JOURNAL OF MANAGEMENT AND ENTREPRENEURSHIP

October - December, 2008
Volume I, Issue IV

XIME

Published by Xavier Institute of Management & Entrepreneurship, Bangalore

Quarterly **Vol I No. IV** **October-December, 2008**

Editorial & Administrative Address:

XIME (Xavier
Institute of Management
and Entrepreneurship)
Electronics City Phase II,
Hosur Road,
Bangalore-560 100, India
Tel : 91-80-28528477,
28528597, 28528598
Fax: 91-80-28528733

Journal of Management and Entrepreneurship Published by Prof. J. Philip, Xavier Institute of Management & Entrepreneurship Electronics City Phase II, Hosur Road, Bangalore – 560 100
Printed by Mr. Joy Kottackal, Matha Prints, 4/1-24, II Main Road, Brindavan Nagar, Bangalore - 29
Reg. No. MAJ(2)CR/PRB/135/05-06 KARENG/03344/10/1/06-T6 dt. 29.11.06

CONTENTS

From the Editor

This issue of our journal brings to the readers articles on management education in France, Germany and Croatia, based on presentations made at our conference last January. These countries, belonging to different parts of Europe and bearing different academic traditions are, each in its own way, adding to the wealth of management education on the continent. Well-known indeed are the achievements of France and Germany in this regard, so also the progress their management education systems have made in pedagogy, curriculum development and internationalization. But, as will be evident from the somewhat brief article by Prof. Drazen Kapusta on management education in Croatia, the country and no doubt the Cotrugli Business Academy also hold great potential for excellence.

Both Prof. Jean-Pierre Helfer and Prof. Manfred Kiesel, authors of the articles on management education in France and Germany are high-ranking academics from their respective institutions. Their reviews have the merit of dealing with several issues pertaining to the wider European context, particularly the Bologna process. For his part, Prof. Helfer has spelt out in the concluding part of his article the global challenges that assail business schools and universities today. A global challenge of a different order was also addressed in another notable presentation at the January conference by Mr. Frederick C. Dubee, Senior Advisor, Global Compact of the United Nations. Current trends in CSR and their impact on management education were its theme and it generated a good deal of interest. We are pleased to carry it in article form in this issue.

A paper on Knowledge Society and Management Education by Mr. Igor Lestar, CEO of SEAVUS, a leading Business School in Macedonia, was also to be presented at the conference, but had to be cancelled due to an unavoidable reason. We have included it in this issue in view of the importance of the topic.

Among other contributors to the journal on this occasion, I would like to make particular mention of Mr. Vinay Deshpande, an innovator of high calibre in Indian IT and a competent observer of the industry. His article on sustaining growth in India's IT industry will be read with much interest all round. A similar response is bound to be evoked by Dr. Lilly Sanathanan's article which reflects on a subject that is at the very core of learning in business schools everywhere : quantitative techniques. It is backed by her considerable research and teaching experience in the U.S.

Prof. R. Venkataraman, Director of XIME, has written on innovation in public sector and government-owned organizations that are generally considered as risk-averse and rule-bound. He brings out some ideas on how to make innovations prevail in those organizations on the strength of an actual case of successful innovation carried out in a particular public sector unit.

The issue features, as usual, a book review by Prof. C.P. Ravindranathan on Globality authored by Harold L. Sirkin, James W. Hemerling and Arindam K. Bhattacharya.

J. Philip

* * *

MANAGEMENT EDUCATION IN EUROPE AND IN FRANCE : ISSUES AND CHALLENGES*

Prof. Jean-Pierre Helffer

Dean

AUDENCIA Nantes School of Management, France

A question like this is perennial. "Issues and challenges for management education" could have been the title of 1, 5, 10, 20, 30 past articles. Education issues are a permanent field for application of intelligence … or only for pragmatism. It is the same for management education; we could even square or cube the problem, because management is such a specific field, subject to many turbulences.

Why "Europe and France"? Can we imagine that France does not belong to Europe? Can we imagine that solutions in France are not exactly the same as in other countries … or can we imagine that solutions in Italy, in Germany, in the U.K. and in France are not absolutely similar? The answer is "yes".

This article is divided into three parts. We will start with the background of the issues, then move on to describe the Bologna process and finally present the main issues before the conclusion.

I. Management education background

Four kinds of observations can be made at this stage:

I - 1. The weight, the role of the State and of public policies

It is a very long story. In France, from the beginning, in the field of education as well as in so many other fields, the state, the ministries, the regulation authorities, the commissions and councils are day-to-day players.

In France as in other countries – and India is certainly one of them – we often have small or large revolutions or simply evolutions, but everywhere ministries are the stars of the stage.

* **Paper presented at the Conference on "Country Perspectives on Management Education in a Globalizing World" hosted by XIME on 24 – 25, January, 2008**

Anyway, public policies are never far from education issues. Let us take only one example to prove that education is in the state portfolio. Just one French quotation: "As long as we do not teach young boys and girls that it is absolutely necessary to be republican or monarchist, to be catholic or agnostic, the state will be on uncertain and vague roots and could be at any time subject to revolutions".

This quotation explains that the state has to be in charge of the education system. Who is hidden behind this quotation? The French emperor Napoleon, more than two centuries ago! Napoleon is no longer in charge of the French government but the core of the idea is still there. Market, freedom, competition are never or seldom the more fashionable words in the education field. But we have to be careful with such an assertion.

Three remarks on this. First, it is not 100 % right to strongly link education and freedom. Education is not a market like the others. Universities and business schools do not sell education as L'Oreal sells soaps and perfumes, or Airbus sells planes. Secondly, there is a specific reason – or one of the specific reasons – why it is so difficult to manage a business school. Market, freedom and competition are the bed we sleep in, the ring we are working in and, for all that, we are married to public authorities. We have to outdo this paradox, that is to say, live in an administration-regulated market and teach the positive aspects of a free market to our students.

Right now - not three or five years ago - European countries and especially France are moving to more autonomy in their education system. Less control, more market; less regulation, more management. Change gets going; no one knows where it will lead.

I - 2. Two networks in France

This is not exactly true, but we have to simplify since it is always better to have a clear understanding of the background of something which is 90% true than a misunderstanding of something that is 100 % true. In France, two networks of institutions do exist.

The universities on the one side and the business schools on the other. A student who wishes to learn business, management, accounting and so on has the choice between universities and business schools. There are bridges between them but the gap is wide.

Universities are public; you can find a university in every large city. There are around 90 of them and most of them provide management training. Obviously, some of them are more famous or larger than others. Tuition fees are very low. It could be a consequence, but students are not really supervised. Job perspectives for them are

sometimes uncertain. To summarize, the quality level in universities of France is medium, and the link with companies is not really direct. To be less critical, we can use a statistical expression. The average level of quality is not really high but the standard deviation is very high. Some – very few – are at the top level, many of the others are outside the international competition field.

On the other side stand the business schools. They are subdivided into three groups. The first one numbers 80 schools, well recognized by the French ministry of education. The second group contains 33 schools, which do not really carry the ministry's stamp. The third group numbers 114 schools, usually small private schools. We will focus only on the first group. Among the 80 schools of the first group, 30 or 40 only are at the premier level with large groups of students and an extended portfolio of programmes.

Usually, these schools function under the supervision of a chamber of commerce, some are private. In the case of Audencia Nantes, we have three shareholders – the word "shareholder" is not quite right because Audencia's legal status is an association, but it may be noted that the three shareholders are the Nantes chamber of commerce, the municipality of Nantes and the county council, our territorial division.

I - 3. A huge increase of students

Over the last ten years, the number of students has doubled at the university and in business schools as well; over the last five years, the number has grown by 50%.

It is a real challenge but the consequence is a large dispersion between the players.

In the early nineties, there was a kind of continuum and everybody was ranked on a unique scale.

The reality today is completely different. There is a first league of 10, 12 or 15 business schools and 2, 3 or 4 universities involved in international competition. They are attractive and selective, well known to European and French companies. All the other organisations are purely domestic, sometimes local or regional. They play another game in another field. For this article, we shall indeed focus on the French first league, because it is the league Audencia Nantes is involved in.

I - 4. Facts and figures

It is easy to open a war of figures; it is sometimes better to give a large picture with some shadows that are however useful to understand some kinds of reality. On

the university side, figures are global and typically, business education is not separated from economic education.

Right now, about 150,000 students are enrolled in economics and business education inside the 90 French universities.

Every year, about 16,000 students graduate at the master's level. These figures are not really relevant because we find grouped together very academic and theoretical programmes in mathematics for instance, or economics for emerging economies and marketing or accounting programmes, that is to say, programmes linked to companies. On average – it is only an average – the student/teacher ratio in the universities is 17.6 in France, 18.2 in the UK and 9 in Sweden. We are more or less on the same level in Europe regarding coaching in the universities. But these figures hide big differences. First, it is really difficult to know the situation of management education in universities. Second, universities are so different that it is impossible to compare a large one with a small one, a generalist one (from medicine to humanities, from economics to physics) and a specialised one (only law and economics, for example).

Now, with regard to the business schools, the figures are more homogeneous.

In total, 29 business schools belong to the Grandes Ecoles association. This means that in France, 29 schools share the following characteristics:

- they deliver programmes at master's level
- they are involved in research programmes
- they are staffed with a majority of permanent faculty

Among these 29 schools, some have been in the group for many years, and some just joined the group two or three years ago. A ranking of these business schools? Never ! We can only admit that three Parisian schools are at the top and just behind, without ranking them but according to the alphabetical order of the cities' names: Lille, Lyon, Nantes, and, according to the alphabetical order of the schools' names: Audencia Nantes, EDHEC Lille and EM Lyon.

Nine of these schools have triple accreditation: EQUIS, AACSB and AMBA. Audencia is one of them. Only five more have the EQUIS accreditation, and only two more have the AACSB accreditation.

Now this is the French panorama, and every year about 12,000 students graduate from all these schools at master's level.

We now have to turn to the key characteristics and we will just focus on the Bologna process which is really a European issue.

II – The Bologna process

II – 1. Description

The Bologna process was launched in 1998, when Germany, Italy, the U.K. and France signed the Sorbonne declaration. The second step was the Bologna agreement which was signed in June 1999. At that time, at the turn of a new century, Europe was at a peak of harmony and prosperity. The extension to new countries, the economic growth especially due to the internet explosion, without the slightest idea of September 11th, it was a time for happiness and long-term vision. The Bologna process is built on two main boosters to target one outcome. This outcome is mobility, mobility and mobility: mobility of students, mobility of faculty, mobility of knowledge, mobility of employment. The motto could be: "Death to European borders!"

To reach this, two boosters were necessary. The first is visibility and the second is transferability or comparability. To promote visibility, universities and business schools first have to provide clear information and comprehensible formats for the prospects and customers of mobility. They must promise they willl never start their speech with:"Well, our situation is quite different and we'll try to explain how we are running our programmes." Forbidden. At any time, you must start your speech with "I am afraid I must apologise because our system looks like the others." Second, universities and business schools have to organise comparability and transferability. Mobility is not emigration. Emigration means that a student leaves his or her country for his or her education. Then, the student buys another world. European mobility is different. A student can invest in a part of his or her national programme in another country – a semester for example – or invest in a degree. A student can graduate at the bachelor level in Germany and at the master level in France.

To do this, it is absolutely necessary to build the house of knowledge with the same characteristics and only some differences, for example: with the same number of stairs, with steps of the same height, with a slate or a tile roof – but never a thatched roof. From a pragmatic point of view, all these principles were illustrated with some huge decisions:

- A two-cycle system leading to qualifications of relevance to the labour market at the end of each stage. If we add the doctoral level, the stages could be: bachelor, master, doctorate, but doctorate is very special, that is why we can speak of two cycles.

Bachelor takes more or less three years, master takes more or less than two years. This is why we often hear: Bologna is three plus two plus three. Three for the bachelor level, two for the master level and three more for the PhD.

- A credit system with credits earned in every field of studies: courses, lectures, internships, in class working, distance learning, etc. so that a programme can be described as an elementary particle: a credit. A marketing course taught at Audencia in the first year of master's can be compared to a marketing course taught in Berlin or in Madrid at the same level.

- A very strongly harmonized file named "Supplement to the diploma". It is neither a diploma nor a resume, it is a document attached to the diploma and describing in a really standardized manner how the student got his diploma: which kind of courses, where, which extra studies and activities, and so on. The school or the university is able to prove the exact characteristics of a track through this document.

II – 2. Analysis

Is the Bologna process working very well in Europe? We could use the image of the bottle, either half full or half empty. But we can say that the process is working in Europe and I prefer focusing on some questions for the future.

We will first look at institutions, at business schools and universities. Their motto could be: "to play the game" and not "break the rules" so that the Bologna process may succeed.

Transparency, visibility, transferability and mobility have something in common: competition. Institutions have to adapt their programmes, to make their programme offer quite clear, to accept going through external audit quality processes. Finally, they have to make a choice: either being in the mainstream of internationalization and increasing their reputation, or being local, less attractive, facing financial pressure and then moving to another market where they can, of course, have other key factors of success. Disappearing could be an outcome we can imagine for these schools.

Second, we will examine the students' point of view; here, of course, I am going beyond the European borders.

The Bologna process offers new opportunities to students, to European students as well as to those coming from all over the world. The split into two stages

– bachelor and master – creates a hub at the bachelor level. We know that every year between 2.5 and 2.7 million European students graduate at the bachelor level. Their choice is either to join the job market or to continue specializing in their field or in a different discipline, in the same institution or in another one (why not abroad?). At the same time, this split means that European institutions can welcome students coming from anywhere in the world at this level. Language is not an issue: between 1.5 and 2 thousand European masters are taught in English in countries where English is not the first language. At Audencia, one third of the courses at master level are taught in English and a specific track is organised for the students who are not fluent in French. We run a track in Spanish too, to prove that we are open-minded.

Mobility is therefore possible, but as far as flexibility is concerned, students have to jump over a new hurdle: that of money. The consequence of mobility could be an increase in the cost for students. The issue does not come only from travel expenses and accommodation, but from fees as well. The landscape shows public as well as private institutions, some of them with large company subsidies, others only with students' fees. Fortunately, bankers have understood for many years that they can make money by helping students; bankers must however make no difference between a local and a foreign student and it is not the case at the moment. The battle is never over. The last solution – it does exist – is a scholarship granted by the school. At Audencia, every year, we give 100% or around 40 scholarships: this means that 40 students (10 % of a whole year group) have € 0 to pay for one year.

