism” is failing miserably, creating the gap between rich and poor and destroying the future of America. So what can government do? Retreat, stay out, don't subsidize, don't destroy success through the arbitrary laws of antitrust, don't help anyone. Don't intervene. Just stay away. Stop

using monetary and fiscal policies to “stabilize” the economy and promote “growth” (which only creates more artificial booms and deep busts). But that of course means politicians won't get their PAC contributions from special interests. So, we know what is needed, Friedrich Hayek showed it 60 years ago, US history proved it for a century, but we also know it won't happen any time soon (unless Rand Paul wins the election and the Tea Party comes to power).

[Brainovation]: Following successful innovations, competitive markets quickly form forcing firms to do things better or cheaper or both. While e.g. lower prices benefit consumers in the short term, excess competition causes market fragmentation thereby reducing scale and lowering profits – profits that could have been invested in innovation – potentially leaving future

consumers with less value. In the global market, is there a need for e.g. more or better trade policies to promote innovation and fair terms competition or should individual firms simply do the best they can?

[BG]: I tend to cringe whenever government determines what's "fair competition". It is typically a thinly veiled excuse for protectionism, typically of industries close to the political establishment. I am not sure what excess competition means. If it is unhealthy, firms will fail, and the market will concentrate slowly and efficiently. But it is hardly ever excessive or unhealthy. In the Pharmaceutical industry, the remaining 8 giants companies have little pipeline of innovation left in them. They are desperately looking for innovation from smaller biotech firms. In some industries, like textile and small electric appliances, cheap competitors enabled people to buy cloths and TVs they couldn't afford otherwise. Wal-Mart is responsible for raising our standard of living more than all the Democratic presidents in the 20th century combined.

I also don't buy the relationship between R&D budgets and innovations. Apple actually invests less than other companies in R&D. That said, it is clear that state "capitalism" like Chinese companies create headache for US firms. The de facto closure of the Chinese market presents challenges given that the US is an open market. The kneejerk response is to become protectionist. But if you take the longer view, none of the Chinese "enterprises" can match the entrepreneurial engine in the US. The problem is the US is destroying this same engine. Give business freedom and they won't need protection from trade policies.

[Brainovation]: A majority of businesses want to be competitive and many point to soft – but hard to manage – internal characteristics such as culture, knowledge and creativity as being most important. You have worked with competitive intelligence for many years. In your experience, is it possible to identify some common internal characteristics of truly competitive firms?

[BG]: I know this will sound counter to what consultants supposed to say, but no. I've worked with firms where the culture was totally authoritative and others with open spaces instead of offices and still others with creativity coming out of peoples' ears, and there is NO formula for success. If there was, we all will be successful. All those

“Being competitive is a talent and to a degree a skill.

formulaic books From Great to Incredible (to bankrupt..) are in my opinion selling shaman medicine. I highly recommend people buy a small book by a management professor from IMD –Phil Rosenzweig, called *The Halo effect*. Once you read it, you look at those “Seven Characteristics of Successful and Effective and Good Looking Innovative Companies” with clearer eyes.

Being competitive is a talent and to a degree a skill. Some people are capable of taking in the big picture and designing strategies with third parties in mind without even being aware they are doing it. Every successful entrepreneur *by default* has this talent. I can spot these people in my corporate war games a mile away. They just think differently.

Maintaining success, though, requires some vigilance (call it competitive intelligence) and quite often just luck. Lois Pasteur said, ‘Luck favors the prepared mind’. If this is true, then training people to think about competing rather than just looking inward and executing well should be useful. It doesn’t guarantee great strategies, just like teaching chess doesn’t guarantee creating a Master, but it is a start. Would it make companies more competitive? A definite maybe.

Companies do train their people to understand P&Ls, so shouldn’t they teach a course on “Competing”?

As culture goes, I personally like humble CEOs, but that’s just because I can’t stand pompous people. It doesn’t mean pompous doesn’t win sometime. In short, we don’t know, long lists of benchmarked behaviors and attributes by the large consulting firms notwithstanding. Companies will keep paying the organizational development consultants millions for something which is truly elusive, but then, hey, consultants need to make money, too, right?

[Brainovation]: They certainly do. You have written four major books on competitive intelligence, the latest published in 2009. Do you by any chance have plans for one more?

[BG]: I already have one written. It’s a novel about what if – what if Heaven and Hell are run like a typical government or corporate bureaucracy. Nothing to do with competitive intelligence, though the protagonist is a researcher who finds himself talking to a six-billion year old celestial administrative assistant named Lumiel as he tries to solve a twenty year old crime. All I need is an agent who can see that this manuscript has the potential for a

major blockbuster book and then a film with Steve Carrel and Charlize Theron (my protagonist is dating an angel). Do you know anyone?

[Brainovation]: Uh...not really. Sounds like a very interesting project though. Thank you for sharing your thoughts.

Realizing Creativity

Interview featured in the June 2013 issue of the Brainovation® newsletter



Creativity can be expressed in many different ways. In art and design creativity is at the heart of activities. In business it is a key ingredient in innovation and in complex problem solving. Research has shown that creative contributions primarily rely on expertise, thinking skills and motivation - factors that one would expect to be present in most organizations. It should therefore be relatively easy for businesses to put creativity to work or simply enjoy its benefits, but experience suggests otherwise.

To shed some light on the issues, we have the great pleasure to share a recent conversation about creativity in business organizations with Mr. Thomas Hagbard, owner and CEO of Gothenburg based consulting firm Realize.

iKT: Creativity is often seen as a characteristic of individuals, i.e. something happening in the minds or brains of creative people. In your view, can one also look at creativity as a team characteristic or as a social phenomenon in organizations?

TH: Certainly. It's important to remember that an idea is not a solution but a step towards one. Thoughts and ideas of course occur in the minds of individuals. In a team environment, members stimulate each other and people interactions are absolutely necessary to challenge, further develop and validate new ideas. But for team sessions to be productive it's important

that members agree to some basic rules or establish a contract of behaviour if you will. Think "yes, and..." as the initial response to an idea. That way you level the playing field and create room for those unconventional views that are so important for innovation to happen.

iKT: OK, but given that many large organizations use investment models that actually discriminate against innovation, how should one promote creativity and ensure that the creative effort results in outcomes that are beneficial to the business?

TH: In big companies this can be a bit challenging. Innovation needs to be on the business agenda and there needs to be a way of working with creativity. And don't forget to engage stakeholders early in the process to build awareness and support. To be successful, it's not enough to have creative people in the organization or even have a top leader who promotes innovation. There also needs to be a deliberate and organized effort to stimulate and exploit the creativity of individuals. A good example is the Clay Street project at Procter & Gamble. The widely inclusive innovation jams that have been conducted at several companies such as e.g. IBM and Volvo are also ways of tapping into the creative potential. This may not be for everybody, but there are some ways that almost everyone can benefit from.

iKT: That sounds encouraging. In what ways then can organizations increase the return on their creative effort and have you in your work with clients seen a strong correlation between creativity and certain business outcomes?

