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# Sustaining Innovation

## by TONI NADIG

I've been asked by the organisers of this event to speak about the subject of change management. I can imagine that a few of you in the audience have had experience with this ,bugaboo' called change. It's certainly nothing new, in fact it's become a standard companion in most industry sectors. With a constant metamorphosis in external environments around us there is a real and pressing need to adjust our organisations, their structures and resources to changing conditions. And then to change again. And again.

You may experience this in the growing amount of new books published each year, in constantly changing database requirements or new web technologies. There is less and less time and people to effectively manage these changes. As a psychologist, I learned over years of experience in clinical situations that individuals experience the change process as being painful. How does that saying go? ,No Pain, No Gain'?

And working now with large organisations, doing various kinds of psychological assessments, experience has show me that individuals often look upon change as something painful. My question is: Does it have to be that way? Before I answer that, let me say that Mr. Barth was very specific when he asked me to talk about change management. His request was: ,How do you maintain motivation in your ranks, that is to say, how do you instill a spirit of renewal in the minds and the hearts – and the behaviours – of your people? How do you perpetuate innovation?' That's no small order.

I do believe that it is possible to maintain a culture of innovation. I'd like to suggest, however, that the fundamental change first has to take place within us, in our attitudes and mindsets. When that happens, the promised land may indeed come into view. There has to be change in our attitudes and mindsets to accompany any movement towards sustaining innovation.

Today I'd like to support this theme by re-visiting some principles we may already have learned about organisational life. Please understand I don't have a secret recipe on change. I don't think there is one. However, if we get the

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basics right, we can create conditions to allow change and innovation to happen.

An important goal I want to keep in mind today is: that people in organisations have to share a common sense of purpose, a similar vision, and have the experience that they themselves are ultimately responsible for change and innovation. For leadership this becomes a communication and behavioural challenge.

In my presentation I'd like to suggest that history repeats itself, not only in the longer cycles of the world's economy, but also in organisations. Cycles have an upward moving curve, and they have a downward moving curve. But one does not necessarily have to ride the downside of each cycle, and we will look at a couple of useful tools to better manage change cycles.

One is create a new upward curve of innovation before the old one reaches its peak, and the other is a standard method of analysis applied to the individual as well as the organisation, to identify how and when to start new innovation curves. And, I'd like to emphasise the practice of project-based disciplines, as well as methods for stimulating group dialogue, and ultimately spurring on innovation from within the organisation.

# Kondratieff

Let us then begin with the Kondratieff Cycle. You may well know about the Russian economist Nikolai Dmytriyevich Kondratieff, who worked in the Agricultural Academy and Business Research Institute in Moscow. And his theory of long waves in major economies of his time. One interesting note about Kondratieff – unfortunately, he was banished and died a broken man in the Gulag, after having suggested to his communist masters that there was an inherent self-perpetuating mechanism in capitalism.

But his theory was taken up by the likes of Schumpeter, who defined a fourphase cycle which you can see from this slide. It consisted, first, of a general economic expansion, called ,Prosperity', initiated by an entrepreneur or entrepreneurs of exceptional ability, whose innovations made immense profits and led the way for a cluster of innovations.

The second phase Schumpeter termed ,Recession', which was part of longer cycle in which the potential gains from the cluster of innovations had been exhausted. Then, there is a third phase called ,Depression', when the excess

and non-innovative capacity in the economy shrinks through liquidations and bankruptcies. This issues in a movement towards a new state of equilibrium. Finally the basis of the fourth phase, or ,Revival', as Schumpeter put it, is then laid. This is when, once again, particularly innovative entrepreneurs have begun to lay the groundwork for the next phase of prosperity.

Looking briefly at several examples of Kondratieff cycles from the past, we can see how innovations in the 1800s such as the steam locomotive and steel production, and in the present century the automobile, fossil fuels and synthetic materials unleashed broad economic expansions.

What were sentiments like at the turn of the century 100 years ago? Well, with regard to attitudes about the state of change and the future, it was not all that much different today. Technological advances apparently had turned the world into a ,boiling pot' of change, according to a member of a technical institute of Berlin in 1899. At a merchants convention of the same year it was remarked that ,probably no other century had produced such an excellerating developments in all parts of life as the 19<sup>th</sup> century.