Finally, employers and governments.

Governments play a major role and will continue to do so, in terms of mobility within and outside European borders. There are three areas linked to government decisions.

The first is the financial aspect. In a country or group of countries like Europe, a key measure of public impact is the amount of euros or dollars dedicated to a student in higher education by the government. Governments take care of this fundamental issue. The second area is that of standards, procedures, guidelines, accreditations and certifications which prove to the market the true level of quality of an institution. This is done. In Europe, we have European networks of public quality assurance and the AMBA and EFMD peer accreditation bodies give their support to the global system. The third aspect is the visa policy. You need something to cross borders: a pass, a pass plus a visa, a pass plus a visa plus a health certificate, plus an admission in an institution, plus the proof of living expenses, plus, plus, plus …. The list could be endless. Mobility needs a true commitment to freedom.

Companies are the final customers of the education system. For business school deans, it is great to be pulled by the market. It is exactly what professors teach in their courses. Usually, companies give quick answers to the movement, they like diversity if married to quality. For companies three + two or four + one curricula or, why not two + three curricula, is an irrelevant question. They are happy when they find good students mastering the management skills they need. The Bologna process gives them diversity, visibility, comparabiliy, mobility ... if quality is always present, they will push the system. We can say that companies have been the trigger of the Bologna process.

II – 3. Challenges

The Bologna process is far from being done with. We can say that European institutions are faced with two challenges.

First, even with 700 million citizens, Europe is too limited for a top-ranked university or business school. For example, we say at Audencia that Europe is our domestic market, our identity, and that the world is our competition area. The Bologna process is an internal, an intra-European process, but it is also a worldwide process. Europe is moving towards globalization. This means that Europe is developing to become a partner and a competitor of the US and Asia.

We will quote Audencia's example one more time; some figures: 2 000 students of 43 nationalities, 85 faculty of 13 nationalities, 1/3 of the students get their first job abroad. This obviously shows that Audencia Nantes evolves within the global market.

Second challenge: as usual, we have to go past structural and legislative issues to be in the right place, that is to say, innovation and entrepreneurship. In the end, the reputation and attractiveness of a business school come from its capacity to innovate everyday in the fields of pedagogical methods, learning skills, programme design, use of technology, closeness to companies. Furthermore, institutions have to give an entrepreneurship-oriented background to their students. Training in an entrepreneurship model is our mission. Deans are never so happy as when they hear that one of their students is launching or beginning to launch a new company.

Now let us move on to the French and European system's key characteristics. We will focus on business schools.

III - Key characteristics of the French and European systems

To present the key characteristics of any system, a good method is to compare it to other systems in the world.

We can actually divide the characteristics of our system into two main parts. The first one covers ideas which are not so singular and can be seen in other countries, in India for example. The second idea is linked to truly specific items, items we only encounter in France or in Europe.

III – 1. Shared characteristics

We are all living in the same area, at the same time, in countries where so many characteristics are the same. We like the same actors, we listen to the same music, we spend our vacations in the same sunny regions, in fact we watch the same US shows and series on TV; football is certainly more popular in France than cricket, and cricket is more popular in India than in France, but "the world is flat", to quote the title of a famous book. As a result of this proximity, the European system, and especially the French one, are not so far from others. We can highlight some examples.

In France, as in the U.K., Germany, Spain, Italy and even the U.S., some characteristics are certainly similar. We can describe these characteristics through some examples. In each country, a strong selection allows a few students only to enter a business school. This is one of the key characteristics of worldwide business schools. The reason is upstream as well as downstream. Firstly, students must be of top quality: this is the upstream side of the question. Secondly, companies generally recruit 100 % of them – this is the downstream reason. It is only a matter of demand and supply: this characteristic is usually shared by many other business schools in the world. Another example: when students start their programme, they find a "high-tech" organisation. For each student, a pedagogical intranet, distance learning with the faculty, group wares, field projects and so on. I am sure that, on these matters, a French business school looks like an Indian one, Audencia Nantes looks like XIME.

Perhaps we can go into other more invisible characteristics, invisible but, once again, certainly the same in many countries when the focus is on the business schools model. Right now, in Europe as in the U.S.A., the academic model is the only one we must try to approach. Academic does not mean theoretical but based first on the faculty and its capacity to do research, research in the business field. This model is not so old. At a rough guess we can say it is 20 years old or maybe only 15 years. At the beginning of the nineties, international competition, the strength of accreditations, market opening – all these ideas pushed business schools in the world to follow the academic way. Can we assert that there is an academic model and a professional model which are totally opposed? No! The academic model is absolutely linked with companies' needs, with the necessity to open the job market to our students, but the primary focus is on research and research and research! Can we declare that to push

business schools to reach this model is a 100 % relevant trend? The answer is not so easy, for two reasons. The first one is that a business school must run at a high speed to reach a distant academic model, and this can lead it to forget its true mission: to deliver good students and managers to companies. Second, an academic model could be too costly for some – or even many – business schools, and as a consequence, the academic model could open the door to financial ruin. We have to keep an optimistic point of view because business schools are so close to companies that they cannot – we hope so – make many long-term decisions. And what if the truth were right in the middle of the river? The solution could be just between the academic and the professional model.

III – 2. Specific characteristics

We can consider three key areas.

First, we can consider the link between companies and business schools, for example, the link between Audencia Nantes and the job market, or to put it another way: Audencia business school and the companies play the same game with the same rules, at the same time, in the same field. Every day, students meet companies. A course taught by a company in the morning, a lunch buffet with a head-hunter, a project for a regional company in the afternoon and, finally, a lecture and a friendly cocktail with alumni in the evening. During all this time, there is a faculty to coach and to supervise. Internships of up to 24 months during a four year programme, that is to say 50% of their time. As a consequence, the students are living and studying inside and with companies.

What is more – and this example is really different from what happens in the U.S. For example, our students' first jobs are strongly linked with their programmes or electives. If a student chooses a major bank, he or she is 100 % bound to work for La Société Générale or Lehman Brothers, choosing an audit major, he or she is immediately hired by Deloitte or KPMG; a marketing major and suddenly he or she is a product manager for L'Oréal. These characteristics are perhaps neither excellent, nor positive, nor good for our students' careers but that is the way they are.

Let us move now to the second point, the organisation of the programmes.

In France, but it is not so different in India, we like singularity in education, we pray for freedom for everybody and a large majority of business schools offer exactly the same programme. Everyone copies everyone else's habits. In Paris, in Nantes as well as in Marseilles or Strasbourg, the Bologna process is translated into 3 + 2 + 3. A bachelor after three years, a master needs two years more and the PhD three years after. You know quite well that this system does not exist anywhere else in

Europe. A bachelor in four years is possible, a master in one year too. And in addition, in French business schools, because we have a long study track, there is no exit at the bachelor level. That is the way things are. At Audencia, nobody leaves the school at the bachelor level. It is easy to put this idea in the students' mind: we do not give them anything at this level, neither a diploma nor a certificate. Nothing! Consequently, it is compulsory to go to the master level. The companies agree with this. They never try to recruit any student from a French business school at this stage – it is different at the university. In the universities, students get a bachelor diploma after three years but 70 or 80 % of them try to go on to the master's level.

We can now turn our attention to the third specific characteristic.

MBA programmes are relatively new in France. Audencia Nantes was created more than one hundred years ago, its MBA was launched six years ago. Nevertheless, previously there existed an executive programme which resembled an MBA but had another name. In France, MBA programmes – even the prestigious ones – were not launched until 10 or 15 years ago. The reason is to be found in the two other characteristics.

If formal education takes five or six years, if to be an engineer only opens the door to be a shopkeeper but not to a management career, the MBA is not necessary. Things are changing. MBA programmes in French business schools are very strong now, and Audencia is an example. Audencia runs four MBA programmes: an international one taught in English with worldwide students, an executive one taught 80% in French with regional students, a Euro MBA combining distance learning and residential weeks, and a corporate MBA, customised for large companies.

We can just give one figure to conclude this point on the specific French characteristics, to highlight that in France, the cost for a student in a university – not in Audencia which requires a lot of money – is approximately 50 % of the cost for a student in a high school. It means that when we compare the figures, in the U.K. for instance, 5.9 % of the gross national product is devoted to education and in France, the same figure is 6.1 %. There is not so much difference but the expenses are not incurred at the same level. This is an important issue that we are faced with in France. Education expenses are certainly at a good ratio if we compare them with other countries but the allocation of the expenses is not so well managed: a lot of money for high schools and a meagre allowance for the universities and business schools.

III – 3. Main issues for the French and European systems

A professor in the marketing field and in strategic management can divide the issue into three areas: firstly, upstream, secondly, the process itself and finally, downstream.

Let us take a look upstream: students, applicants, intakes. At this stage in France, the strategic issue is relative to the nature of our model. A description of the model can lead to the conclusion that the French Grandes Ecoles system could be … only domestic! If this is true, it means that it is a dream to try to be attractive to students from abroad … and foreign institutions would not be so sad for their French partners. In the opposite direction, if the French model is assumed as an international one, the borders will be open to everybody. Who could be arrogant enough to be sure of the answer? We can only weigh each argument against the other.

On the right, some prestigious business schools where you can learn three or four foreign languages, where English is the working language, which are located in attractive places like Paris or Nantes, where you can speak French – if you are fluent – to buy a French "baguette" every morning, where you are supervised by faculty coming from – it is Audencia's example – 13 countries. Then the model is evidently international and our business schools are really attractive to students from abroad.

On the left, an unreadable model, with two years of preparatory classes in a High School, plus three or four years to get your master's degree in the business school but where entry just after the bachelor level is not the norm. Can you explain how an Indian student can come to Audencia Nantes just after the high school? Is it impossible because preparatory classes are exclusively taught in French? And what about after the bachelor degree? The answer is 'yes', but he or she has to join a pre-organised group which has arrived a year before. Not exciting! Then the model is purely domestic: we are not attractive to students from foreign countries.

Even if we overstate the case, we are not so far from the truth. For three or five years now, and especially since the Financial Times started to rank the pre-expereince masters at the European level, French business schools are on the way to delivering readable portfolios, opening doors at every stage for students coming from abroad. The final target has not yet been reached, but Audencia Nantes, for example, can welcome students for a two year masters in management, with courses taught in English, for different MSc programmes with courses mostly taught in French, for a European master co-delivered with other business schools in Europe, for a full-time MBA and for a Ph.D., all these diplomas, with the exception of the specialised MScs, being taught in English.

Let us move on to the issues linked with the process.

The main observation at this stage – and certainly the most important one – is the sturdiness of the financial model. For many years, the French business schools were vocation-oriented. With some support from the Chamber of Commerce, with reasonable tuition fees and money coming from executive education, the model was running very well. Right now, many things have changed. The financial cost of the model is rapidly increasing. Everybody knows that when one moves from a vocational to an academic model, the cost increases by a factor of two or three – this is mainly due to the faculty. At the same time, the chambers of commerce try to externalise their education activities and grant less money to business schools, competition is stronger – and margins decrease as well – in the executive education field where students are worldwide consumers; they benchmark the suppliers and we must focus everyday on the price/quality ratio for every kind of programme.

It is a true challenge and there is no evident solution behind the door, even if Audencia has a privilege in this field. The same issue could be explained in another, but similar way. Competition in France is absolutely silly. Around 30 business schools have a strategic plan which looks like that of the best three Schools. Nobody can understand it. If in the USA 100 schools tried to copy Wharton or Stanford, it would not work. Such an odd situation is rooted in the regional geography of France. When one lives 200 km from Paris or two hours by high-speed train, one must be as close as possible to what is decided in the heart of the country. Psychology, sociology and ethnology are certainly scientific disciplines we can use to understand this issue, kindly speaking. But in Nantes, we try to avoid silly competition, we know very well that we do not have to copy the best French or European schools. We play the same game but we use our intelligence to find our own way. To these main process issues we have to add one. This is the dramatic shortage of faculty having a specific profile or characteristics such as maturity, an international career, research at a reasonably good level with pedagogical qualities likely to be applauded or to receive a standing ovation from their students. Shortage exists because suppliers are increasing, shortage exists because many of our students work for companies, shortage because being a good professor requires many qualities, shortage exists because the market is now an international market. The consequence of this shortage is a pressure upon salary levels, and this brings us back to the financial model.

Finally, a few words on the downstream issues. We must focus on the public authorities' point of view which is "unfortunately" shared by some companies – not by most of them but by some at the top level.

For a French or European company, the only target is to hire students with highly reliable qualities and devoted to specific jobs. Since there are two networks in France, universities on the one hand and business schools on the other, many people ask for a kind of merger for a better understanding of our system. Right now in France, it is politically correct to argue in favour of this proposal but we have to keep in mind that so many decisions, designed to make things easier, have the final consequence of reducing the quality level of all the players. The danger could be that demagogy would be the leader. We must work hard to fight this project to put in the same black box what is excellent, what is good and what is mediocre. Merging or even linking universities and business schools too strongly would be wrong. Business schools and universities are sometimes in a cut-throat competition but never in a state of war. On the contrary, in Nantes for example, we, Audencia and the university, run the PhD in common, we have research projects in common but we are not "married" to one another.

From the companies' point of view, the second observation is the skills the students have to master over the coming years. When we ask them this important question, they usually answer ...it depends, it will change, we are not sure ... What can deans do with such answers? Do we think it is an intractable issue? Certainly not! We have heard these answers for so many years and we have to manage our schools with these constraints or an unpredictable future.

Now, by way of conclusion, let us start with the two following certainties and a hope :

The first certainty is to agree with the fact that the decision process is under the responsibility of companies. And that is a good thing! Business schools can decide to provide the market with specialised students or students having a very large span of skills, long tracks or short tracks, certificates, diplomas, degrees, a bachelor level or a master level, generalised MBA or specialised MBA, pre-experience programmes or post-experience programmes ... finally, the market is the king and companies are sovereign in the long term. They decide to hire students linked with their needs. For us, the deans of business schools, it means that we do not have to understand the market, we have to move ahead of the market, we do not only have to go faster than that, we have to accelerate more than our competitors.