TH: I just mentioned some things companies need to do and what some have done. It's also important to have good ways of screening and reviewing ideas to maximize the potential business value of innovation. I have certainly seen cases where creative efforts have resulted in new and profitable solutions and there are numerous positive cases reported in studies. This is not surprising. The problem is that many companies don't really track this very well as their accounting systems are not set up to do so. It can therefore be difficult to validate creative success by numbers. In addition, market success may be the result of many factors other than pure creativity. In general though, I would argue that creative effort - even if many innovations fail - overall results in a positive business outcome.

iKT: You have stated that creativity is not only a state of mind but also a craft involving different techniques. Can you elaborate a bit?

TH: In our own work with clients we try to introduce thinking methods that pave the way for creative insight. One approach involves removing or adding something to a current product or business model, which then forces people to think along new lines. Another is to reframe a problem or bring an entirely new perspective to bear on a business issue.

We also sometimes use idea cards or mind mapping. We use Mindjet's MindManager tool to assist teams with idea management. In particular we find the tool's 2x2 matrices useful to visualize the positioning of ideas. Another important issue is for organizations to keep comprehensive records of their ideas. After all, it can take quite some time before technologies or markets have developed enough to justify the pursuit of a solution.

iKT: Pablo Picasso once described his way of working as "I start with an idea and then it turns into something else". It seems to suggest something basic about the creative process. Do you think business organizations can learn something useful about creativity and creative work from the fields of art or design?

TH: Yes. I believe the creative processes are basically very similar. Bringing in people from the creative fields can obviously be very stimulating in work sessions. Besides, you don't really have to be very knowledgeable about the client's specific products or services in order to ask probing questions. In fact, it's often the novice who asks the simple question that can lead to a creative breakthrough.

Overall, I think that in today's complex and fast changing business environments it may not be possible to manage effectively just by way of traditional plans and processes. It may be better to explore, probe and sense in much the same way an artist goes about creating.

iKT: That's great food for thought. Thank you for taking the time to share your insights.

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Thomas can be reached at hagbard@realize.se and you can read more about Realize at www.realize.se

Technology Innovation

Interview featured in the December 2012 issue of the Brainovation® newsletter



We are very pleased to share a recent conversation about innovation with telecom industry veteran Mr. Mats Andersson. Mats is the head of Huawei's R&D group in Gothenburg, Sweden and has previously worked at Swedish telecom companies Bluetest and Ericsson.

Mats has earned dual degrees from the Chalmers University of Technology in the fields of engineering physics and radio & space science and is also a graduate of the University of Gothenburg.

iKT: Telecom is obviously a hi-tech industry. Would you also say it's a highly innovative industry and what role does innovation play in equipment vendor companies that rely on high volume manufacturing of standardized products?

M.A.: Yes, I would say that telecom is one of the most innovative industries of today. The rapid demand of mobile broadband capacity and the increased number of wireless devices is demanding constant innovation. Equipment vendors have to invent to reduce cost and power consumption of their high volume products which at the same time are required to be about twice as capable every year. This is challenging and stimulating work.

iKT: Innovation can be undertaken in different ways. In a recent interview, Apple's CEO Tim Cook, expressed the view that having a dedicated innovation department or e.g. a VP of innovation is not a sign that a company is particularly focused on innovation, but rather a sign that something is seriously wrong. What's your take on that?

M.A.: I agree that innovation should be everyone's responsibility. You cannot rely on an innovation department to produce the necessary innovations. On the other hand I think it is good to allocate a dedicated budget for research/innovation and encourage in different ways all engineers be part of the company's innovation process.

iKT: Your group has recently announced a collaborative R&D program with the Chalmers University involving antenna designs for micro radio base stations. What do you expect from this collaboration in terms of innovative outcomes?

M.A.: We expect Chalmers University to have time to thoroughly investigate some of our ideas as well as come with new ideas to help us improve performance and reduce the cost per bit from micro radio base stations using new MIMO antenna architectures. The goal is to incorporate the best of these ideas in new products to be released within a few years.

iKT: You have worked in both small, entrepreneurial technology firms and large telecom multinationals. What have you enjoyed most?

M.A.: I have enjoyed both. The best with the small companies is that you have control and very good overview of what you are doing. Decisions to develop new products can be taken very quickly. However, often it takes time to develop the new products because of lack of money and/or resources.

In a large company you have access to many different experts and usually have the resources to develop new products quickly when a decision has been taken. However, the decision process to develop a new product is often long in the large company. There are many layers of management that should be as convinced as you are yourself about the decision to be taken.

iKT: Thank you for taking the time to share your insights.

Knowledge and Expertise

Interview featured in the December 2009 issue of the Brainovation® newsletter



In this issue of Brainovation we are excited to share with you a recent interview we conducted with Dr. Richard McDermott, president of McDermott Consulting and visiting academic fellow at the Henley Business School, UK.

[Brainovation] You are well known for your work with Communities of Practice. You have worked with many organizations and early this decade you co-authored "[Cultivating Communities of Practice](#)" with Etienne Wenger and Bill Snyder. Looking back ten years, how does practice today compare with theory back then?

[Richard McDermott] Over a number of years I have seen that communities focusing primarily on learning have been less successful in the long run than those that have been more directly integrated with the business. In a way one could say that today's community concept is less like an informal helpdesk and more like a deliberately organized collaborative workplace.

In fact, today you can even see companies using communities as an easier, cheaper, quicker and more efficient way of responding to challenges than going through the traditional reorganization.

[Brainovation] You have studied not only communities but how organizations in general work with professional knowledge and expertise. What common challenges have you seen and what management and organizational capabilities do companies need to strengthen in order to get tangible returns on their intangible assets?

[Richard McDermott] Overall, and maybe not surprisingly, the red thread is that knowledge is the primary resource and primary product in many companies; professional service firms, science and technology based businesses, most service industries and increasingly in global manufacturing as coordinating extended value chains becomes more central to their competitive advantage. But most organizations still have a library approach to managing knowledge, making knowledge more easily available to individual professionals. There is an alternative; to organize knowledge in

terms of the impact you want that knowledge to have, such as increasing innovation, enhance decision-making, or increase the expertise of a cadre of professionals.

[Brainovation] Speaking of expertise, you have often emphasized the difference between knowledge and expertise. Can you explain a bit?