The turn of the last century was also a time of nervous excitement, fear and new psychosomatic diseases, due to what was referred to as the extreme competitive pressures between nations. This is mimicked today in current fears of globalisation, of the Euro, of just keeping up with the pace of change created by the computer and telecommunications.

While it appears as though we are captives riding along these cycles, I want to suggest a way of beating this game. That there are ways of avoiding each downside. Let's look at the curve, this time with a new twist.

The curve that we are looking at, starting in a trough, followed by a steep upward phase, then faltering after a peak, and finally a waning – is called a Sigmoid Curve. Business consultant Charles Handy wrote in The Age of Paradox that the sigmoid curve sums up the story of life itself. Not only does it apply to Kondratieff cycles, but also to the life cycles nations, organisations, products and, to our own individual lives. Handy says that innovation can be sustained, that it is possible to start a new sigmoid curve before the old one descends. In the slide you can see this illustrated as the line dips down at point A, and a new cycle begins.

All you have to do is to start the new curve while there is still enough time, energy and resources to manage the new curve through the initial exploration and re-orientation phase. Sounds simple enough. The problem is, we sometimes don't recognise or act upon the need for change until it's too late.

And the response is then to replace the old system and people with new ones, because they are still focused on the old curve, because resources are depleted and energies are low.

Organisations increasingly recognise the need to start new innovation curves. That's good news, and it's probably why I was asked to speak about the subject today. But if you look into the organisations trying to beat the downside of sigmoid curve you may find that they are places of great confusion. Because management must simultaneously continue the old curves, while giving necessary support to new ideas or new people.

Managing this change process is a difficult balancing act. It's hard enough to recognise early the need for change, but probably most difficult of all is the ,Art of Letting Go'. Just like in personal growth processes, managers in organisations have to learn how to let go of old versions of themselves. I would like to repeat my statement from the beginning – that fundamental change first has to take place within us, in our attitudes and mindsets.

To do this, we have to develop the skill of looking objectively in two directions. First, to clearly observe the external environment, and assess its challenges. And, to the person within us.

The assessment tools my firm provides help organisations do this analysis of individuals, but individuals themselves also have to develop the ability to look objectively at their mental models, their feelings and beliefs.

The next step, probably the most critical of all, is to envision new models of behaviour and then to live them in your day-to-day activities. Yes here comes the difficult part, because the environment around us supports the old behaviours and often opposes the new. Let's take a look at what could be models of the old and the new.

A lot has been written in business literature about the New Economy and the New Manager required to make the structural, process and technological changes work successfully. It's also been maintained that you can't put new wine in old wine skins, and expect to be a success in the New Economy. Managers have to let go of their traditional command-and-control styles and embrace ones, it has been said.

Take a look at this slide, which juxtaposes two different mindsets. And two different kinds of organisations. This list is from Geoffrey James, a change Consultant active in the computer industry. He interviewed executive management of the world's leading computer companies to make these claims. James says there is a traditional culture, basically one of command-and-control, and also, a new culture practised by the new electronic elite.

		Traditional		New
Business	=	Battlefield	or	Ecosystem
Corporation	=	Machine	or	Community
Management	=	Control	or	Service
Employee	=	Child	or	Peer
Motivation	=	Fear	or	Vision
Change	=	Pain	or	Growth

The top category is Business. James suggests the traditional mindset is that business is a series of conflicts amongst companies, conflicts amongst groups in organisations and amongst individuals in groups; and by extension, the conflicts continue among customers and vendors. The electronic elite, he says, sees the world as an ecosystem made up of symbiotic relationships formed to exploit market niches. Diversity and partnering with competitors are here the most important characteristics to have.

Or let us look at the category ,Management'. James contends that the real job of the traditional manager is to control employee behaviour – and employees who disagree with a manager or refuse to do something are insubordinate and dangerous. On the Electronic Elite side, a manager's job is to set a direction and obtain the resources employees need to do their work. Managers ,lead' instead of ,run' the organisation. Dissent is encouraged so long as it resolves itself with creative ideas, and James terms the management function as service.