The second certainty concerns the connection between economy and education. The education system is never in a stratospheric area. Education is embedded in the economy and the characteristics of the economy in 2015 will define the characteristics of education in 2015. If the economy goes faster and faster on the IT path, on globalisation, on the elimination of borders, on freedom, on the increasing

power of worldwide companies, then education will follow the same economic pattern. In contrast to this situation, if the economy in 2015 focuses on protection, social welfare, favours withdrawal, with every person and every country for themselves, then the education system will be truly domestic. It is not time to take sides even if we are sure that one way is better or more predictable than another. We have to wager on the link between economy and education. One is the reflection of the other and vice versa because education, we are so lucky, can influence economy.

And a hope now, a personal hope :

Usually, business school deans are deeply in favour of freedom, competition, market laws, worldwide knowledge, shared skills and intercultural benefits. But if deans altogether can create not only one management model, but also one "attractive" business school management model, we will be on the right path for the future.

To charm South American students and companies, to appeal to Chinese, Australian, U.S. students and companies in Europe, we must work a lot, we have to prove that we are offering quality programmes but with the extra touch of a business school.

What could this business school touch be? This could be the title of another article. We only try to set some markers. This business school model will be intercultural, mastering two or three languages, knowing very well how to live in the world market, how to be a committed decisionmaker rooted in ethical perspectives and in line with corporate social responsibility. But only so much about the markers. It is not the time to sell the business school system against the engineering schools system or corporate universities or consulting companies.

Finally, the conclusion could be oriented towards two global challenges for business schools and universities.

The first global challenge is faculty shortage. This shortage is worldwide and it will certainly continue in the long term. We can even be faced with different situations depending on fields, disciplines (more in the fields of marketing, finance and supply chain management, less in HR) on seniority (more of 40/50 years old, less around 30 years old), on nationality (more in the U.K. and France, less on some other countries), and on orientation (more concerning companies, less research - oriented).

Anyway, the shortage is global. What can we do? Wait for a large increase in salaries? Wait for less attractive jobs in companies so that students might make a positive comparison with jobs in education? I do not know. An article must not only give answers but ask questions too.

The second challenge we are globally faced with is that of the financial model of our business schools. At any time, and this is normal, students and companies ask for a higher level of quality, for state-of-the-art technologies involved in our programmes, for a lot of new supports: job counsellors, internship advisors, totally digital libraries and so on. The market price of the fees is well known and it is difficult to increase it continually. The solution is competitiveness, productivity and client confidence. This can lead to mergers between institutions, or strong structural alliances to share processes, supports, and why not, promotional expenses. It is the classic problem of an increase in competition in a growing market and business schools having to implement what they are teaching to their students.

* * *

GERMAN PERSPECTIVES ON MANAGEMENT EDUCATION IN A GLOBALIZING WORLD*

Prof. Dr. Manfred Kiesel
University of Applied Sciences
Wuerzburg, Germany

1. OVERVIEW

"Es ist noch kein Meister vom Himmel gefallen" – which could be translated as "Educated people don't fall from the sky". This German saying means that you have to work hard for a good education. To enter general higher education 12 to 13 years of hard work in primary and grammar school are necessary.

In Germany higher education is offered in three types of Higher Education Institutions.

- *Universitäten* (Universities) including various specialized institutions offer a whole range of academic disciplines. In the German tradition, universities focus in particular on basic research so that advanced stages of study have mainly a theoretical orientation and research-oriented components. At 103 universities and comprehensive universities including 15 colleges of theology, about 1.3 Million students or two thirds of all students are enrolled.

- *Fachhochschulen* (Universities of Applied Sciences) concentrate their study programs on engineering and other technical disciplines, business-related studies, social work, and design areas. The common mission of applied research and development implies a distinct application-oriented focus and professional character of studies, which include integrated and supervised work assignments in industry, enterprises or other relevant institutions. In Germany we have 176 universities of applied sciences and 30 comparable colleges of public administration. Due to their practical orientation the graduates from these institutions can be integrated more easily into companies. They are less expensive and therefore it is the goal of the government to increase the share of all students from 30 to 40%.

* **Paper presented at the Conference on "Country Perspectives on Management Education in a Globalizing World" hosted by XIME on 24 – 25, January, 2008**

- *Kunst- und Musikhochschulen* (Universities of Art/Music) offer studies for artistic careers in fine arts, performing arts and music in such fields as directing, production, writing for theatre, film, and other media and in a variety of design areas, architecture, media and communication. They have a share of less than 5%.

- In the aggregate, we had 1.95 million students in 2007. Of a population of 82 Million in Germany this is a share of 2.5 %. 47.8% are women, mainly in the humanities. 36% of the age-group in 2006 sought higher education, 21% of the age group attained a degree. In terms of international comparison that is not enough. The high tech industry of Germany needs more highly qualified young people. Therefore we are now trying to increase the share of the graduates to 40 % of the age group.

Higher Education Institutions are either state or state-recognized institutions. In their operations, including the organization of studies and the designation and award of degrees, they are both subject to higher education legislation.

PERSPECTIVES

Considering the perspectives on Management Education from the German point of view, I would like to deal with the Bologna Process first. The Bologna Conference with its objective of creating a European-wide comparable system of higher education was the main reason for a complete reform of the higher education system. Other issues were:

- The high age of German graduates
- The lack of public money to finance the universities sufficiently
- The lack of qualified staff in German companies.

Therefore, besides the Bologna Process, I shall touch upon :

- Study fees
- Reduction of study time and
- Post graduate education

a. Bologna Process

The so called Bologna Process is a topic for all European countries, so I shall try to concentrate on the German point of view. The targets are to create

- a system of comprehensible and comparable degrees
- a two-cycle system of university qualifications (undergraduate/graduate),
- a credit transfer system (based on the ECTS model)
- mobility by reducing obstacles to mobility, and
- European cooperation in the field of quality assurance.

With the long history of the higher education system in different European cultures these are very ambitious targets. As always happens in the European unification process, different nations adapted their systems with different speeds and with a lot of exceptions. Nevertheless the pressure for the countries should not be underestimated. Let's consider the main targets.

i. The two cycle system with comparable degrees.

Before Bologna, Studies in all three types of institutions have traditionally been offered in integrated "long" (one-tier) programmes leading to *Diplom-* or *Magister Artium* degrees or completed by a *Staatsprüfung* (State Examination). The three qualifications (*Diplom*, *Magister Artium* and *Staatsprüfung*) are academically equivalent. They qualify holders to apply for admission to doctoral studies. The degrees are highly appreciated in German industry but they are unknown outside of Germany. So our graduates have to explain their degree to international employers.

Within the framework of the Bologna Process one-tier study programs are successively being replaced by a two-tier study system. Since 1998, a scheme of first- and second-level degree programs (Bachelor and Master) was introduced to be offered parallel to or instead of integrated "long" programmes. These programs are designed to provide enlarged variety and flexibility to students in planning and pursuing educational objectives; they also enhance international compatibility of studies.

Bachelor degree study programs lay the academic foundations, provide methodological skills and lead to qualifications related to the professional field. The Bachelor degree is awarded after 3 to 4 years.

The Bachelor degree program includes a thesis requirement. Study courses leading to the Bachelor degree must be accredited according to the law establishing the Foundation for the Accreditation of Study Programs in Germany.

First degree programs (Bachelor) lead to Bachelor of Arts (B.A.), Bachelor of Science (B.Sc.), Bachelor of Engineering (B.Eng.), Bachelor of Laws (LL.B.), Bachelor of Fine Arts (B.F.A.) or Bachelor of Music (B.Mus.).

Master is the second degree after another 1 to 2 years. Master study programs must be differentiated by the profile types "more practice-oriented" and "more research-oriented". Higher Education Institutions define the profile of each Master study program. Study programs leading to the Master's degree must be accredited too.

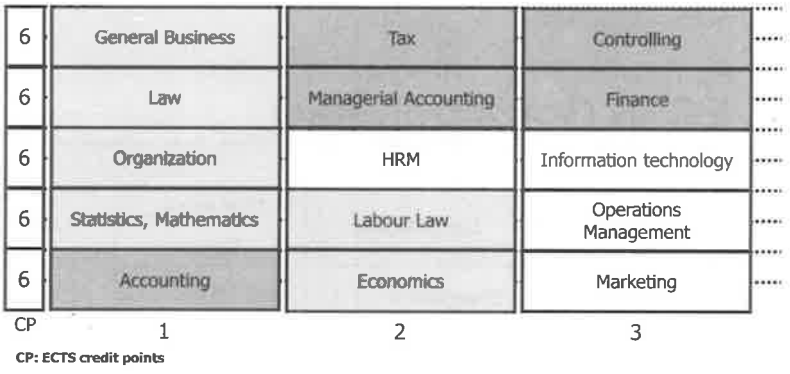
Second degree programs (Master) lead to Master of Arts (M.A.), Master of Science (M.Sc.), Master of Engineering (M.Eng.), Master of Laws (L.L.M), Master of Fine Arts (M.F.A.) or Master of Music (M.Mus.). Master study programs, which are designed for continuing education or which do not build on the preceding Bachelor study programs in terms of their content, may carry other designations (e.g. MBA).

Universities as well as specialized institutions of university standing and some Universities of Art/Music are doctorate-granting institutions. Formal prerequisite for admission to doctoral work is a qualified Master (UAS and U), a *Magister* degree, a *Diplom*, a *Staatsprüfung*, or a foreign equivalent. The universities and the respective doctorate-granting institutions regulate entry to a doctorate as well as the structure of the procedure to determine aptitude. Admission further requires the acceptance of the Dissertation research project by a professor as supervisor.

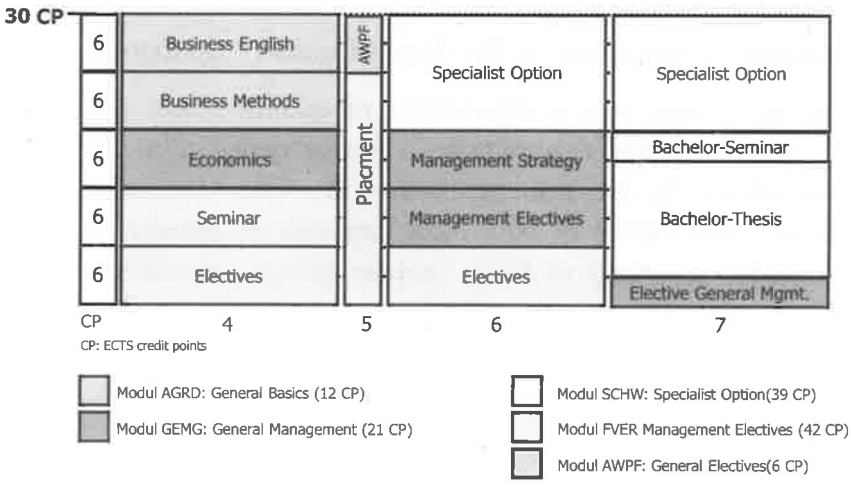
ii. The Credit Transfer System

The organization of the study programmes makes use of modular components and the European Credit Transfer and Accumulation System (ECTS) with 30 credits corresponding to one semester. So our Bachelor of Management Education as well as most other similar programs in European Universities have had to be restructured. The new schedule is given below :

Bachelor Courses Semester 1-3



Bachelor Courses Semester 4-7



At the same time, all the countries use a comparable grading system which enables them to collect credit points in different European countries and integrate them in the national grading system. This way we improve mobility by reducing one of the main obstacles to mobility.

ECTS Grading System

Average	Local Grade	Numerical Value	ECTS
1.0 - 1.5	Excellent	1,0 1,3	A
	Very Good	1,7 2,0	B
1.6 - 2.5	Good	2,3 2,7	C
2.6 - 3.5	Satisfactory	3,0 3,3	D
3.6 - 4.0	Sufficient	3,7 4,0	E
4.1 - 5.0	Failing	5,0	F

FHW-S University of Applied Sciences Würzburg-Schweinfurt

iii. European cooperation in the field of quality assurance

To ensure quality and comparability of qualifications, the organization of studies and general degree requirements have to conform to the principles and regulations established by the Standing Conference of the Ministers of Education and Cultural Affairs of the *Länder* in the Federal Republic of Germany. In 1999, a system of accreditation for programs of study became operational under the control of an Accreditation Council at national level. All new programs have to be accredited under this scheme; after a successful accreditation they receive the quality-label of the Accreditation Council.

iv. Problems with the Bologna Process

The general aims of the Bologna process are accepted by most of the institutions. But those degrees that qualify for state controlled professions and that had the Staatsprüfung (state examination) – before seem to have problems with the new structure. Specifically, these are the degrees for medicine, law and teaching.

Such institutions argue their case with a lot of reasons but in my personal opinion they seem to have a lack of willingness for change. With their powerful pressure groups and their status orientation, they have been trying to develop their own structures and to avoid the adoption of European structures.

The same situation exists for the non state-controlled degrees of engineering. Geman engineers are very proud of their Diploma. Especially in Eastern Europe it is reputed as a degree of a high level. The big companies ask for bachelor degree holders in engineering because they hope to get younger graduates for less money. In their in-house education they offer the trainee a program with the specific input of the company.

Small and mid-sized companies expect from the universities complete engineers – who will have full responsibility for their task from day one. They fear a lack of competence in young graduates after only six semesters of studies. The labor market will decide whether there will be good job offers to such younger engineers with six or seven semesters of studies. If not, the students will prefer universities which offer the diploma or they go in for an additional Master's degree which would mean, besides more expense, that the graduates would be older than the present-day holders of four year diplomas.

In all European countries students have a comparable workload of 30 credit points per semester. But the content is different. That inhibits mobility. The fifth semester as a studium generale with possibilities of studying some electives abroad is lost with the reduction to seven semesters anyway. Presently, with a large variety at least in the master courses, the examination boards have to compare incomparable courses with different course structures of the various European universities involved.

b. Study Fees

Germany was more or less the only country without any tuition fees for the last 50 years. This state-financed luxury should enable young people irrespective of their income to use their chance. But owing to the high costs of reunification with the eastern part of Germany and the economic crises of the past 10 years the German state has not been able to finance higher education on its own. And the objective to attract more students from all strata of society has failed. As mentioned before, we have only 35% of the age group in higher education and members of upper classes still dominate. Therefore beginning in 2006, tuition fess from 200 to 500 Euros have been introduced in some German States. At the same time the state affirmed that it would not reduce its expenditure.