[Richard McDermott] Michael Polanyi distinguished between tacit and explicit knowledge. Nonaka made that distinction an everyday concept in knowledge management. It's good as far as it goes. But professional practice really involves four elements. The first is technical knowledge, i.e. the basic science of a profession, how the tools of the profession work, etc. Second is analytic knowledge, which is how we make sense of a situation. A process, for example, is a form of analytic knowledge. It's an interpretation of how the technical knowledge hangs together. Of course, a process is often an interpretation of how things "ought" to work. Real life, especially in the professions, is full of exceptions and varying circumstances. Third is personal know-how. Not agreed upon, deeply rooted in personal experience. Know-how is the tricks you know about the situation. Finally there is skill acquired through practice. Expertise draws on all four. It's when a high level of professional skill combines with a great deal of knowledge that we speak of expertise. You don't consult experts just to get a factual answer, but to put their minds to work on a complex problem. They typically have the ability to improvise within the domain instead of relying only on rules or established practice. It's almost like - given certain cues - experts feel the right answer or right course of action without having to think about it. Recent cognitive science research on expertise confirms this, that expertise is an intuitive ability to improvise. In human experience there is both thoughts or knowledge and the thinking that produces those thoughts. Expertise is the thinking as well as the thoughts.

[Brainovation] Given what you just said, how then can experts best share their expertise with others, if it's possible at all?

[Richard McDermott] Certainly not by telling people what they know out of context. You need to shift the starting point from sharing what the expert knows to developing the expertise of learners. It's a fundamental shift. It involves giving learners the opportunity to practice with guidance from experts. We know how to do this. Individual experts have been doing it on their own for generations. It is how people learn in the arts, sports, and competitive games, like chess. We're using four learning techniques that have proven to be particularly effective: case studies, masterclasses, simulations and cognitive apprenticeships.

These techniques can be engineered to incorporate the principles of effective practice, active thinking, guided feedback, demonstration, exploring options and explaining choices. In other words, with a thoughtful and deliberate effort, organizations can learn the art of sharing expertise.

[Brainovation] Both knowledge and expertise may impact productivity. Peter Drucker once wrote that the biggest management challenge in the 21st century is to significantly increase the productivity of knowledge work. Do you agree with this and how do you see it happening?

[Richard McDermott] I don't know if it's the biggest challenge of all, but I think it is certainly important. How to use global organizations to address global problems, like climate change or globally interdependent economics might be bigger. But putting the burden of organizing, sorting, managing and accessing enterprise knowledge on the users - even with the help of good taxonomies, meta data and easy access to knowledge bases - will most certainly lower their productivity. Managing information itself requires a specific expertise. Some years ago as we shifted from paper to electronic files, many companies let their administrative assistants go. It seemed logical. Professionals were interacting directly with knowledge and generic knowledge management tools seemed to make that easier. But over the last decade the quantity and complexity of information has dramatically increased, overwhelming many professionals and making it nearly impossible for them to manage their own knowledge. Realizing this, one company hired the assistants back, redefined their job as information managers. They are trained, responsible for the accessibility of information and effective.

[Brainovation] Good point. Just one more thing. Can you share with us something about what you are currently doing?

[Richard McDermott] I have shifted the focus of my work from knowledge management to enhancing the impact of enterprise knowledge. This involves four things:

1. Develop effective collaborative networks, communities and self-organizing crowds. For more about this, look for an article that will appear in the March issue of the Harvard Business Review.
2. Increase the rate of developing technical expertise to stave off the negative impact of boomer retirement.
3. Enhance the decision-making of knowledge workers by designing knowledge systems around key decisions. This is proving to be an effective

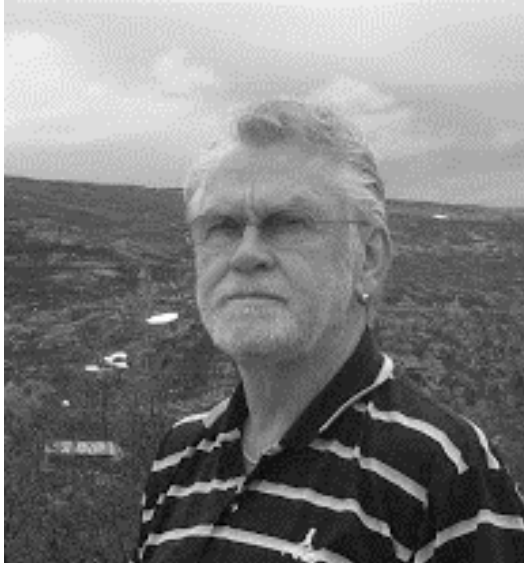
way to make enterprise knowledge useful without increasing the workload or professionals, and

4. Design how we put knowledge together to increase innovation. There is a bit of an art to this but it is a learnable art. These foci are reflected in my website: www.McDermottConsulting.com where you also find my contact information.

[Brainovation] Thank you for sharing your insights.

Managing Technology

Interview featured in the September 2009 issue of the Brainovation® newsletter



As the first in a series of interviews with technology management executives, we are pleased to share with you a recent conversation with Mr. Göran Fröling, former general manager of Montreal based Ericsson Research Canada.

[Brainovation]: You have a great deal of experience both in technology and management. It must be interesting to compare the developments in these two areas over a longer period of time. What is your general view on this?

[Göran Fröling]: We seem to live in an increasingly symbiotic relationship with technology, which has amplified our ability to experience and accomplish. There is great potential in this, but also great responsibility. It is of course easy to see the developments in technology both in telecom, which I am most familiar with, and in other high tech industries. The proliferation of information and communication technologies has obviously been dramatic and easy to observe both in organizations and in society at large. It is not as easy to see the developments and changes that have occurred in management and there are several reasons for this.

The work of managers has of course been greatly impacted by information technology and the product and system technologies they manage have changed, but many fundamental issues in management have remained more or less the same for a long time. Delivering on mandates and maintaining a strong value proposition are still good things to focus on in management. And I'm old enough to have worked without a computer on my desk. Don't get me wrong though, I think management can certainly benefit a great deal from embracing new tools and learning more about itself as a discipline.

[Brainovation]: In telecom, besides the specific technological and market developments that always occur, what are the most significant changes you have seen over the last say 25 years?

[Göran Fröling]: Probably deregulation, open architectures and overall a stronger market pull, particularly in wireless with its phenomenal growth. The internet and new business models have of course also had a very strong impact. Telecom is an innovation based and rather resilient industry, even if it too has had its difficulties including the decline earlier this decade and the current global recession. And there have been casualties. Who would have envisaged e.g. the current situation at Nortel only a few years ago. In fact, it would be interesting to go back 10 years and look at the strategic plans and future scenarios then and compare with the actual situation today. I don't think many companies got it right including even considering an industry meltdown that was just around the corner at the time. There were some growing concerns, but I too didn't quite see it coming.

[Brainovation]: As a result of globalization and competitive pressures, both outsourcing and other forms of open, networked and collaborative approaches have become increasingly popular. Do you see these developments as necessary and beneficial from an R&D perspective?

[Göran Fröling]: In general, probably yes. However, these are complex issues and need to be addressed with a great deal of thought. Companies need to balance benefits and drawbacks and make sure they don't lose the core competencies or competitive strengths they need in the future. Outsourcing may cut cost, but it may also blunt a competitive edge. Open innovation sounds great, but it may not be for everyone. It clearly ties in with strategy.