I would like to enlarge on the idea of the Ecosystem. I believe it is one important intellectual model to digest and a key to developing new behaviours and an environment for innovation.

Some of you may be familiar with the research on feedback-systems done during World War II, and the work on what has been called ,systems thinking'. In it, organisations are conceived of as whole systems, or even as organisms by some of the theory's more passionate believers. You may be familiar with Peter Senge's book, The Fifth Discipline, which popularised these ideas in the global business arena during the early 1990's.

I want to read a statement by a recent proponent of this idea, Kevin Kelly, the executive editor of Wired Magazine, who dramatically characterises the nature the challenge. In his book, Out of Control, he writes:

"The world of our own making has become so complicated that we must turn to the world of the born to understand how to manage it. That is, the more mechanical we make our fabricated environment, the more biological it will eventually have to be if it is to work at all. Our

future is technological; but it will not be a world of gray steel. Rather our technological future is headed toward a neo-biological civilisation."

He suggests that man-made things like the Internet or the global financial system are behaving more lifelike, and, at the same time, life is becoming more engineered, (just think of the food- and pharmaceutical industries).

Or let us consider your profession. You are an international group of librarians, whose world is comprised of hundreds of thousands of books, and perhaps millions of possible electronic links to information and knowledge in all the other libraries and databases on this planet. Given today's technologies, it's easy to imagine in the-not-too-distant-future one immense linked information source. In what ways might that portend change in your world? Or in the lives of library users?

Does it mean change in their information seeking behaviour? Or where they will go looking? And if you want to respond to evolving information needs, what sort of changes will be required to fulfil them?

I'd like to present some possible responses to these challenging questions. And to do so, I will use the Holistic metaphor as a rallying cry. It is but one model among others, but one that I believe has a special power to motivate minds and hearts in organisation, if it is communicated and demonstrated with true conviction.

The logic goes something like this: If change is constant, it would seem a logical need to regularly analyse the changing environment. But because of the overwhelming scale and complexity of the changing world system, it is too great a task for isolated individuals or groups. We have to bring in as many participants of the system as possible to understand and change it. The more brainpower focused on the task of analysis, the better.

The kind of analysis I'm suggesting is essentially a discipline of dialogue. I'll repeat, it is a discipline of dialogue. And it should be practised by a larger number of people than is usually the case in so-called strategic analysis. By having the eyes and ears of your organisation scan the environment according to certain guidelines you set, and using a simple SWOT analysis, you can develop the habit of reassessing change needs.

Give it only as much structure as is needed to develop strategic dialogue as an organisational behaviour. The tool should be kept simple and practical enough so that everyone can learn to contribute.

I've been very theoretical for the last few minutes, so I'd like to return to my previous statement that change has to first come from within us. Here, I believe the dictum is simply this: Know Thyself.

What can I do personally? Well, I can also do a personal SWOT analysis to determine my own strengths and weaknesses. In our psychological assessments we have often noticed that successful managers know themselves well – they know what they do well and they usually enjoy what they do. If my personal assessment is realistic, then I know what gaps I have to fill. It is simply recognising what I have to change. And if I am honest with myself and with my staff, they will be much more likely to offer their loyalty. It is a basic fact of leadership.

So, what might it mean for me as a person with managerial responsibilities in a library? Let us say we have done an external analysis and determined that James' ideas of ,Community' and ,Vision' are missing in the organisation. My self analysis includes personal questions like: how has my behaviour contributed to present conditions? What sort of behaviours are required to reach our goals? What do I have to do differently, what do I have to learn to reach those goals? And does this also have implications for my staff?

Important to keep in mind that the external- and personal self-analysis are closely interrelated.

Now another issue I'd like to mention is organisational structure. It is often said that flexibility is a key success factor today and I am sure we have all heard about the project-based organisation. The ex-McKinsey consultant and writer Tom Peters is paid tens of thousands of dollars to tell us that projectsprojects-projects are the way to salvation.

The functional-line organisation has received a lot of criticism but keeps hanging on. Each person's job is to contribute to one functional unit, and this, it is said, can lead to a ,stovepipe mentality' which hinders cross-functional communication and co-operation.