At some universities there were demonstrations against these moderate tuition fees. But the first experiences are positive. The additional money is used for additional service for tutors with smaller classes and for strengthening the social benefits. The fees can be financed by credits with low interest rates; many groups, for example, highly qualified, exchange students and students with children, do not have to pay. And what was new for us: Only what you pay for has a worth. Students value the study time and the quality of the courses more than before.

Only for post graduate Masters courses the tuition fees have to finance the courses completely. Students have to pay from € 3000 per semester.

c. Reduction of Study Time

A university student seeking graduation starts his education at six years of age at the primary school. After four years about 40% of the students change to a grammar school where they have to study for nine years. Including an obligatory year for military or civil service for the boys, an elective period of professional training before the studies and four to five years of studies some students are hard put to finish studies before they are 30 years old. And in the period of high productivity that is between 20 and 30 they do not work for the society, they do not pay taxes. In view of this, the time spent at grammar school will be reduced to eight years and with the support of Bologna, (substantive) studies will be reduced to three to four years. That means that graduates should be two years younger when entering the labor market. In 2010 we expect the first batches to have finished their grammar school after eight years. In the same time frame the grammar school graduates having done nine years will look for a place at the universities. That means, from 2010 to 2015 we will have to offer twice the present capacity at our universities. Due to the demographic development from 2015 the number of young people will decrease all over Europe. We hope to increase the share of the students at the same time so that our universities could be used for the future too. That might be a topic for another conference in five years.

3. Continuing education at institutions of higher education

Continuing education provides institutions of higher education with an opportunity to develop programs which are interesting and useful for both industry and science. In a highly competitive market universities offer courses from a one hour lecture up to a masters program. All courses have to be financed with tuition fees. For state-owned institutions under the control of the Ministry of Education it is not easy to be successful against private institutions worldwide, but with the high competence of

the professors they should have a chance. As an example I may cite the post-graduate Masters program of my own university which has a strong international impact.

It is the objective of the program to study the cultural and economic background of business in the main developing areas of the world in an intercultural setting. For German industry, representating as it does, the world's leading export-oriented economic power, it is absolutely necessary to have well-educated German and international staff with the background of the home market and the target market in Asia or Eastern Europe. At the same time the booming markets in these countries need people with knowledge about how the European Union works.

The program includes three semesters with € 9000 as total tuition fees. German students do not quit the job; international students gain practical experience while studying on placements. Therefore classes are from Friday to Saturday. At the beginning we offer a one-week team training, in the second semester students will have a study period of four weeks in Russia, Taiwan or Wuerzburg.

The courses are a mixture of language, business functions related to the international context and social competence/skills with cultural focus. As a University of applied sciences, practical orientation is our main focus.

* * *

MANAGEMENT EDUCATION IN CROATIA*

Prof. Drazen Kapusta
Principal
Cotrugli Business Academy, Croatia

Cotrugli Business Academy (CBA) was established with its goal of creating leaders who could initiate the processes which enable both their companies and communities to flourish while finding a deep personal fulfillment in doing so.

Word Business Academy (WBA), the founder of CBA, is a network of business leaders who collectively create resources for individuals to be more effective, efficient, and responsible in commerce, society and their own lives.

WBA deals with concerns of contemporary business and its future ones such as: corporate governance, sustainability, macro-economic trends, emerging concerns and opportunities, new models for profitability, and the role of fossil fuel in our firms and civilization itself.

Three principles link these themes:

- Business processes, skills, resources and talents to pass a sustainable world to our children;
- We can do the right thing in the right way *AND* make a profit;
- As the most powerful institution in society, business must take responsibility extending across the whole range of society's concerns.

WBA Fellows represent some of the best and brightest men and women who are shaping today's global landscape. For many years, they have researched, analyzed, reported and predicted the transforming paradigm shifts in business and society.

CBA curriculum is designed, monitored and updated by the WBA fellows who are among the leading experts in their fields of expertise such as Verna Allee, Warren Bennis, Deepak Chopra, Harlan Cleveland, David Cooperrider, Stephen Covey, Daniel Goleman, Stuart Hart, Dipak Jain, Joseph Javorski, Peter Senge, Margaret Wheatley and Diana Whitney.

*Paper presented at the Conference on "Country Perspectives on Management Education in a Globalizing World" hosted by XIME on 24 – 25, January, 2008

Since its initial stages, CBA has turned into the fastest growing Business School in South Eastern Europe (SEE) by enrolling 110 students into the fifth Executive MBA generation in Croatia, and 35 students into the first EMBA generation in Serbia which begins this May. With operations in Brazil being in its last phase of implementation, CBA is actively engaged in the process of global expansion.

All of these characteristics put CBA by far on the top of the list of what is currently on offer in Croatia, and perhaps in the region as well. Not to overlook other players in the field of executive education, we should consider the following:

In Croatia, there are several business schools offering programs more or less competitive to CBA:

1. University of Economics in Zagreb is state-owned, part of Croatia's biggest University, offering a Masters program in economics, but brands it as an MBA program.
2. International Graduate Business School, Zagreb reinforced with a partnership agreement with Kelly School of Management (#100 business school in US). This program has only small number of students...
3. There are also many other organizations offering different types of management education: open enrolment programs, in-house education and others, but none of them has any significant market share in Croatia.

Furthermore, in the wake of preparations for CBA's HRM 2008 conference in Croatia, a survey targeting managers and directors has been conducted. If brought out more than 200 responses revealing the following information:

- When asked what the governing attitude of people in Croatia was, the widest response was that people are open to change.
- 27% feel that Croatian managers are professionally capable of handling the challenges of the market.
- 8% feel that Croatian managers and entrepreneurs learn enough.
- 8% feel that Croatian managers only look after their interest and profit.
- Only 7% disagree that ethics is lacking in business and communication.

These findings also reflect current thoughts and views on management education in Croatia:

- 43% of respondents undertake regular management education activities

- Developing high-potential individuals (57%) is the main objective for management education activities.
- In-house development is the most common activity.
- On-the-job training is identified as the most effective form of learning by 49% of respondents.
- Only 10% believes that e-learning has significantly altered learning and training offerings.
- 63% believes that management education activities could be critical to the success within an organization.
- 85% uses some form of evaluation to demonstrate the value of their management education activities.
- 57% has a training budget.

Views on management education in Croatia

There is a lack of properly educated leaders at all levels of society and organizations in emerging markets. In USA 1% of population holds an MBA diploma. Estimates show that in South East Europe, which include Croatia and neighboring countries, this percentage is below 0.01%. In Croatia the in-house development programs are being used frequently as they are perceived to have a high effect (85%). 74% of responses to our research agree that management education can have a positive impact on an organization's bottom line. Therefore, enhancing the opportunities for a professional education and developing the management education market in Croatia is of great importance for the future.

* * *

CURRENT TRENDS IN CSR AND THEIR IMPACT ON MANAGEMENT EDUCATION*

Frederick C. Dubee
Senior Advisor
Global Compact of the United Nations

Introduction:

This paper combines the perspectives gained through some three decades of experience in the international automotive industry, academic exploration in the areas of peace and development, with specific emphasis on business and structural violence, new business models and long term advocacy and participation in the development of the United Nations Global Compact.

While I am a Canadian who lives in Finland, I do spend a great deal of time working with business, government, entrepreneurial, civil society and labour organizations as well as with the academic communities in China, Japan and Korea. I have a great appreciation for the overarching philosophies and business approaches in these countries. In what follows, however, I shall focus on trends impacting the Anglo-American business model. My rationale is that this model still dominates and has continuous impact on business teaching around the world.

It would seem appropriate to start our discussion by pausing to reflect a little on the global context;

- Massive social inequities: Extremes of wealth (few) and poverty (many)
- Serious Ecological degradation: Climate chaos, biodiversity loss, energy decline,

are viewed by many as major global threats to the world's peoples, to all in rich or poor nations, to each and every one of us.

But these did not just happen and it is important that we try to explore the possible causes.

*Paper presented at the Conference on "Country Perspectives on Management Education in a Globalizing World" hosted by XIME on 24 – 25, January, 2008

In an article published in 1949, Albert Einstein wrote that "for some time now human society is passing through a crisis and that its stability has been gravely shattered" and he concluded that the essence of the crisis centered on "the relationship of the individual to society". Einstein argued that though the individual had an ever better understanding of his dependence on society, he experienced it not as an asset or protective force but as a threat to his "natural rights" and "economic existence."

If I might borrow from the colloquial, one does not have to be an Einstein to see the relationship between the enduring social challenge, the rapidly escalating environmental challenge and the essence of the crisis: the relationship between the individual and society.

So on the most macro and micro of levels we appear to have a challenge in relationships and in the values and in the way these values that support the relationships is shared.

While many might say that these are broad philosophical issues, I propose that they are reflected in business and in the role that business currently plays and that we might want or need it to play in society.

The social and environmental threats are increasingly seen by the North no longer as distant un-niceties and inconveniences that occur only in the time/space of the distant South. Of course some still believe that barriers of distance, education, wealth, protectionism and even physical walls – insularity in myriad forms – offer protection. But slowly even in the bastions of the most conservative minds and hearts these threats are increasingly understood as global realities.

India and Indian leaders, scientists, researchers, academics and business people have made significant contributions to driving home this reality. Mother Teresa tugged the minds and heartstrings of the world. Rajendra Pachauri and the IPCC have given dimension and direction to the realities of climate change. Indian business and business thinkers have shown that there are not only markets at the bottom of the pyramid, but a potential fortune in human, social and economic capital. The city of Bangalore, its citizens, its scientists and its companies have become synonymous with innovation and are the leading edge in technology that is driving the world.

Today, in the classrooms and laboratories of business schools around the world, innovation ranks among the hottest topics.

I may return to Prof. Einstein for a moment with another quote: "No problem can be solved from the same level of consciousness that created it"; tomorrow's

challenges cannot be solved with yesterday's thinking, with the same thinking that caused them.

The social and environmental challenges that we face and the imperative that they be addressed effectively and in a timely manner indicate that we have a profound need for new consciousness, new thinking, and innovation.

One of the greatest barriers to innovation is entrenched dominant logic; convergent thinking or cultural lock-in. Convergent thinking is ideally suited to assumptions of continuity and is effective in handling small incremental changes and differences. Cultural lock- in perpetuates a self-reinforcing world view that can be detrimental and limiting in addressing major challenges and transformational change.

Dominant logic provides an assumed or perceived reality in which visions, strategies, structures can be developed. It acts as a funnel through which perceptions of past environment and experiences (successes and failures) are categorised and as a lens limits the range of imaginable futures and therefore the range of imaginable future strategic actions. It provides a comfort zone which is tempting to maintain, difficult and uncomfortable to question and is often clung to despite mounting evidence that either the view of the past was inaccurate and/or incomplete and/or that the perception of the future excludes too many possibilities.

As you travel to business schools around the world, peruse text books, read the business best sellers, one thing that can be noted is the tension between those who understand that the tried and true business models are sound and only need adjustments, the "if it ain't broke, don't fix it" camp and those who feel that a new consciousness, new approaches, new thinking and new models are imperative. Bolstered by past success, dominant logic often tends to lead to a process of institutionalisation and of favouring the application of old solutions to new problems and eventually to the exclusion of new problems.

How can we go beyond established and congealed world views that are being reinforced by cultural factors that influence a company's thought processes and patterns which can include myopia (market changes are not real), hubris (we have always been right) and egocentricity (wisdom is at the top)?

How do we go beyond "business as usual"?

Allow me to suggest three approaches that can be considered by business to transform its dominant logic and improve its capacity to innovate:

1. incorporate points of view of different stakeholders with diverse priorities, needs and aspirations

2. broaden the objectives of the company beyond the economic to include the social and the environmental

3. integrate radically different markets in the core business model.

Perhaps you will define these as the basis for a new and more vibrant corporate culture. Many people would understand that business involvement with these issues falls under the heading of CSR – Corporate Social Responsibility.

The respected business thinker Michael Porter summarizes the justification for CSR under four headings:

- Moral obligation – to do "the right thing" – to respect ethical values as well as people and the environment

- Sustainability – "meeting the needs of the present without compromising the ability of future generations to meet their own needs."

- License to operate – the permission from government and people to carry on business

- Reputation – the enhancement of corporate image and brand value

While these are valid, they focus on the tension between business and society. Perhaps a more useful point of departure is to recognize their interdependence.

Porter argues that these justifications are not sufficient to help a company identify, prioritize and address the issues that are the most important and where it can make the greatest impact. The result is an array of uncoordinated activities that are disconnected from the company's strategy and that make neither a meaningful impact on the social challenges nor enhance the soundness of the company.

We can argue quite forcefully that an understanding, a consequential and proactive acceptance of the society/business interdependence is at the very root of a sustainable business culture and at the very heart of sound business.

Yet today there exists a dichotomy between the direction of the dominant, primarily Western, Anglo/American shareholder driven corporate model and the needs and aspirations of the society in which it operates.

Last year, in an interview with Mc Kinsey, the father of public-opinion research, Daniel Yankelovich reported that business strategy might be evaluated by two tests:

- does it enhance long-term profitability?

  and

- does it serve the public good?

  And went on to state that these are not mutually exclusive criteria.

Yankelovich's research confirms what we all know: "the social contract with business is in a state of flux." If a new social contract is to be developed, is it important for management to find ways not to be locked into "the tyranny of quarterly earnings" and build a new culture of value not only for shareholders but for all stakeholders?

However, in his book The Corporation, Joel Bakan, examining the legal construction of companies, affirms that corporations are required by law to elevate their own interests above those of others, making them prone to prey upon and exploit others without regard for legal rules or moral limits. The Friedman – propounded position of the moral obligation of the corporation to maximize profits for its shareholders, once the sacrosanct premise on which the rules of business was based is not only being questioned but attacked. The old rules with their clear, uncompromising direction and criteria for strategic and operational decision -making no longer seem to apply. Managing to create shareholder value, evolved into managed earnings and from there to managing quarter-to-quarter results to please the financial markets, even, and at times especially and specifically, at the cost of disinvestment in the future seemed to work and work well until the future arrived. One of the results was that business became disconnected from its fundamentals, producing immediate "perceived value" instead of real and sustainable value, because that is what the stock market rewards.

Disinvesting in the future is not limited to reducing R & D or foregoing investments that will show returns in years to come at the cost of current quarter results and dividends. Of course these are important aspects but often secondary to the disinvestments driven by trading brand value, the relationship and the trust of the stakeholders for short term gains.