These are also examples of areas which impact management and emphasize the need to understand both business architecture and inter-organizational relationships.

[Brainovation]: What unique challenges do you see then in managing R&D organizations?

[Göran Fröling]: There is always the risk and uncertainty of investing in new products and services or emerging technologies. Sometimes it may be

obvious what to do, but often it's not so easy to make the right call. And making realistic market commitments requires good resource planning and a robust work process. Managers must be skilled in both strategic and operational management and be able to deal effectively with a wide range of engineering, business and organizational issues. Technology and current projects tend to dominate the agenda, but there must be sufficient room also for new ideas, strategic thinking and learning from outcomes. Maintaining legacy products and systems while developing new technologies is another classical challenge. One could say that R&D management is a combination of general management and technology management. Like a double challenge.

At the same time, R&D work is very rewarding and in engineering there is great satisfaction in solving complex problems and a strong feeling of accomplishment when you see the result of your efforts and when you see that it works.

[Brainovation]: Indeed. In conclusion, do you have any advice for managers and leaders of contemporary R&D organizations?

[Göran Fröling]: I guess the same advice I would give to any manager. Keep an open mind. Don't stop learning just because you occupy a nice corner office. In the midst of product and project issues, try to put the external view before the internal.

Management has authority by default, but it must earn its integrity and one of the responsibilities of management is to assess its own effectiveness. This can be a bit challenging, but I think only then can management undertake its true mission - to increase the return on all assets under its control. Therefore keep asking yourself some very important questions – do I know what needs to be accomplished, am I the right person for the job and am I doing everything I can? If you answer the second question with a no, I commend you for being honest. Answer all three with a yes and chances are you will become, and continue to be, an effective leader.

[Brainovation]: That's good advice. Thank you for your time.

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Göran can be reached at gfroling@gmail.com

Forecasting the future

Interview featured in the April 2009 issue of the Brainovation® newsletter



In this issue of Brainovation we are very pleased to be able to share with our readers a recent conversation about future forecasting with industry foresight analyst and author Adam Gordon.

[Brainovation] We all know how unreliable predictions of the future can be. You recently wrote "[Future Savvy](#)" - a study of future forecasting from the interesting perspective of the consumer of such information. What prompted you to develop this perspective?

[Adam Gordon] Taking the consumer perspective stimulates us to ask the key questions about value that consumers would ask of any product or service: What is this? Why should I care? How can I use it? Is it worth my time and/or money? So the consumer perspective is a thinking device, if you like, that allows me to probe for quality and value in foresight work (including my own).

Also, what is valuable in foresight work has changed. I think we are good at pointing at changing industries and saying, "what was valuable has become commoditized," or "a paradigm shift is required," and so on. Well, this is needed in the foresight field itself. It used to be that the channels of publication were narrow and well-guarded. Nowadays it's super-easy to get ideas on any topic, including forecasts, out there. A million forecasts are just a google away (Google "forecast of X" and you will see the infinite babble of future thinking about X). So we are in a different game, one where forecasts are 10 a penny. What's valuable is being able to assess which forecast to buy into, or whether any forecast is worth factoring into our decision-making.

[Brainovation] With that in mind, attempts have been made to establish future forecasting as a discipline. There are even the inevitable software tools available to help the professional futurologist. Is this futile or are there actually useful models by which one can understand the future, e.g. as a projected

continuation of the past combined with trends and unpredictable discontinuities?

[Adam Gordon] It really comes down to what kind of future forecasting we are talking about. There are many situations characterized by low uncertainty, short time horizons, relatively few variables, that is: narrowly-bounded and well-understood complexity. The evolution of these situations will follow known trends and can be modeled very effectively, so why not? That's the way to go.

The problem comes when people take the software beyond its frame of adequate performance. Situations that have many input factors (including many unknown), complex systems that we don't fully understand, and delays, lags, and thresholds over longer horizons, cannot be predictively modeled - ever - and it is pointless to try. Here nothing and nobody can predict the future. Software is very good at trend extrapolation and sensitivity analysis. It is not good at anticipating inflexion points and discontinuities.

[Brainovation] In many systems and processes, feedback loops can be applied for learning and improvement. Is there something similar in future forecasting, i.e. are we getting better at forecasting or are the possibilities growing and developments accelerating in ways that make it more and more difficult to make reasonably accurate forecasts about the future?

[Adam Gordon] A very interesting question. In my 15 years on the field I have definitely seen improvements in the foresight field. A big part of this is it is much easier to see what other professionals are doing. For example, the Association of Professional Futurists exists specifically to facilitate peer learning. And as a group I think futurists are, by definition, "lifelong learners," so a lot of learning from the best practices around is sought, and new approaches shared, and that all works towards better futures work (which may mean less "forecasting," but at least not dumb forecasting). But, as ever, there is a larger problem stalking us, which is that people in the field have incentives that are not exactly lined up with the goal of good forecasts. Or, put it this way, good doesn't mean accurate. People predict badly because they have incentive to talk about the new and/or the extreme thing. They are not trying to produce good forecasts, they are trying to get attention. I don't mean to single anyone out, but Kurzweil comes to mind. He has an absolutely extreme view of the future that has made him very famous, and very rich, whatever happens including if he turns out to be entirely wrong (which is very likely). I don't think a process feedback loop would make forecasters like this "improve." For them it couldn't be better!

But it's terrible for the field as a whole, of course - an unplugged drain on our credibility.

[Brainovation] Besides reading and understanding forecasts, is there anything an organization can do to develop enough foresight to benefit strategically or guide efforts to innovate and are there any good examples of companies that have been particularly successful in doing so?

[Adam Gordon] I would say reading and understanding forecasts is a small part of what should be done. It should be part of a broader monitoring, scanning function, and that should be just part of a ongoing strategic inquiry.

On the scanning function: to me there is always far too much stress on reading and sorting info - downloading the Web. That's nice as far as it goes but real scanning means getting out there, embracing "learning journeys" into institutions and industries and markets and societies. Only then can one get a feel for what is to come ... what is ready to emerge. The biggest problem of all in foresight work is people think the future is determined by technology change. It never is. Technology is important because it deals the new options (including timing options) but institutions and markets make the choices in what to adopt. The economic, social, and moral choices we make via our institutions and communities is the future.

[Brainovation] Perhaps you would like to offer a small prediction of the future that might interest our readers?

[Adam Gordon] There are many- which to choose? Perhaps a situation where we think we've seen the change, but possibly we haven't really "seen" it in all it's implications: we are going to be living in a genuinely multi-polar political and moral world, where the key new power centers are Asian. Yes, we know this. But what does it really mean. Over the next decade or two Asian institutions, cultures, and mores will come to really influence decisions at all levels. At the moment countries like China and India are more-or-less just fitting into the Western mold, as resource providers or low-cost producers in an existing system. The balance of power is familiar. But this will radically change. Truly Asian agendas will start to surface. We've seen a bit of this. China has been cutting its teeth in Africa, buying unfettered long-term access to raw materials in exchange for infrastructure investment. This injection allows African governments to bypass the IMF money and therefore Western oversight. At risk of oversimplification, the Chinese don't give a toss about democracy or human rights in Africa. They do care about stability. So that's the political agenda in Africa right now:

stability. For now it's "just" Africa in the Chinese sphere of influence, but one can see the principle.