For the last 15 years or so, a project-based, multifunctional team approach has been used effectively in some manufacturing industries, and more recently there have been attempts to adapt it to services. Functional leaders allot their specialists to a project team led by a project manager who reports to top management.

There are many attempts to develop multifunctional project teams and there are many pitfalls. Today consultants are often hired to help facilitate the

transition process to this way of working. And project managers are often at their wits end because the traditional glue that held organisations together, keeps sticking. There is a very practical book I recommend by Christopher Meyer, called Fast Cycle Time, which provides a realistic and thorough description of really how to build a project-based organisation.

One more subject before we go into our break out sessions – and that is the subject of group dialogue.

Earlier I said it was important to bring in as many participants of the system as possible if you want to talk about changing it. For example, so that functional managers will see why it is so important to give co-operation to project teams – and to have a forum in which to express their real concerns about losing responsibility.

One such tool is the ,Future Search Conference', or total systems work. This form of organisation-wide dialogue has existed in different forms since the 1940s. Future Searches bring everybody who has a stake in a system into a conference-like setting for several days to scan the whole system, and not just bits and pieces.

The goal, as Marvin Weisbord has written in his book, Finding Common Ground, is to bring all the pieces of a complex puzzle together in order to create a shared view, the starting place for which is our joint relationship to the wider world. Total systems work can be a powerful antidote for bureaucratic and closed systems, fragmentation and ad hoc problem solving. Utilised, say once yearly, with a skilled facilitator, it can instill an organisation with a potent dose of Holism.

There is a more or less standard technique used at such events to generate extraordinary dialogue and I would like to show that to you now. It is very simple, basically gathering diverse views that usually don't have the chance of co-existing in the same room.

## Extraordinary Conversation

- 1. Clarify Purpose (navigating beacon, create focus)
- 2. Gather Diverse Perspectives
- 3. Build Shared Understanding
- 4. Connect Options
- 5. Generate Dialogue for Action

This method is beautifully described in Robert Hargrove's book, Mastering the Art of Creative Collaboration, and can be used in a small meeting or in a Search Conference with several hundred people.

The important point to remember is that creative breakthroughs and innovation are much more likely to happen when diversity is encouraged, and therefore the innovation manager has to learn how to grow such breeding grounds.

So, till now I have done most of the work. Now it's your turn. We're going to have a break out session where you will create a Roadmap for Growing an Innovation Environment. I've created a template here that will give us six teams, each of which is asked to pool your ideas on your chosen category, and to work for some sort of shared understanding. You will then present your findings to the whole group.

## Roadmap to Innovation

- 1. Organisational Requirements
- 2. Role of Knowledge
- 3. Work Methods
- 4. Skill Requirements
- 5. Communication
- 6. Reward System

The picture painted by Tom Peters of the fast and flexible project-based organisation is essentially one of an adaptable-learning-and-information-processing-organism. There is an impermanent (and therefore changing) network structure, there is the basically intangible value of ,knowledge' that makes the paid-for services worth paying for, and there are individuals and teams who are rewarded for processing the demands for information and for learning better and faster ways of doing so.

Perhaps this presentation as well as your interactions in the breakout session have given you food for thought about sustaining innovation in your area. I would hope that each of you works on a vision for change. It is a big challenge for us all, but it is one that can be met by applying some fundamental principles I mentioned – that we first have to recognise what needs changing within ourselves before the organisation will change; that innovation requires a special, supportive environment; and that more people

have to be involved in a group process of dialogue about a shared future, for it to spread. I thank you very much for being able to speak to you today.

## References

Handy, Charles; The Age of Paradox, Harvard Business School Press.

Hargrove, Robert; Mastering the Art of Creative Collaboration, McGraw Hill.

James, Geoffrey; Giant Killers, Orion Business Books.

Kelly, Kevin; Out of Control, Perseus Books.

Meyer, Christopher; Fast Cycle Time, Free Press.

Peters, Tom; Liberation Management, Pan Books.

Weisbord, Marvin; Discovering Common Ground, Berret-Koehler Publishers.

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