So in addition to the tensions caused by a dichotomy between the dominant business model and society, there exists a set of tensions within the model itself and with the business community as a whole.

We are experiencing a state of flux and in this state of flux, the emphasis is moving from learning about ratios to learning about relationships.

Relationships are based on trust. The level and extent of the trust or distrust will determine the quality, effectiveness and value of the relationship. Relationships are much more than the means to an end but are of great intrinsic value.

Reviewing 75 years of research data, Daniel Yankelovich points to three significant surges in American public mistrust of business and other institutions over the past 75 years. Tied to the Great Depression, Watergate/Vietnam and the scandal cycle epitomized by Enron, the three were marked by changes in the economic patterns as well as perceived decline in social morality. The main targets were business and government. And it appears that this decline is continuing. In the Enron days of 2002, 36 % of the US public felt that business leaders could be counted on to do the right thing most of the time. By 2006 this eroded to 28%. And it seems that this mistrust was shared by customer, employee and shareholder alike. At the end of January 2002, Businessweek ran a header: "The scope of the Enron debacle undermines the credibility of modern business culture. Let's get back to basics".

Taken at its simplest, business can be seen as an activity or a process which can be understood in terms of its output relative to the inputs and energy expended and to the value it adds or subtracts.

A process that is destructive, where the outputs are less than the sum of the inputs, must eventually erode or implode, as will any process that does not add enough value to permit its sustainability.

It can be further argued that to be sustainable, a process must serve the needs and aspirations of all those involved, that is to say, it must add value to each, adequately and appropriately recompense each for their input in terms of energy resources or risks taken and ensure a surplus that can be invested to permit growth and development. The argument can be made from both an ethical point of view – just/equitable compensation for effort/risk as well as in terms of the business case – inappropriately compensated effort/risk will tend to seek better opportunities.

In essence, a business can be understood in terms of synergy, a model where the whole is greater than the sum of the parts.

A business that cannot properly remunerate capital will not attract capital and a business that provides better remuneration based on investor standards will attract quantitatively or qualitatively better capital. A business that cannot meet the needs and aspirations of its customers will eventually not be able to retain them or to attract new ones and this same logic can be extended to employees and other elements of the value chain. Without customers, the company would cease to have any economic

input and without employees it would cease to have any economic output. Without a license to operate, a business simply ceases to exist.

If relationships are defined by trust, trust requires transparency and transparency implies respect. In their annual report on the pharmaceutical industry, Ernst and Young cited "increasing stakeholder confidence", along with value chain management and growth in emerging markets as critical factors in realizing global potential.

Porter's question as to where to place the emphasis – on the tensions or on the interdependence – becomes increasingly germane.

This is not just theory.

Let us consider two statements in the light of the concept of the interdependence of business and society:

- Efficient use of land, water, energy and other natural resources makes business more productive..
- Any business that pursues its ends at the expense of society will find its success illusory and temporary.

These illustrate one aspect of the interdependence and help us understand that the responsibility of business with regard to the environment goes far beyond the "nice to do" and impacts the very core: materials and energy costs and long term ability of the company to operate.

It is in the consequent understanding of the impact of externalities that we can explore the concepts that can drive a new business culture.

Current developments indicate that within the next five years environmental, social and governance (ESG) criteria, the hallmark of interdependence, will become mainstream in assessing business performance and sustainability and the integration of ESG standards will be seen as regular business practice. Around the world, corruption is seen as having a significant impact on economic activity resulting in higher cost of doing business, lack of predictability, an uneven playing field and less competition as corruption deters honest bidders. Corruption reduces the resources available for poverty alleviation and can be viewed as an element of failed global governance.

And so we see that the financial community that was once epitomized by a blinded obsession with quarterly results and short term profitability pursuing its own

enlightened self interest, is driving a cultural change that is impacting every aspect of business.

I would like to conclude by sharing some thoughts on the Global Compact which through the commitment and efforts of its stakeholders is today the world's largest and most significant voluntary Corporate Responsibility initiative.

The decision by the leadership of a business to engage in and support the Global Compact, to use the Global Compact as a strategic framework, is a fundamental decision and a decision of fundamental importance. For while at first glance it might seem innocuous, engagement in the Global Compact is really a commitment to a profound cultural change that will have a profound and very positive impact on the business model.

As you will recall, when United Nations Secretary-General Kofi Annan introduced the concept of the Global Compact at the World Economic Forum in January of 1999, he warned that unless more serious consideration was given to social and environmental issues the global economy would grow even more fragile.

Looked at another way, a more equitable and inclusive world economy would not only be more sustainable, but would lead to improvement in the quality of life by providing opportunity and dignity to a growing number of the world's population. In so doing, it would promote peace and ensure the stability and growth of markets.

So while the purposes of business and the United Nations are different, their objectives do overlap and the deepening interdependencies help define the broader aspects of business responsibility.

Outlining both the moral and the business case for responsible corporate citizenship, the Secretary-General challenged business leaders worldwide to contribute to a more stable and inclusive global market by embracing and operationalizing a set of universal principles in the areas of human rights, labour, environment and anti-corruption and by supporting the broader goals of the United Nations.

The Global Compact challenges companies to integrate these principles into their strategic vision, operating practices and the day-to-day decision making and to catalyze action in support of the United Nations goals. To do so, the Global Compact offers facilitation and engagement through several mechanisms: Policy Dialogues, Learning, Country/Regional Networks, and Projects.

The Secretary-General offered the Global Compact as a dynamic platform for profound organizational change, fully realizing that processes of change are never free from tension and cannot happen without leadership.

The Global Compact is not a set of standards or regulatory framework, but rather an action-oriented voluntary commitment to share values and principles, to learn and share lessons learned. Through the Global Compact, the United Nations seeks to advance responsible corporate citizenship so that business - in partnership with other social actors - can play its appropriate role in building more inclusive and sustainable national and global economies, in working towards a more harmonious society.

The Global Compact involves all the relevant social actors: governments, who define the principles on which the initiative is based; companies, whose actions it seeks to influence; labour, in whose hands the concrete process of global production takes place; civil society organizations, representing the wider community of stakeholders; and the United Nations, the world's only truly global political forum, as an authoritative convener and facilitator.

Understanding and respecting the fundamental connections and the interdependence between business, the environment and society has become essential elements in business management. Increasing complexity and interdependence require new approaches and integrative management tools that help embed environmental, social, and governance concerns into their strategic thinking and daily operations.

Business needs support as it internalizes and integrates these issues into the core of businesses, engages in dialogue with stakeholders and reports their conduct. Business requires talented and ethical leaders who can not only advance organizational goals and fulfill legal and fiduciary obligations to shareholders, but who are also prepared to deal with the broader impact and potential of business as a positive global force in society.

Academic institutions help shape the attitudes and behavior of business leaders through business education, research, management development programs, training, and other pervasive, but less tangible, activities such as the spread and advocacy of new values and ideas. Through these means, academic institutions have the potential to generate a wave of positive change, thereby helping to ensure a world where both enterprises and societies can flourish.

Through the Principles for Responsible Management Education, leading business schools and institutions around the world have voluntarily joined forces with

the Global Compact to create a powerful strategic platform to guide and support the contribution of the academic community.

Focusing on purpose, values, method, research partnership and dialogue as well as on adoption and implementation of these principles for responsible management, international business education today finds itself at the leading edge and represents a commitment on the part of the academic community to play a vital role in the building of a better and more harmonious world.

* * *

KNOWLEDGE SOCIETY AND MANAGEMENT EDUCATION

Mr. Igor Lestar
Chief Executive Officer
SEAVUS, Macedonia

"Every few hundred years in Western History there occurs a sharp transformation. Within a few short decades, society rearranges itself, its worldview (paradigm), its basic values, its social and political structures, its arts, its key institutions. Fifty years later there is a new world."

(Drucker, 1993, p.1)

Today's world is a world of change. Change is happening in every single aspect of our lives. We should be able to adjust our behavior to changes rapidly. The need for change including the way we lead business arises as a result of globalization, the transformation of societies from one system to another as well as from the whole revolution in the techniques and technologies that bombard us every single moment with new sources of "the unknown". That being so, we should be able to shift our minds and learn new patterns of behavior continuously; we should be able to teach people around us to change their mindsets according to the environment, even as we teach them not to forget their authenticity and to follow their needs until they reach the highest level, their level of self-actualization. We should build organizations of people that are able to learn and share the knowledge and to develop all of the potential that they posses.

Transformation to Trans-modern

The label "knowledge society" or "knowledgeable society" was first used in the 1960s debate on the structures of the post-industrial society, i.e. the society that should follow the industrial society, in which an economic transition occurs from a manufacturing-based economy to a service-based economy, with a diffusion of national and global capital, and mass privatization. The values needed in the capitalist industrial society are freedom, initiative and creativity and the knowledge is described as a new productive force beside the classical social forces such as labor and property. On a general level, the label "knowledge society" represents a new and separate culture, where knowledge leaves its mark on all areas of society, changing and at the same time modernizing them.

It is still hard to foresee the traits of the post-capitalist world. We know, however, that it will be "both a non-socialist and a post-capitalist society". We also know that "its primary source will be knowledge" and therefore it will be "a society of

organizations." The 21st century conflicts most likely will not be between religions or cultures, but within them. The conflicts will occur among pre-modern, modern, and trans-modern worldviews. The turn of the 21st century has climaxed with the global crisis of wars, terrorism, and climate changes, the increasing gap between the rich and the poor, social alienation, and individual feelings of pressure, anxiety, chaos and powerlessness world-wide. These processes have raised a whole range of futuristic scenarios from the 'softest' questions of environmental sustainability to the radical argument that humanity is in danger of a collective death (Brown, 2006; Ghisi, 2006; Ray, 2002; Rooney, 2005).

Administrations and politicians are slow to understand and accept the changes. Business is sometimes more quick to grasp the changes, and that is why perhaps it has a crucial role in warning politicians. According to Scott Peck, author of *The Road Less Travelled*, confronting problems is painful. Many people are either unwilling or unable to suffer this pain, so they cling to their old patterns of thinking and behaving. When we hold on to the same modes of thinking and acting, we usually fail to work through crises, and therefore, fail to learn and grow. On the other hand, a 'silent revolution' against the existing global socio-economic system is led by the so-called 'creative individuals' who are currently going through personal transformation of their own societal values towards greater spirituality and concerns for the environment, community and overall humanity. The move from industrial rationality to trans-modernity and knowledge society has been politically recognized and researched, in order to make possible trans-modern entities. This transition is characterized by holistic approaches to post-patriarchic values of interdependence between women and men, West and East, human nature, mind, body and soul (Ghisi, 2001).

The new, transformed society is now termed as **"Information Society"**, a society in which low-cost information and ICT are in general use. In the **"Knowledge-based Society"**, the most valuable assets are investment in intangible, human and social capital, and the key factors are knowledge and creativity. This new society presents great opportunities such as new employment possibilities, more fulfilling jobs, new tools for education and training, easier access to public services and increased inclusion of disadvantaged people or regions.

The new world economy is post-capitalist because capital becomes less important than knowledge in the value creation process. Value creation is linked to knowledge applied to knowledge, and this new tool of production is more important than capital and technology. This new society is beyond trade. It is a society of data, information and knowledge. The data - mainly facts regarding things or records, and

information - the data already sorted by some entity, are the key elements of knowledge, which represents all the data and information processed by the human cognitive system, and are passed out. The knowledge is produced by the human brain which digests data and information and it is increased only by sharing in a network. That is why the human brain and networks are the new tools of production. Here is an example: when I exchange an object against money, I am losing the object. This is trade, win-lose logic. If I exchange knowledge, I do not lose my knowledge. I win and you win. I am not trading anymore. I share. This is the win-win logic of sharing. In this new economy, quality of knowledge is more important than quantity, and progress becomes more qualitative, because the knowledge society is about knowledge which is immaterial, intangible and qualitative. In the knowledge-based economy, intellectual property (IP) is an essential element as well as a significant asset. The World Trade Organization contemplates to provide a platform for creating a uniform and globalized IP protection regulatory environment.

Learning organization in the Knowledge-based Society

Living in times of exponential increase in information, the growth of knowledge outlines the growth of tomorrow. Knowledge becomes the core resource of the economy; the last and ultimate source of power (Toffler, 1995). According to Drucker (2002), the fact that developed countries are into the knowledge-based society, represents the biggest change in the modern world. For the first time since the industrial era, the organizations are truly dependent on their staff, on the knowledge of the employees, their formal skills, education as well as their experience and social ability. Furthermore the learning organization is introduced. The learning organization is an organization skilled at creating, acquiring and transferring knowledge and at modifying its behavior to reflect new knowledge and insights (Garvin, 1993). Additionally, it is an organization that facilitates the learning of all its members and continuously transforms itself (Pedler, Bourgoyne & Boydell, 1991). Learning ability is becoming the only permanent source of competitive advantage, side by side with successive change management and effective leadership. In this context two types of knowledge should be taken into consideration:

- Professional knowledge - The essence of the business idea from which the organization receives its revenues (the knowledge of experts); and
- Managerial knowledge - Marketing, administration and management itself. Consequently, a new terminology is introduced to business:
- Information instead of revenue;
- Human being instead of machines;

- Education for human being instead of maintenance for machines;
- Recruitment instead of investment;
- Time instead of raw material.

The learning organization requires that everyone takes responsibility for the organization's objectives, contributions, and for its behavior as well. The industries that have moved to the center of the economy in the last forty years have as their business the production and distribution of knowledge and information, rather than production and distribution of things. Today's knowledge is highly specialized and focused on details. Its description "as an economic resource" sheds interesting light from a different angle. For example, every organization of today has to build into its very structure the management of change in order to be able to answer to the demands of the post -industrial society. If modern countries do not learn how to increase the productivity of knowledge workers and service workers, they will face economic stagnation and severe social tension.

Knowledge-based society triggers transition of the industrial organizations to learning organizations. The leaders in all spheres of the new era society foster success through the growth and effective application of knowledge. Employees in the learning organization are managed by two or even three managers, who are formal as well as informal leaders who must know how to steer the forces in the organization and increase the value of the organizational capital. The core of the organization is made of few people – visionaries, who are willing to continuously develop their skills so as to arrive at new insights.