Another example, again just a straw in the wind - is the shift of power in the world of cricket. For over 100 years the game was ruled over by the International Cricket Council in London. Now the headquarters of the ICC are in Mumbai, where the big money is. What's good for English cricket is no more than an afterthought in current administration. We felt these kinds of shifts in the 1980s with Japan, particularly when it bought major US cultural organizations. But then Japan fell off the wagon. China and India are not going to fall off.

[Brainovation] Indeed not. Thank you for sharing your insights.

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To learn more about Adam Gordon's work, please visit www.futuresavvy.net

Managing Innovation

Interview featured in the January 2009 issue of the Brainovation® newsletter



In this issue of Brainovation we are very pleased to be able to share with our readers a recent conversation about innovation with Dr. Alan C. Middleton, Executive Director of the [Schulich Executive Education Centre \(SEEC\)](#) and Assistant Professor of Marketing at the Schulich School of Business, York University in Toronto.

[Brainovation] In international innovation performance benchmarks, Canada consistently rates behind the US, Japan and several EU nations. Is this significant and, in your view, which factors are the most important in making Canadian firms globally competitive through innovation?

[Alan Middleton] I think ratings of innovation performance do matter in the sense that they create perception and therefore may guide reality. Nations that are rated as highly innovative may gain an advantage both in marketing their products, attracting foreign investment or in multinationals deciding to expand their local businesses. On the other hand, most of these reports tend to emphasize R&D investments and product innovation over business and process innovations. Just think of companies like Dell and Toyota. Both are product based businesses that have relied heavily on process innovations. But it is true that Canadian companies are lagging in some areas. There also seems to be a certain lack of awareness in both Canada and the US of what goes on in other parts of the world like Asia and the EU. These regions are very advanced in e.g. ICT applications. There are other sectors in which Canadian companies have been doing particularly well with technological development, but where innovation is less visible. Mining and agriculture are good examples. So while innovation ratings do say something, they certainly don't say everything.

In terms of stimulating innovation, government of course wants to play a role, and they should, but in my opinion there are too many bodies involved. It's fragmented and confusing to the entrepreneur. Also, there is not enough cross fertilization between industries due to insufficient broader networking. Even cluster development, while stimulating innovation and growth, also

tend to keep groups of companies within a particular industry insulated from other industries. I think these are areas in which we need to become more efficient and effective.

[Brainovation] Turning good ideas into good business, i.e. successfully commercializing innovation, can be a tough challenge. What do you feel the key issues are that companies face when trying to move their ideas off the drawing board and into the market?

[Alan Middleton] There are definitely some challenges here. Even though there are notable exceptions like e.g. RIM with their BlackBerry innovation, Canadian companies have traditionally been a lot better at the initial stage of innovation than at commercialization. There is a lot of focus on technology and many startups underestimate the need for quick market introduction and getting access to capital for growth. Innovation is also a lot about persistence. In large companies innovators have to struggle with legacy business and budget constraints and in new venture companies they have to work both with building the business and creating return on risk capital. Simply put, innovation is very much an uphill struggle. In general, Canadian venture capitalists are more cautious than their counterparts south of the border and they also tend to want a closer involvement with the strategies and operations of their portfolio companies. Innovators and technology entrepreneurs need to be aware of this. Also, technology innovations create more opportunities for further innovations in technology and for doing more with technology. As this may invite more false starts, it becomes increasingly important for innovators to develop a good understanding of markets. Many companies are too inward looking and they simply have to develop and maintain a stronger external view of the business. And, quite simply, be more aggressive in marketing.

[Brainovation] Open innovation has attracted considerable attention in recent years. Do you see this as a structural shift or more as another business choice made by individual firms?

[Alan Middleton] Basically I see a certain structural shift here, but most companies are still more comfortable viewing open innovation as a business management option rather than a strategic necessity and I expect this will continue for some time. However, networking is here to stay and firms need to learn how to operate and innovate effectively in networked environments. There are of course issues around intellectual property, but it's not a given anymore that owning and protecting such property is always a business advantage. There is increasing evidence that openness and sharing can both accelerate innovation and create a bigger market. We may see companies

continue to protect their core competencies but at least become increasingly more open with applications.

[Brainovation] Specific techniques such as e.g. the use of prediction markets and real options valuation have been tried in conjunction with innovation. Do you think such techniques will remain niche applications or become more main stream methods in innovation management?

[Alan Middleton] There is always some drive to apply techniques and try to automate business processes including innovation. I believe we will see a continued use of various techniques applied to innovation, but also a continuation of disappointment. Techniques are useful in many ways but the important question is not which technique to use but rather if and where the investment should be made. Even advanced forecasting cannot predict the future, but it can help companies ask the right questions. In particular questions about the business and market environments. I think herein lies a good part of the value of specific techniques.

[Brainovation] What else would you like to emphasize about innovation and innovation management?

[Alan Middleton] Think customer trends and think how what you are doing could provide benefit and value to them. Don't end explorations too early. Be persistent, but when you have a path be rigorous about evaluating its potential and set up clear "go/no go" decision points. Adopt people with two key skills - finance and marketing - as your employees or partners or advisors.

[Brainovation] Good advice. Thank you for sharing your insights.

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Dr. Middleton can be reached at amiddleton@schulich.yorku.ca
Additional information can be found at Schulich's [Centre of Excellence in Innovation Management](#)

Knowledge Management

Interview featured in the February 2008 issue of the Brainovation® newsletter



Brainovation is very excited to present a very thorough interview with Knowledge Management guru, Epistemologist and Educator [Dr. Michael JD Sutton](#). Dr. Sutton is an Assistant Professor at the [Bill and Vieve Gore School of Business, Westminster College](#). Dr. Sutton brings a unique view to Knowledge Management given a very comprehensive career in senior corporate and consulting positions spanning more than three decades. His work has also been recognized with a teaching excellence award from Kent State University.

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**[Brainovation]** Your PhD thesis is titled "Examination of the Historical Sensemaking Processes Representing the Development of Knowledge Management Programs in Universities: Case Studies Associated with an Emergent Discipline." What made you pick this as a research topic?

**[Michael Sutton]** First, let me say, "Whew, what a title!" When trying to focus in on a title for the dissertation I looked about to see how other dissertation had been labeled. Some were short, with meaningless gibberish having nothing to do with KM. Others were twice as long and sounded like something totally impenetrable. And others seemed descriptive.

Titles are chosen today for many research articles, books and other works based upon how Google will find them. I had to include "Knowledge Management," although like many in KM I would more likely choose a moniker more like "Knowledge Mobilization," where, at least when a global search a replace was executed, we could still keep the acronym KM and convey action.