According to the latest research on leadership and risk identification in massive economic and social systems, adaptive learning should cover the whole organization. This is precisely explained in a *Swarm theory* that investigates a large number of individual organisms that move together in the pursuit of a goal. As individuals, ants may be tiny dummies, but as colonies they respond quickly and effectively to their environment. They do it with something called swarm intelligence. Swarm intelligence means that the single ant or bee is not smart, but their colonies are (Gordon, 2005). Individuals collaborate with each other and are able to pursue goals that cannot be achieved individually.

Collaboration in the organization is a structured, recursive process where two or more people work together towards a common goal, typically an intellectual endeavor that is creative in nature, by sharing knowledge, learning and building consensus. Collaboration does not require leadership and can even bring better results through decentralization and egalitarianism. In particular, teams that work

collaboratively can obtain greater resources, recognition and rewards when facing competition for finite resources.

Individuals share their thoughts and create intersection of ideas. It is a Medici effect, where ideas from different fields and cultures meet, leading to an explosion of ideas and possibilities. It also explains the forces that are creating it and why it is growing in importance. The Medici effect is implemented in the advanced ICT and the concept of Web 2.0. It empowers ways of communication and collaboration between people. People share personal and public data and information, thus increasing the world data base through a process of repeated fact and data evaluation, analysis and recycling.

Management Education

If we know how to manage knowledge, then we know how to manage people. Rapid globalization is one of the most significant aspects of the new millennium (Brown, 1999). The world transforms itself dramatically affecting all areas of economic, political and social life. Deep demographic changes and "lightning speed" transformation in technology, science and economy drastically influence people's lifestyles and the state of society. People of today and of tomorrow have to process more information, cope with social developments and critical situations and make more decisions (UNESCO). The next decades will make unprecedented demands on political courage, political imagination, political innovation and political leadership. The educated person will have to be prepared to live and work simultaneously in two cultures: the one of the intellectual, which focuses on words and ideas, and the other, of the manager, which focuses on people and work.

We are in transition to a trans-modern way of thinking that combines intuition and spirituality with rational brainwork. Some years ago, higher education was a great national asset. Its contribution to the economic and social well-being of the nation was of vital importance. Today it is a world asset and has a global importance. Researchers are pushing forward the frontiers of human knowledge and the foundations of human progress. Teaching educates and skills the world for a knowledge-dominated age. Obtained knowledge gives to graduates both personal and intellectual fulfillment.

Generally, the main role of future education is to make sure people have the skills and training they need to develop a career. One reason for that is the fact that the 10 jobs that will be the most wanted in 2011, did not even exist in 2006. The amount of new technical information is doubling every two years. For students starting a four year technical or college degree, this means that half of what they learn

in their first year of study will be outdated by their third year of study. It is predicted that by 2010 the information will double every 72 hours. The U.S. Department of Labor estimates that today's learner will have 10 to 14 jobs by age 38 (Barlow, 2005).

According to the futurist Ed Barlow, the following are some of the compelling facts about the future:

- 30% of one's knowledge will be obsolete in four to five years;
- 70% of today's technology will be obsolete in six years;
- The Internet doubles in size every 120 days;
- 80% of jobs that today's children under age of five will have, do not exist yet;
- Children of 18 years of age or younger will get 70 % of information from the Internet;
- 40% of the information from the Internet will come from blogs;
- By 2040, China will be the largest economic and military power in the world.

The new demands of the emerging knowledge-based society make imperative the need for reforms in the educational system. The goal of the system will be to impart a small, but fixed body of knowledge at one time. Furthermore, education should emphasize preparation of the up-coming generations to face the challenges of this enormous inflow of information. It should help young people to not only acquire knowledge and information, but also to develop the resources and skills necessary for continual learning. The basic characteristics of the educational system should be the same as those of society. Therefore, the basic skills that one should acquire are collaboration, contribution, diplomacy and critical and creative thinking. Universities in the future should manage education, combining a liberal arts education with business, engineering and scientific expertise to equip graduates for life-long learning and creating the next cohort of leaders (Munroe-Blum, 2000).

The students in the future should be able to make effective transfer of technology and knowledge across sectors by creative analysis and solving problems. They should be oriented towards finding new, creative solutions to problems, and develop promising and interesting new ideas, technologies, products and practices. They should be able to build the society in which knowledge is the true valuable asset. The innovation in that society results from knowledge applied to knowledge; therefore it needs highly educated individuals with wide social skills, technical expertise and business virtues.

The Vision

Nowadays, there is impressive evidence that traditional business schools and management education have proven deficient in many ways. Such education has even been blamed for much of the corporate crime that has burst into public awareness with the collapse of Enron, Arthur Andersen, World Com, Tyco, and Parmalat. The root of this criticism points to the narrowly-focused, over-specialized, efficiency-driven approaches to short-term profit-maximization (Henderson, 2006).

The time has come when we need to ask ourselves: "Are we ready for the future and do we all share the same definitions of the future?" There are three futures that we have to contend with: the "contemporary" future, the "visible and the predictable" one, and the "distant and unpredictable" future.

When thinking of education as a crucial component of human development, one must be constantly alert to the ubiquitous phenomenon of change. We must prepare ourselves not only to respond to the inevitable and imperative changes, but also to engineer an instrumental change. Only this way we can achieve the multi-faceted growth of a social order (Berlia, 2004).

Universities and colleges are considering new ways of using technology to improve their teaching and bring the content to wider audiences. It is a broader issue exploring how technology can change the way teaching is performed, how learning can be extended beyond the college gates (Ranger, 2006).

The manager of the future should know how to use information and contextualize it into knowledge on how to support the industry level. The shift requires remodeling our well-known concepts. Hence we have Web 2.0 and Enterprise 2.0 – why cannot we talk of Education 2.0? We have to adapt quickly to new ideas and concepts and start contributing to the new global society.

What do we need to know when most of recorded knowledge is a mouse-click away? The Education 2.0 is based on the Medici Effect. The effect means intersection. It also explains the forces that are creating it and why it is growing in importance. Intersection tends to yield an exponential increase in ideas and concepts. Only through creating intersections between scientific disciplines, we can master the world's knowledge. We must be able to use the differences as a creative propeller. Intersectional ideas must be found and we must profit from them. Thus, the true knowledge of successful business management lies within the points of business – cooperation of commercial, sociological and technological science disciplines (see Figure 1). These disciplines would need to be the foundation of the new Management Education Curriculum.

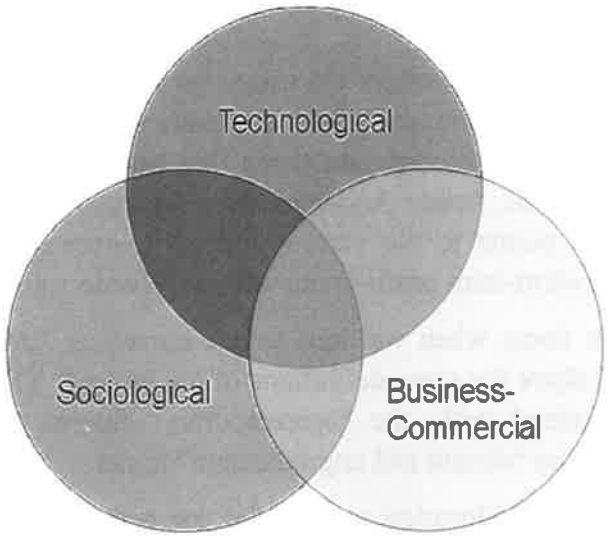


Figure 1. Intersection of Technological, Sociological and Business – Commercial scientific disciplines

We are talking about an information and communication technologies revolution. Is the business education part of it? We are in constant need of highly educated professionals who are capable of managing changes. Invest in research. Build research teams. Research brings innovation. And finally, innovation brings success.

Conclusion

The global flow of information, technology, capital, goods, services and people has never been greater. Challenges and opportunities facing businesses today include unprecedented growth in the developing world, as well as the increased need for consistency, standards, controls, compliance and governance and the cost, risk and management needs associated with evolving supply chain issues. Improving performance has become a persistent need for companies striving to remain competitive and effective in this environment.

There are several important premises that are highlighted in this article. One is the need of transformation; a fluid state that is open and continually adapting to change. Another is an emphasis on self-directed learning, yet within the context of a community of learners. Finally, the learning organization concept is highlighted in the following statements:

- Learning is as natural as breathing, and should be acknowledged as such;
- Learning should be an embedded part of the organization's culture (values and beliefs);

- Continuous adaptation and improvement can only happen through continuous learning;
- The spectrum of learning goes through data, information, knowledge, understanding and wisdom.

The author discussed how important it is to know how to manage the learning experience. Nowadays, there is a need to move away from internal competition to cooperation, collaboration, and networking because we cannot do it alone anymore. Therefore, we need to link ourselves to a larger business and social community and be socially responsible to the larger society.

References:

- Berlia, S. (2004). *Theme presentation at Conference: "The Higher Education Summit: Roadmap for the Futur"*. New Delhi: N/A;
- Brown, T. (1999). *Challenging globalization as discourse and phenomenon.* N/A: International Journal of Lifelong Education. 18(1), 3-17;
- Drucker, P. (1993). *The Post-Capitalist Society*. New York: Harper Collins;
- Drucker, P. (2002). *Managing in the next society*. New York: Truman Talley Books;
- Ghisi, L.M. (2007). *European Visions for the knowledge age: a quest for a New Horizon in the information society*. UK: N/A;
- Ghisi, L.M. (2008). *The Knowledge society: Building a sustainable future.*, Luxembourg: Editions romaines;
- Gordon, D. M. (2007). *Control Without Hierarchy*. Nature journal. P.446, 143; Henderson, H. (2006). *Thoughts on the Future of Management Education*. UK: Cambridge;
- Munroe-Blum, H. (2000). *Universities and Good Practices for Knowledge Management. High-Level Forum on Knowledge Management*: The New Challenge for firms and organizations, CERI/OECD: N/A;
- Ranger, S. (2006). *Education 2.0 – more than just e-learning.* Available on-line. http://www.silicon.com/publicsector/0,3800010403,39160260,00.htm;
- Rooney, D., Hearn, G., & Ninan, A. (2005). *Handbook on the Knowledge Economy*. Cheltenham: Edward Elgar;
- Sveiby, K. E. & Lloyd, T. (1988). *Managing Knowhow*. Trafalgar Square: N/A.

* * *

SUSTAINING GROWTH IN INDIA'S IT INDUSTRY

Vinay L. Deshpande
Chairman & CEO
Encore Software Ltd, Bangalore

With the mayhem in the global financial sector over the past few months and the consequent turmoil in the global economy including India, doubts are being raised about sustainability hereafter of the remarkable growth rates that the Indian IT industry has been experiencing in the past several years. How will the US slowdown affect India's IT companies? Will Indian IT companies need to resort to layoffs? Will they slow down hiring? What kind of growth rates will they have now? If the IT industry slows down, how will it affect India's fast-growing economy? Is India's famed march towards becoming one of the world's three largest economies, suddenly in danger?

These are some of the questions that are already worrying people in India. These and similar questions are naturally expected -- after all, the Indian IT industry's business model is mostly based on providing software development services to the best-known companies in the developed world -- the US, Europe, Japan, Korea, etc., so when the financial industry in the US and Europe seems to be in dire straits, the economies of those countries are also expected to suffer in their wake casting a shadow over the future growth of the Indian IT industry. Consequently, many are asking what India's IT industry can do in order to protect itself from such upheavals in the global economy.

Real Question

The real question to ask, however, is how much longer should India's IT industry be so heavily dependent on, and satisfied with, providing software development services to such global multinationals?

Let's examine this question in some detail. Many of our IT companies today provide software services to the large multinational corporations from different countries, helping to improve the productivity and profitability of those companies and their respective countries. Regrettably, however, little attention is paid to improving the profitability and productivity of our own country. For instance, while the Indian IT industry recorded export earnings of around $40 billion in the latest fiscal year ending in March 2008, the greater percentage (by far) of the domestic Indian IT spend of $24 billion in the same year, accrued to multinational IT companies! Moreover, the productivity in the Indian IT industry, comprising over 2 million professionals, is only about $ 20,000 per person per year, while that of Israel, for example, is over $ 300,000 per person per year! Imagine the contribution of the Indian IT industry to the national GDP, with a 15x productivity compared to the

present -- over $ 600 billion, which would be over thirty-eight percent of the national GDP that would itself be greater by over fifty percent of what it is today! Far-fetched? Perhaps, but the true potential definitely lies somewhere in-between, closer to $600 billion than $ 40 billion.

Myths

However, to realize this true potential, we need a change of mindset, and explode two major myths:

The first myth is that India is already an IT superpower. If anything, it is an IT *services* superpower. However, continuing focus on this superb capability developed over the past twenty years or so, without initiating active efforts in creating our own intellectual property (IP), we cannot expect to ever be an IT superpower.

The second myth is that "IT" means software, whereas IT – Information Technology – encompasses both software and hardware. Therefore, to be an IT superpower, we (as a country) need to assume leadership positions in both hardware and software, and not limit ourselves to software development services. Obviously, this implies that our IT companies in both domains – hardware and software – need to attain leadership positions.

So how do we get there? We need to switch strategy, defocus from drudgery and grunt-work, learn to address creation of Intellectual Property (IP) and develop innovative products and services. There couldn't be a better time to make this strategy switch than now. Some may ask, if global markets are reeling, and might cut down on IT services spend, how can we expect any market to buy our innovative products and services? The answer lies in the old saying that if you offer a product or service that users need, they will buy it.

Time to be Unconventional

The trick may be to address an unconventional market -- India! The domestic Indian market (for both IT products and services) is growing, and growing rapidly, as the potential of IT in improving India's productivity and profitability remains largely untapped. This situation is akin to the old story about the late Mr. Thomas Bata's two sales scouts many years ago, before the Bata Shoe Company entered the Indian market, when both the scouts sent independent but diametrically opposite reports. One said that there was no market for shoes in India since nobody wore shoes, while the other said that the market potential was huge because nobody wore shoes!

India's IT companies must now grab the opportunity. Fortunately, they have the programming skills, the systems analysis and design skills and the project management skills, having acquired all these over the years by providing software development services to companies all around the globe. Likewise, Indian IT hardware companies have acquired component sourcing, volume manufacturing, quality control, marketing, selling, and field support skills, over the years. These

must now be leveraged to move from assembling and selling products based on imported technology, to products created anew, indigenously. For far too long, India's manufacturing activity has, by and large, limited itself to low value-addition. We must now move to a new era of higher value addition, which can only come from R&D and innovation, generating our own IP. And what better way to add value than think of products needed in our own domestic market?

What remains, therefore, is to figure out what India's needs are, and to develop what consequently are the appropriate innovative solutions for those needs -- *Uniquely Indian Solutions for Uniquely Indian Needs.*

Can we Innovate?

Again, there may be self-doubts: are we creative enough? *Can* we innovate? Do we have the financial resources and strength to undertake development of innovative products? What if the creative new products or services we develop, fail in the market?

The simple fact is that innovation and creativity are not the exclusive domains of any country or of multinational companies. There are many examples of Indian innovation, in both IT and non-IT sectors. We simply need to have faith in our own ability to innovate, to be creative. Admittedly, the path of innovation and creativity is fraught with risks, and no one can guarantee success for any new product or service. A spirit of adventure, coupled with patience and perseverance, would definitely be the order of the day, for no risk means no reward and no pain means no gain.

Yet, some products or services will fail. That, however, should not deter our companies from trying again. Each failure should be analysed for its lesson(s), and those lessons must be learnt for the next time around. Each such attempt will help take our companies closer to success. Each success will definitely make up for several other failures. Of course, each failure does burn a hole in the pocket, and therefore it is important to first do one's homework (to determine what product or service is likely to succeed), and then still be prepared for the worst. Admittedly, this may not be every company's cup of tea, but the more of our companies attempt this, the more of them will succeed, and the greater the chance of Indian IT industry achieving success in the innovation space, which in turn will help raise its overall productivity.

Speaking of failure, it is worthwhile recalling George Bernard Shaw's words: "People are always blaming their circumstances for what they are. I don't believe in circumstances. The people who get on in this world are the people who get up and look for the circumstances they want, and, if they can't find them, make them."

Protecting against Failure

Similarly, one possible way to raise the probability of success of a product or service, is to strike a marketing alliance with another company that may have already experienced success in marketing of products or services, and one that therefore has both finances and reach. Clearly, this implies that the innovator company will make less profit as a percentage of sales, but that may be offset by the success of the product in the market and the resultant volume of sales.

Another way to ensure success may be to form a consortium of synergistic companies that may have specialist expertise or experience related to different components or subsystems of a particular new product to be developed, or different aspects of a new service being developed. This way, companies may hedge their bets and spread the risk of development and marketing of a new product or service.

Positive Factors

There are three important factors that present themselves today, which would facilitate making of appropriate choices as to which products or services need to be developed:

First, the domestic Indian market has come into its own, with a reasonable size of demand for almost any product or service. It is therefore possible for new products or services to be tested in the domestic market, without worrying about the inadequacy of the market size as in the past, ironing out any shortcomings, and then taking that product or service to the rest of the world.

Second, since India is part of the so-called third world, almost any product or service designed for the Indian market, is sure to be usable/applicable in the rest of the third world, which is almost three-fourths of the world. It is not rocket science to extend this to the whole world, as many products or services that are applicable to the third world, could also be applicable to the first world. Consequently, by developing products or services for the domestic Indian market, our IT industry can expect to find additional markets in the rest of the world, too.

Third, *affordability* is a crucial factor for success in the Indian market, and fortunately our development costs in India are far lower than in the rest of the world. Therefore our IT industry may actually be able to turn the current global meltdown into an opportunity, by extending the previous argument further, and making affordable products and services available to the Indian market, and thereby to the whole world. The "bottom of the pyramid" offers a huge potential and myriad opportunities for new products and services. However, unless we wake up, as a foreign visitor recently remarked, the huge potential that has always been there will continue to be only a huge potential! We just need to be alert to spot these opportunities, and to think laterally, think outside the box, in order to create the appropriate products, solutions, and services for this hitherto unaddressed market.

We may at this point recall those famous words of the German philosopher, Arthur Schopenhauer: "The task is not so much to see what no one has yet seen, but to think what no one has yet thought about that which everyone sees."

Uniquely Indian Solutions for Uniquely Indian Needs

Uniquely Indian Solutions for Uniquely Indian Needs would fit the above description very well, and hold the key to sustaining growth in India's IT industry. A very good example is microfinance. Nobel laureate Prof. Mohd. Yunus' idea has taken firm root in India, and the Indian experiment in microfinance has already become eminently successful -- in no small measure owing to the use of appropriate information technology (which still holds a huge potential in this area, by any stretch of the imagination). Many other countries, especially those that have tried microfinance projects but failed, are keenly observing the Indian microfinance experiment, and it would therefore be easy for our IT companies to take working solutions from here to those countries.

Another interesting example of a *Uniquely Indian Solution for a Uniquely Indian Need* is the ubiquitous STD/ISD/PCO booth. Such a product had not existed before it was developed in India to address the need of a real-time monitoring device, for the purpose of billing of telephone calls made by a caller from the telephone line in such a booth. This opportunity arose when the Indian Telegraph Act of 1885 was amended by the Indian government about twenty years ago, to permit renting of time on the telephone line allotted to an individual. The development of such a monitoring-device "black box" by a handful of small Indian companies, opened the floodgates for STD/ISD/PCO booths to mushroom and spread into every nook and corner of India. Indeed, this single act could arguably be called the harbinger of the telecom revolution that has swept India and has already catapulted India into a leading position in the telecom services domain. What's more, these little monitoring devices are now seen in many other developing countries, thus proving the claim earlier made herein, that any new product or service that is applicable in India, would also be applicable, at the very least, in other countries of the third world.

Information

One of the important needs of the "bottom of the pyramid," is information. Any hardware or software product or service that helps people to obtain information relevant to their context or needs, at an affordable cost, as well as in the local language, is bound to succeed. However, we must keep in mind that information is a perishable commodity, and is valuable only if presented at the right time, i.e., when it is required.

Yet another example of the *Uniquely Indian Solution* idea is a Tamil-language Point of Sale (PoS) device developed by a leading Chennai-based company, which not only facilitates its use by small traders who do not know any other language than

Tamil, to keep track of their sales and inventory, as well as print invoices/receipts in Tamil, but also keep their accounts using the traditional accounting system of the traders. It's a no-brainer, then, that this device found instant acceptance in the market.

Local Language

Therein lies one of the keys to market success as a *Uniquely Indian Solution for a Uniquely Indian need* – local language. Since only five percent of Indians know or have familiarity with the English language, the other 95 percent are a huge market waiting to be tapped, if only our IT companies would develop hardware and software products to cater to each of the languages of this vast majority.

Challenges

That key – language – is also one of several other challenges, including cost, to creating products for the "bottom of the pyramid." Some of the other challenges are environment (dust, heat), unavailability or unreliability of mains power, availability of communications connectivity, simplicity, ease of use, timeliness, personalization, security of information and local culture. For instance, in most of rural India, women avoid visiting public places, if they can help it, so if information has to be delivered to them, it is best delivered at their doorsteps. Literacy (or the lack of it) could be yet another challenge and a common mistake that many of us make is equating literacy with intelligence, meaning that an illiterate person is not credited with a high IQ. Consequently, we don't give much credit to our rural brethren for their intelligence. There are so many people in our rural areas who don't know how to read or write, but can use a mobile phone very effectively, not only to make calls, but to even get certain types of information (such as cricket scores or market prices), by learning from others. Developers of products and services for the "bottom of the pyramid" market will do well to keep these challenges and issues in mind when designing their offerings.

Application Domains

Many other areas are fertile grounds for new hardware and software products and services. Healthcare (including solutions for the Primary Healthcare Centres, healthcare workers, disease surveillance, etc.), eGovernance (including municipal bodies and local self-government – *Panchayats*), financial inclusion (including mobile and doorstep banking), entertainment, logistics, enterprise field-force automation, etc., are representative of the thousands of application areas that are begging for the "right" solutions.

Industry-Institute Interaction

So how do our IT companies go about the task of identifying and then satisfying the multitude of needs in the domestic market? A good idea would be to seek active and regular interaction with academic institutions of repute. The first

benefit of such interaction could be assistance in identifying specific needs and opportunities, for instance, through market research done by students of good business schools. Senior faculty at such schools could help with devising the market research methodology as well as the analytical techniques to draw conclusions from the market research data.

Once specific market needs and opportunities have been identified, interactions with technological institutions will help identify the technology requirements for developing the products/solutions for the identified needs and opportunities. The companies may then decide which of the technologies they already possess expertise in, and which technologies the institution(s) are better able to contribute through the senior faculty as well as through students.

Thus, Industry-Institute interaction would be an important ingredient in helping India's IT industry in its quest for innovation which in turn will help sustain its growth.

Finance is the next ingredient, but its role is often over-emphasized. The prime goal should be to first decide on the innovative products or services to be developed and to commit the organization to developing the same. It would then be a simple matter to find the resources required. In Mahatma Gandhi's words, "Find purpose; the means will follow." Once you know what you wish to develop, you will be able to estimate what would be the costs involved, and then would be able to figure out innovative ways of finding the required resources to support the development effort.

There are, of course, ways that the government could help make the industry adopt innovation for growth, but that is another topic, and may be dealt with separately.

Most Important Ingredients

The most important elements of the Indian IT industry's quest for sustainability of growth in future, however, are three that have already been mentioned elsewhere above – commitment (to innovation), patience, and perseverance. Far too often, far too many organizations throw in the towel far too early in the life of far too many development projects. Initial failures are simply that – mere initial failures. The Indian Space Research Organization did not give up in the face of initial failures while building up its capability to launch satellites, and by the time this article appears in print, will have launched its Moon mission! Likewise, our companies must learn to not be discouraged themselves or discourage their employees when there may be some initial failures, but on the contrary, should learn to encourage them to carry on to eventual success. Despite everyone's best efforts, though, some projects might ultimately fail; that should not however lead companies to stray from the path of innovation. Having made that effort, though, will have

injected a new spirit of creativity in the organization, which will stand in good stead over the long run.

New Mindset

In today's context, it is especially important that Indian IT companies adopt Innovation as their corporate strategy and policy, for the biggest risk they face is in doing nothing. In the words of Wayne Gretzky, a well-known Canadian ice-hockey player, "You miss 100% of the shots you don't take." Even if some of your efforts at innovation may fail, having made those efforts, you will have injected a new spirit of creativity in the organization, which will stand you in good stead over the long run.

In conclusion, let us all, in India's IT industry, adopt for each of our companies the following beautiful words that had appeared as a full-page unsigned advertisement in The New York Times, several years ago:

AIM SO HIGH, YOU WILL NEVER BE BORED

The greatest waste of our natural resources is the number of people who never achieve their potential.

Get out of that slow lane. Shift into the fast lane.

If you think you can't, you won't. If you think you can, there is a good chance you will. Even making the effort will make you feel like a new person.

Reputations are made by searching for things that can't be done, and doing them.

Aim low: boring

Aim high: soaring!

* * *

THE ROLE OF QUANTITATIVE METHODS IN MANAGEMENT

Dr. Lilly Sanathanan
Clinstitute, Bangalore

When we look at the current global financial meltdown, it is hard to resist asking ourselves the simple and obvious question, "Where have we gone wrong?" I don't think there are simple answers to this simple question. In any case, hindsight will not help us get out of the present mess brought about by the demise of a 158-year-old institution called Lehman Brothers and the collapse of financial giants such as Merrill Lynch and AIG which had to be rescued by Bank of America and the US government with a staggering price tag of $700 billion or more. To quote Santosh Desai, these were all solid corporations staffed by the brightest people from business schools across the world. It is reasonable to assume that these business school professionals had enough exposure to quantitative methods, modeling, and forecasting, to be able to apply these tools toward optimizing their business decisions. Yet, the outcomes we have seen recently must make us wonder about the effectiveness of such tools in today's complex financial world, or the skill set of the decision makers, or both.

It is clear that quantitative techniques have their limitations. They are typically based on assumptions that, in some situations, may not be consistent with reality. Quoting Santosh Desai again, "The headiness of wealth in the short term blinds us to the cantankerous nature of money in the long run. Money exaggerates natural cycles; so when the going is good or particularly bad, it is easy to forget that it can be any other way. When the sensex touched 21,000, most experts believed that it would reach 25,000, and when oil prices approached $150 per barrel, most agreed that they would cross the $175/barrel mark. If one thing is clear from the current crisis, it is that there are no experts when it comes to money, only people with varying degrees of greed." This sentiment is echoed by Chidanand Rajghatta who has come up with credible terms for the usual acronyms, such as Chief Embezzlement Officer for CEO and Corporate Fraud Officer for CFO, and jokes such as "What is the difference between an investment banker and a pigeon? A pigeon can still make a deposit on a Ferrari." The point is that we need new quantitative models which factor in such attributes as greed and fraud, to be able to predict financial meltdowns such as the one we are presently facing.

From a brighter perspective, quantitative tools can be immensely helpful in making optimal decisions in almost any field of human endeavor ranging from pharmaceutical research and development to market research and financial services. Quantitative techniques can be viewed as forming the basis for decision theory, which is about making optimal decisions in the face of uncertainty.

Typically, decision theory tends to be normative or prescriptive in that it focuses on identifying the best decision to be taken, assuming an ideal decision maker who is well informed and rational in his or her approach. The common terminology for this prescriptive approach (how people should make decisions) is called decision analysis, which is aimed at organizing tools, methodologies and software to help people make better decisions. The most systematic and comprehensive software tools developed in this way are called decision support systems. As the label suggests, these decision support systems are just aids for decision making, and are not to be viewed as completely automated decision systems into which you can feed your questions and expect valid answers.

Several statistical tools and methods are available to organize evidence, evaluate risks, and aid in decision making. Hypothesis testing is one such tool. The following example shows a structure for deciding guilt in a criminal trial:

		Actual State of Affairs	
		Guilty	**Not guilty**
Decision	**Verdict of 'guilty'**	True Positive	False Positive (i.e. guilt reported unfairly) **Type I error**
	Verdict of 'not guilty'	False Negative (i.e. guilt not detected) **Type II error**	True Negative

Of the two types of errors denoted in the table above, it is clear that Type I error, namely that of rendering the 'guilty' verdict when the defendant is actually not guilty, is a more serious error than Type II error, namely that of rendering the 'not guilty' verdict when the defendant is actually guilty. The judicial system usually requires strong and compelling evidence beyond reasonable doubt, before pronouncing a defendant guilty. In this case, the hypothesis to be tested, typically referred to as the null hypothesis, is that the defendant is not guilty so that the null hypothesis is presumed sufficient to explain the data unless there is overwhelming evidence to indicate that the data does not support the null hypothesis, in which case

the null hypothesis is rejected in favor of the alternative hypothesis, namely, that the defendant is guilty.