Next I need to convey that this was a qualitative research study, not quantitative. As any researcher will tell you, quantitative studies test hypothesis, work from the top down, i.e., from testing data to findings and

conclusions, and are the generally acceptable mainstream approaches to empirical research. On the other hand qualitative research works from the bottom up, looking for patterns in the data, and eventually suggesting new theory. My title infers the phrase: "Case Studies Associated with an Emergent Discipline" that there may not be many and that KM, itself, is not yet an accepted discipline.

Now, let me actually answer your question. Let me quote from my first chapter:

"Before my journey back to the academy when I launched this investigation, I was a Senior Director in a management consulting firm. I directed a business unit with professionals and staff whose goal was to sell and deliver knowledge management consulting services. At that time I was tasked to make sense of KM and identify the competencies and skills required for my analysts and consultants to be productive at the client site. These professionals needed to develop enough expertise in KM to be useful to the client and justify a worthwhile billable rate-a rather pragmatic business value proposition. The organizations who engaged my teams were interested in learning how KM differed from Management Information Systems (MIS), Information Technology (IT), and Information Management (IM).

Any corporate director faced with figuring out the competencies and skills for upgrading their staff's education and training might simply review the academic and trade journals, websites of professional associations, and relevant university program offerings. It should have been easy to identify the competencies and skills required of a KM professional. However, finding this information in the period of 1995-1999 was not easy. I was faced with a critical obstacle-at that time KM educational programs were virtually nonexistent.

Those programs that existed were not widely marketed or visible. And, most importantly, KM pundits provided inconsistent definitions, promoted ambiguous conceptual frameworks, reported contradictory research results, and could not agree upon an identifiable Body of Knowledge (BOK).

When I decided to return to graduate school in 1999 to begin my doctoral investigation into KM education, I started my study with a simple observation: KM educational programs were scarce. By 2002 I noticed that a significant range of distinct KM-related degrees and credentials were being offered. This situation spawned my primary research question: How did the academic KM program designers make sense of the emerging field of KM in order to create a program for conveying learning about this new phenomenon called 'knowledge management?' In fact, it was the warrant

proposed by Dunn and Hackney (2000) and bolstered by numerous other researchers that helped me consider (IT), and Information Management (IM)."

**[Brainovation]** Can you share with our readers some of the key findings from your research?

**[Michael Sutton]** Again, responding with a quote from my conclusion and recommendation chapter will help illustrate and summarize my findings:

"The emergent field of KM is broad, pervasive, multi-faceted, and is often described as interdisciplinary. A new-found interest in educating academics, practitioners, and professionals about KM has grown rapidly in the last decade as interest in the emerging knowledge economy and in KM itself has increased. Many institutions of higher learning and professional organizations are launching new KM programs to meet the demand in the marketplace for KM-related skills. A major challenge for KM programs is the heterogeneous mosaic of topics offered.

The institutions were confronted with an emerging field that lacked academic rigour, integrated inconsistent definitions and ambiguous conceptual frameworks, and encompassed pundits and experts with contradictory opinions. Through self-learning, motivation, passion, and perseverance, the thought leaders and team members of the two institutions made sense of the emerging field of KM.

The KM programs were conceived from multiple perspectives: techno-centric, organizational-centric, people-centric, and process-centric. These perspectives reflected the fragmented nature of the KM field as well as the backgrounds and experiences of the thought leaders, team members, and Advisory Board members. The programs also reflected different underlying institutional strategies associated with the KM topic: a leadership and sustainability approach, a KM approach, a LIS [Library and Information Science] approach, and a MBA approach with a KM concentration.

... neither institution had much of an opportunity to capitalize upon previous knowledge about KM program design and development, which was virtually unavailable. Neither university appeared to have been aware of the other university's KM initiative during the design and development stages. ... The separate curricula exhibited both heterogeneous and homogenous characteristics in the course topics and learning outcomes, but the heterogeneous nature of the programs appeared to prevail. ...

The trigger event for a KM program at both institutions was a business driver

to generate additional revenue by creating a unique, innovative educational offering. The new educational programs were envisioned to appeal to the knowledge workers and professionals involved in the high-tech industry before the advent of the dot-com bust of 1999."

Interestingly, neither program, on the surface, seemed to be about the pursuit or discovery of new knowledge about an emerging field called KM. Both seemed to be built upon the institutional needs for new revenue streams. Yet both uncovered distinctively different perspectives on how KM should be taught and contributed significantly to the definition of this new, emerging field, called KM.

**[Brainovation]** What is the difference between epistemology and knowledge management?

**[Michael Sutton]** Funny you should ask that question. I have a very early background in theology and philosophy, and this was one of the pressing questions I tried to grapple with when I returned to the academy from 35+ years in business and management. In order to describe differences I need to first attempt to define these two fields. Let's start with epistemology, it is the theory of knowledge and most epistemologists attempt to answer one or more of the three following questions:

*What is knowledge?*

*What can we know?*

*How do we know what we know?*

Philosophers, metaphysicians, and theologians over the last 10,000 years have all tried to take a stab at these questions. Are we any closer to knowing these answers, not if we depend on epistemology to answer these questions.

Knowledge Management, on the other hand, is also as difficult to define as the theory of knowledge; but also bases much of its foundation on epistemology. My initial review of the literature turned up over 100 definitions of KM, and this problem has been supported by other researchers such as Dr. Kim Dalkir and McGill University. Most academics as well as practitioners agree that the term was poorly defined and ambiguously described.

In order to carry out my study I felt that an acceptable definition of knowledge management must encompass the concept of knowledge and the

valuation associated with intellectual assets. I synthesized three widely accepted definitions I discovered during my research (Dalkir, 2005, p. 3; Becerra-Fernandez, Gonzalez, & Sabherwal, 2004, p. 30; Bennet & Bennet, 2004, p. 227) into one definition for this study:

Knowledge Management is the deliberate and systematic framework encompassing communications, people, processes, structure, and technologies of an organization in order to produce sustainable competitive advantage or long term high performance for the organization.

The value and utility in the management of knowledge accrues to the organization through innovation, reuse, and organizational learning.

The framework is operationalized through the convergence of personal, group, and enterprise action on a knowledge lifecycle.

The knowledge lifecycle integrates the identification, creation, acquisition, capture, securing, production, publication, sharing, leveraging, and eventual disposal of knowledge resources and assets within an organizational memory.

The organizational memory may be found within the tacit memories of the knowledge workers or within the explicit codification of knowledge stored in different information and knowledge systems.

Ask anyone else in KM and you will probably get a totally different definition for KM. That is the challenge of an emerging field. Regardless, in comparing epistemology and knowledge management the most critical difference I can suggest is that epistemology is a field that studies the theory of knowledge, while KM is an emerging field, not yet stabilized, that relies upon epistemology to help it interpret how knowledge might be used in intellectual pursuit, education, business, and the field of management.

**[Brainovation]** How is knowledge management being taught in business schools and university programs today and how does enrolling in knowledge management classes prepare students for entering the workforce?

**[Michael Sutton]** Another very perplexing, but interesting question. KM is being taught in a variety of ways and with a variety of methods. A formal shared knowledge repository containing detailed elements of different KM programs would be advantageous to new KM program designers. No such repository exists, and most institutions are very jealous about guarding their intellectual property about teaching KM. The competitive nature of these programs works against explicit co-operation.

Back in 2002 I identified 79 different programs being taught in 49 different global institutions. I might suggest that number may have doubled, yet such an increase in numbers would only be reflected in Europe, China, Southeast Asia, Japan, Africa, and Australia/New Zealand. In North America, (including Canada, USA, and Mexico), the number of institutions offering KM educational programs seem to be dwindling. In other nations there is significant investment in knowledge industries and the creation of knowledge economies. But, in North America such investment appears to have stagnated.

A dangerous trend I have seen develop is the attempt to try and teach KM in online courses. It is my firm belief that KM cannot be taught in electronic classrooms (given the existing web-based technology). KM, by its very nature, requires a constructivist learning philosophy. Constructivist learning appears to take place best in a group setting or in a person-to-person mediated interaction. A project-based or competency-based classroom setting, or more appropriately a seminar setting, permits the student to develop a line of question and responses to test the validity of the truth claims made by the instructor.

KM cannot be learned from pure lectures. My educational research and experience teaching KM courses suggests that a highly interactive Socratic method, with group-based discussions, cases, and projects, creates the highest return on learning (ROL) for the student. In this "in person" environment interaction can be spontaneous and the instructor can tell by body language, semiotic poses, and personal disposition whether the learner is engaged or in doubt about a concept.

The construction of knowledge and learning about KM flows from the group interaction between both peers and the well-experienced instructor. A hybrid program has much higher educational value for the KM learner if some of the project-based work is spawned and submitted within a web-based environment, but augmented by obligatory, in-person residencies on campus. The residencies could encompass a suite of weekend "retreats" over a year or a 1-3 week residency where more group and team-based work, leadership exercises, and in person communication could take place.

I do not wish to sound too traditional or old fashioned, but my experience teaching KM has helped me to identify a number of critical success factors and key performance indicators for successful learning of KM. My research has complemented my classroom observations. The emerging field of KM cannot be learned by rote classroom lecture or strict on-line attendance to an electronic classroom of pre-recorded presentations and personal exercises.

Learning in KM comes through person-to-person, face-to-face interaction. We would not expect surgeons to learn how to do surgery procedures strictly by watching a video, listening to a lecture, or downloading a presentation and answering questions. Surgeons must employ experiential methods of learning-by-doing, and thus be able to learn both from their successes and their mistakes.

Finally, I even question whether KM should be taught in institutions of higher education where most of the academics have very little or no experience in the application of KM in the workplace. I would suggest that scholarly practitioners -- (individuals with business and management experience who have achieved either a Master's or a PhD) -- might make the best instructors in KM. Academic instructors would be applicable in Tier 1 research universities where PhDs are the goal. But I sincerely believe that all other bachelor's and master's courses where KM is a primary theme should be taught by scholarly practitioners, those who have decided to return to the academy and acquire the rigour and discipline of a Master's, but preferably a Doctorate degree. Students would benefit most from individuals who have done KM in a pragmatic, restrictive business setting.

**[Brainovation]** In the field of knowledge management, what interactions do you typically see between academia and industry?

**[Michael Sutton]** Often KM programs are developed with advice from industry and business, but fall short incorporating KM projects into the curricula done within an actual business workplace. The programs are often too academic and theoretical, instead of being very practical and pragmatic. This is normally a reflection of the lack of practical business experience in the professors who teach KM. Those academics who have never worked in business or industry have a very difficult time identifying the competencies necessary for a learner to take KM into the workplace. Thus, their students embark on some very interesting research projects, but very few business projects where KM is applied pragmatically to a business problem. This is a significant shortcoming of some institutions that purport to teach KM.

Moreover, KM is a cross-disciplinary field and should never be taught in isolation from business, education, commerce, computer science, psychology, and organizational communications. Regretfully, this is a shortcoming in a lot of KM education and courses.

**[Brainovation]** If you were to pick three aspects of knowledge management as most critical for its successful application, what would they be?



**[Michael Sutton]** The three critical aspects of KM application design, development, and deployment, in my humble opinion, are: passion, executive sponsorship, and collaboration. The team must be strongly led by a passionate leader, whose members all display a similar level of passion. The initiative needs sincere, authentic, and long term support by an executive whose vision far outweighs the accounting mind set of strict cost/benefit analysis and ROI. And, finally, no KM initiative has ever been successful with team behaviour that results in genuine collaboration and renewed team spirit.

**[Brainovation]** Thank you so much for your time.

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Should you have feedback or questions, Dr. Sutton [looks forward to your comments](#).

# Intellectual Capital

*Interview featured in the November 2007 issue of the Brainovation® newsletter*



Brainovation is extremely pleased to provide you insights from global experts. This month we present Intellectual Capital guru and former "Brain of the Year" winner Professor Leif Edvinsson. Leif has been Vice President and the world's first Corporate Director of Intellectual Capital at Skandia of Stockholm, Sweden and has held the world's first professorship on Intellectual Capital at Lund University, Sweden since 2000.

If you are interested in contacting Leif, he has provided a contact email for Brainovation readers:  
leif.edvinsson @ unic.net

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[Brainovation] You are probably best known for your pioneering work on intellectual capital at Swedish financial services company Skandia and for the "brain of the year" award you received in 1998. What have you been focusing on more recently?

[Leif Edvinsson] It is now almost 10 years since I was awarded Brain of the Year in 1998. It has been very exciting, stimulating and challenging years. At that time I was mostly focused on Skandia and the IC, Intellectual Capital, for enterprises. At that time we had also started the world's first Future Center at Skandia. Today there are more than 20+ such established

Future Centers in the World (and more to come), with which I am connected, among others through a European Commission sponsored project. Today my work has grown into IC of Cities, IC of nations and Regions as well as IC for Science Organizations. See among others www.the-new-club-of-paris.org I am doing that as partner in several organizations and as Board Director, see among others www.cmm.ki.se and www.intellectualcapital.se , www.wissenskapital.info

Another recent very successful diffusion project by the European Commission, in which I am involved, is called **InCAs**, short for Intellectual Capital Statements. This is based on the German Wissensbilanz model, now being prototyped with SMEs in Poland, France, Slovenia and Spain among others.

I have also been appointed as the world's first professor of IC at the Lund University in Sweden and recently also at the Hong Kong Polytechnic University.

[Brainovation] A lot has been said and written about the knowledge economy. What do you see as the key characteristics of the present economy and how is it impacting the organization and management of business?

[Leif Edvinsson] The knowledge economy is impacting both business and society. See the website for the New Club of Paris, which is focused on this key question. It has also been looking into a very interesting report from the US Federal Reserve together with the University of Maryland. It resulted in an article in 2006 by Business Week, with the headline [Unmasking the Economy](#)

[Brainovation] Peter Drucker once said that the enterprise of the future will be held together not by ownership but by strategy. It seems that globalization, online communications, outsourcing and off-shoring are creating the conditions for truly virtual firms and global networked enterprises to emerge. At the same time we see efforts to concentrate in knowledge intensive local industry clusters. What is your view on these developments and how they determine the strategies of individual enterprises?

[Leif Edvinsson] Peter Drucker was very right in his statement that organizations will be kept together by strategy. This can be refined even further to say that the glue is the Culture, Values and Networks (or in the taxonomy of IC - Relational Capital). So therefore we need to develop the maps of those intangible dimensions as drivers for the financial capital

economy. See among others the website for CMM and the Network impact between Scientists.

[Brainovation] Cognitive psychologists argue that it generally takes about 10 years to develop expertise in a professional field. With diminishing loyalty and shorter employment tenures within the professional workforce, how are companies best ensuring that they develop and retain business critical knowledge and deep domain expertise?

[Leif Edvinsson] It is very similar to develop world class whether it is enterprise or Olympics - the average time to get to that Olympic medal is estimated to take close to 15 years of training. During that time the leadership should focus on the context for the talents, i.e. culture, values and networks. In Canada, Hubert Saint-Onge has done excellent work on this conducive role.

[Brainovation] Sweden and the other Nordic countries are consistently rated as innovation leaders. Is this primarily because their domestic markets are small requiring their industries to be globally competitive or are there other factors involved?

[Leif Edvinsson] Sweden and other Nordic Countries are top ranked as IC of Nations. I think this has something to do with the small size, density of talents and the values. See the Swedish position in a forthcoming article on IC of Nations in [Journal of Intellectual Capital](#), as well as the values position in [World Values Survey](#).

[Brainovation] Thank you

Competitive Intelligence

Interview featured in the October 2007 issue of the Brainovation® newsletter



Brainovation is very excited to present an interview with Competitive Intelligence guru Dr. Ben Gilad. Dr. Gilad is the founder of the [Academy of Competitive Intelligence](#). Formerly he was a strategy professor at Rutgers University School of Management and is a renowned management educator. Dr. Gilad is considered a pioneer of competitive intelligence theory and practice in the US. The first to popularize the corporate CI unit, war gaming methodology and the strategic early warning process, Gilad's

methodology and models are used by almost every consultant and practitioner in the CI field today.

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**[Brainovation]** It's been over 10 years since you published your groundbreaking book [Business Blindspots](#) and you have worked with many organizations since then. From a Competitive Intelligence (CI) perspective, and over the years, what developments have you seen concerning the production and use of intelligence in organizations?

**[Ben Gilad]** Calling executives blind is not really groundbreaking, but thank you, Anders. I wish I was that good. Barbara Tuchman in her 1985 groundbreaking book, [The March of Folly: From Troy to Vietnam](#), showed how leaders can get completely and utterly blind sided and stick to the wrong strategy until it ends up in a disaster. I just applied the paradigm to business and gave it some more research backing. Since I wrote the book I have seen CI becoming institutionalized in almost all of the Fortune 500 companies in the US and many in Europe (Asia is still lagging), but the production and use of intelligence has been fully accepted mostly at the product marketing level. I have not seen CI making big strides in the realm of blindsided executives. Not because CI can't, but because it hardly ever makes it to the top. Instead, the average tenure of CEOs in the US keeps falling (I think now it is at all time low of 3 years). They pay the price of their biased view of the competitive reality but still do not understand the need for intelligence to give them a reality check. What I found out in recent years is a growing body of neuroscience research showing how people can fool themselves about reality to the point where they believe that what they wish will actually happen (called motivated cognition), and a growing

body of research showing top executives suffer more from that biased cognition than lower level managers as they rise to the top. Which should make CI even more valuable, right? Ahaa.

**[Brainovation]** CI is obviously helping individual businesses survive and compete. Have you seen cases where CI has also been successfully executed in extended enterprise environments or in industry clusters?

**[Ben Gilad]** That's an interesting question and I am not sure how to answer it. Can a model be developed for sharing intelligence across a cluster or extended enterprise - customers, suppliers, and business? CI is at its core a capability whose role is to find the advantage for its master. In other words, you may not want customers or suppliers to have the same insights as you do, because that will raise their bargaining power with you. However, some aspects of industry evolution may be "sharable" as in a joint five-force analysis exercise. When I run a war game, I at times invite customers or suppliers to take part in a portion of it, where industry evolution is discussed, so enterprises and customers develop a shared view of the future. But at a certain point, I politely escort them to the door, as competitive advantage comes from gaining an advantage, not from sharing it, right?

**[Brainovation]** Do you see a particular role for CI in innovation and emerging technology investments?

**[Ben Gilad]** Definitely, and it is not what many "techies" think. There is a "branch" of CI known as Competitive Technology Intelligence (CTI) which focuses on monitoring emerging technologies and innovations. I personally do not believe in CTI, I only believe in CI. Competitive intelligence includes a technology component, as in "What technologies are out there that can become Substitutes?" or "What technologies are acquired by competitors which will give the competitor a more than a transient advantage with customers, and why exactly?" etc. But technical intelligence which is detached from the business context in my view is not very useful.

A new role of CI in identifying opportunities (including innovations which promise to be an opportunity) has been advanced in recent years by Orit Gadish of the consulting firm Bain & Co. In this model, intelligence on your industry's value chain can be used to identify profit pools, and where your company can move to capture more of the industry's profit. We now teach a course on this new CI tool at our Academy of Competitive Intelligence.

Now if your question is in regard to using CI at the VC level, or the PE level, or by Hedge funds - forget it. Those guys who play with someone else's money wouldn't know what CI is if it hits them on the head. Their model is

"if one in 10 investments succeeds I am going to be rich", and in the meantime, what they do to decide which company and which technology is business worthy is a big black box, which one of those days will come back and bite many of their investors in a soft part of their body.

**[Brainovation]** You have done some pioneering work on early warning systems. In business, is there any fundamental difference between early warning and competitive intelligence?

**[Ben Gilad]** Yes. EW is strategic only, at the executive committee level. It addresses long term strategic threats which can bring the whole business model down. The organization of the process is different - it does not depend so much on professional work of CI analysts as the organization-wide cooperation of critical gatekeepers. It uses scenario work, while CI uses war gaming. So skills, tools, and organization are different. Still, my CI people always play a pivotal role in a SEW.

**[Brainovation]** What do you see as the most challenging issues for CI today and for firms competing globally?

**[Ben Gilad]** The Two Cs: China, and Corruption.

**[Brainovation]** Thank you so much for your time.

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