The probability of Type I error, namely, an erroneous conclusion resulting from the rejection of the null hypothesis when it is really true, called the significance level of the test, is controlled by setting it at a small predetermined value such as 0.05. This means that there is only a 5% chance of rejecting a true null hypothesis. While it is important to first control the probability of Type I error, it is necessary to address the probability of Type II error as well. In general, there is an inverse relationship between the probabilities of the two types of errors for a given set of sample data or level of evidence. The only way to simultaneously decrease both types of errors would be to increase the extent of data or evidence by expending more resources. The power of a test is defined as the probability of a correct decision resulting from rejecting the null hypothesis when it is not true, which is equivalent to 1-the probability of Type II error.

For a clinical study designed to demonstrate the superiority of a test drug to placebo, the probability of Type I error is typically set at the 5% significance level, while the number of patients to be enrolled in the study, referred to as the sample size, is determined with the aim of achieving a power of at least 80% for demonstrating the superiority of the test drug.

In order to test any hypothesis, it is necessary to collect appropriate data. Consider a clinical trial designed to test the null hypothesis that the administration of a certain drug does not cause a change in alkaline phosphatase levels. A very simple clinical trial can be conducted to gather data from 100 patients on alkaline phosphatase levels after administration of the drug. A suitable probability model is used to describe the data and an appropriate test is done to test the hypothesis.

Once you have clearly defined the random variable (such as the alkaline phosphatase level whose values occur randomly, but follow a probability distribution) you are interested in, the next step is to measure the values your random variable generates. Ultimately you want to use this empirical information to construct the observed probability distribution for your random variable. The graph of the observed probability distribution may immediately suggest a theoretical probability distribution (such as, a normal distribution). You can use a theoretical distribution, in lieu of the observed probability distribution, to derive inferences about the probability of observing various types of outcomes. In the model-fitting stage, your goal is to replace the observed probability distribution with a better understood theoretical probability distribution. This substitution enables you to more easily make probability statements about your random variable. Based on this probability model, it is possible to decide whether the observed values of the random variable are consistent with the null hypothesis. If so, the null hypothesis is not rejected and one can conclude that

there is no change in alkaline phosphatase levels or that there is insufficient evidence to indicate a change.

If the null hypothesis is rejected, and the conclusion is that there is a significant increase in alkaline phosphatase levels, the logical next step is to estimate the magnitude of the increase. Estimation theory is a branch of statistics that deals with estimating the values of parameters based on measured or empirical data. Estimators attempt to approximate the unknown parameters using the observed measurements. For example, consider estimating the proportion of a population of voters who will vote for a particular candidate. That proportion is the unobservable parameter, and the estimate can be based on a small random sample of voters. The estimation process also involves quantifying the extent of uncertainty about each estimated value by providing a confidence interval (with a high level of confidence such as 95%) with lower and upper limits for each estimate.

Forecasting is another major statistical tool used in making decisions. Planning for the future is essential for any business. Commodities industry needs forecasts of supply and demand for production planning, sales, marketing, and financial decisions. Financial institutions face the need to forecast volatility in stock prices. There are macro economic factors that have to be predicted for policy-making decisions by governments. The list is endless and forecasting is a key 'decision-making' practice in most organizations.

It is a good idea for managers to keep themselves abreast of forecasting methods. There are plenty of forecasting models available. However, choosing the right one is not an easy task. A common, but erroneous perception is that complex forecasting models always give better results than simple ones. It is important to validate any model using available data.

Forecasting techniques that are frequently used can be subsumed under regression analysis, a collective name for techniques for the modeling and analysis of numerical data consisting of values of a dependent variable (response variable) and of one or more independent variables (explanatory variables). The dependent variable in the regression equation is modeled as a function of the independent variables, corresponding parameters, and an error term. The error term is treated as a random variable. It represents unexplained variation in the dependent variable. The parameters are estimated so as to give a "best fit" of the data. Most commonly the best fit is evaluated by using the least squares method.

Regression can be used for prediction (including forecasting of time-series data), inference, hypothesis testing, and modeling of relationships between variables. These uses of regression rely heavily on the underlying assumptions being satisfied. Once a regression model has been constructed, it is important to confirm the goodness of fit of the model.

Regression models are used to help us predict the value of one variable from one or more other variables whose values are known. Regression analysis can be used for predicting the outcome of a given business indicator (dependent variable) based on other related business drivers (explanatory variables). For example you could predict sales volume based on the amount spent on advertising and the number of sales people employed. In practice, a more complex model with more variables would be required.

The growing complexity and volatility of the business environment has made decision making very difficult. Decision-makers can no longer afford to make decisions that are based solely on their experience and observation. Decisions need to be based on data that show relationships, indicate trends, and show rates of change in the relevant variables. The merit of Quantitative methods is that they provide an analytical and objective approach to decision making and help managers tackle the intricate and complex problems of business and industry. These methods can be used to deploy resources efficiently, project long-term capital requirements, forecast demand, and identify customer preferences.

Quantitative methods are especially helpful in marketing research. The environment for marketing has become extremely dynamic. Without adequate preparation, it is difficult for organizations to survive in such an environment. Marketing research is one of the most effective tools that help organizations excel in the marketplace. Obtaining necessary information about customers' tastes and preferences is the key to business success.

Marketing research provides information about consumers and their reactions to various products, prices, distribution, and promotion strategies. Marketers who collect accurate and relevant information quickly and design their strategies accordingly are more likely to be successful in the marketplace.

Marketing research helps in effective planning and implementation of business decisions by providing accurate, relevant, and timely information. The process of marketing research involves a series of steps for systematically investigating a problem or an opportunity.

This investigation starts with problem or opportunity recognition and definition, development of objectives for the research, development of hypotheses, planning the research design, selecting a research method, analyzing the research designs, selecting a sampling procedure, data collection, evaluating and analyzing the data, and finally preparing a research report. The research process provides a scientific platform, contrary to the traditional intuitive approach of decision making by managers which used to put large amounts of resources of the organization at risk.

Quantitative techniques such as estimation, hypothesis testing, regression analysis, and cluster analysis play a key role in marketing research, which is used for new product development, segmenting markets, identifying the needs of the

customers, sales forecasting, estimating the market potential of products and services, and analyzing the satisfaction levels of customers.

Various constrained optimization techniques such as linear programming are also helpful in making business decisions. Linear programming (LP) is a technique for optimization of a linear objective function subject to linear equality and linear inequality constraints. Informally, linear programming determines the way to achieve the best outcome (such as maximum profit or lowest cost) in a given mathematical model, given a list of requirements represented as linear equations.

Linear programming can be applied to various fields of study. Most extensively it is used in business and economic situations, but it can also be utilized for some engineering problems. Some industries that use linear programming models include transportation, energy, telecommunications, and manufacturing. It has proved useful in modeling diverse types of problems in planning, routing, scheduling, assignment, and design.

Linear programming is heavily used in business management, either to maximize the income or minimize the cost of a production scheme. Some examples are food blending, inventory management, portfolio and finance management, resource allocation for human and machine resources, and planning advertisement campaigns.

In conclusion, there is every incentive to use quantitative techniques, along with qualitative analysis and sound judgment, to enhance the efficiency of any business process.

* * *

INNOVATION IN PUBLIC SECTOR AND GOVERNMENT-OWNED ORGANISATIONS

Prof. R. Venkataraman
Director
Xavier Institute of Management and Entrepreneurship, Bangalore

Innovation in public sector and government-owned Organizations

Abstract

Public sector and Government-owned public services organizations are generally considered risk-averse and process-constrained, with sometimes conflicting accountabilities, resulting in a struggle to focus clearly on innovation and thus finding new ways to perform better. These organizations often find it complex to define its customer. To cite an example, how does a police force or a tax-collecting local authority define and measure customer satisfaction? This is a constant enigma faced by some of the public service organizations. However, there are public utility organizations which can with some effort devise ways and methods of going about understanding their customer as well as to innovate and improve.

This paper seeks to identify key factors that bring innovation into public service organizations and develop some ideas on success of innovation in such organizations. This paper will discuss management of innovation conceptually and substantiate the concept with a live case of innovation that has been successfully implemented in one of organizations in the public utility sector in India. The article will throw light on the strategies employed by it such as strategic planning, reengineering, team management and outsourcing.

1. What is Innovation

The Management guru Peter Drucker defines innovation as 'change that creates a new dimension of performance'. In a more succinct way Rogers suggests that it is about 'getting ideas adopted' (Rogers, 1995). It is also defined as the successful exploitation of new ideas by way of development and commercial application of a new idea for a product or process that contributes to wealth creation and profitability of the organization (Mulgan and Albury (2003). These definitions appear very simplistic, but then they do depict the complexity of this subject. "The process of innovation is lengthy, interactive and social; many people with different

talents, skills and resources have to come together (Leadbeater (2003)". Four decades of studies on innovation in the private sector and almost twenty years of interest in manifested innovation in the public sector have all but shown that innovation is a multi-faceted phenomenon that emerges in the context of numerous intervening variables, with no simple universal formula existing that can be applied to ensure success (Borins, 2001).

The central theme regarding innovation that is common to all these implicit or explicit definitions is that it is not only about the creation of new ideas but implementing these ideas into practice in a way which adds value to the stake holders. The study of innovation is therefore the study of how new ideas are generated, how these change organizational or individual practices which add value, and how these successful practices are diffused.

According to Mulgan and Albury (2003), whilst a substantial body of research has emerged in the past four decades on innovation in the private sector, a significant knowledge gap exists with regard to innovation within the public sector, where quality research on the subject is rather limited.

Innovation is traditionally associated with the private sector where there is an urgent need to successfully innovate for organizational survival and strength. The primary motivator is the responsibility of the organization to its stake holders with the over-all objective to maintain or increase profits and survive in a highly competitive global economy. This happens to be the most powerful enabler for private enterprises to innovate. In this process they cut costs, improve market share, and create better value or quality products and services.

As against this, in public service organizations the need for survival is not felt and hence there is no impetus to act. The public sector is constrained by several factors, including the lack of competitive pressure and the difficulty of meeting many statutory requirements simultaneously. It is further dominated by a public accountability framework, which seeks to minimize risk and to technically justify every unit of money spent through constant audit and approval. Compared to the private sector, these operate under a very different set of pressures, interests, restrictions and demands. As such, innovation has not characteristically been given high priority in public services (Bhatta, 2003). The rewards are scant for taking risks and succeeding and there are penalties for taking risks and failing. There is the need to be transparent and the operation is in a 'political' environment. The management is under pressure to take the least line of resistance and as such to operate under several constraints.

2. Process-constraints

Most public organizations function on a frame work of delegations of powers set by the central or state government, and non-state government organizations often operate in an environment of micro-managed statutory regulations. The reporting requirements are often set in legislation and specified in detail. These factors considerably dampen the innovation process.

3. Accountability

Political personalities, groups, government officials and customers at large exert ownership interests on the organization. As stated earlier, these different groups may have different goals and different understandings of what constitutes high performance. It is this complexity that compels the management in these public organizations to take a compromising approach to mitigate the effect of conflicting stakeholder interests so a whole gamut of vested interests come into play resulting in a total digression from their goals. They spend more time pleasing stake holders rather than look at innovations and improvements.

Under normal circumstances nothing deters the government and public services to innovate in order to develop new solutions to old problems; use resources and meet needs, and redefine strategies. Unfortunately the various inhibitors stated above make innovation in the public sector "an optional extra or an added burden", rather than a core activity that is both necessary and of significant value (Mulgan and Albury 2003). In recent times, however, the deregulation process by governments has made the public sector and more so the public utility organizations recognize that they need to cater more effectively to public needs and expectations by building public services around citizens' requirements, as opposed to make them fit its own organization and structure.

A common typology applicable to both private and public sectors differentiates between three types of innovation i.e. Process; Product/Service; and Strategy/Business Concept innovation (Baker, 2002). Innovations in the area of strategy/policy refer to new missions, objectives, strategies and rationales that signify a departure from current reality. Service/Product innovation results in changes in the features and design of services/products. Delivery innovation involves new or altered ways of delivering services or otherwise interacting with clients. Process innovation itself came to prominence as a result of the quality and continuous improvement movements and refers to the way new internal procedures, policies and organizational forms may be required for supporting innovation.

4. Types of Innovation

Incremental innovations that bring minor changes to existing services or processes are the most popular initiatives in public organizations. These do not attract public or political attention and rarely change the way organizations are structured or inter and intra organizational relations. Thus the innovators are insulated at the same time as they derive satisfaction. Radical innovations that either involve the development of new services or the introduction of fundamentally new ways of doing things in terms of organizational processes or service delivery are likely to catch attention and can make headline stories resulting in public and political attention. Likewise transformative innovations which dramatically change the organizations are shunned in the public sector culture.

5. Barriers to innovation

Borns (2001) observes that whilst opportunity and motivation may be present, there is a relative paucity of skills in "change and risk management". On this basis, and drawing upon his unique study which surveyed over 300 government reformers around the world, Borins provides empirical findings about obstacles that are met in implementing innovations in the public sector.

1. Delivery pressures and administrative burdens within the public sector tend to provide majority of service managers and professionals little time to dedicate to thinking about doing things differently

2. Short-term budgets and planning horizons, poor rewards and incentives to innovate and the culture of risk aversion inhibit innovation in the public sector.

3. The bureaucracy in the organization such as skeptical attitudes; difficulty in coordinating within organizations, lack of interest of staff; resistance to introducing new technology; union opposition and middle management resistance to change strongly weigh down the innovative initiatives.

4. Political environment in the form of inadequate funding /resources; legislative or regulatory constraints; and political opposition and instability also bring down the impetus to innovate.

5. Public doubts about the effectiveness of programmes; opposition lobbies by those affected in the private sector, including entities that would experience increased competition as a result of political deregulatory actions are also critical inhibitors.

Thus the key area is the ability to act, that is, either a clear legislative framework or a programme design which empowers managers to be creative in implementing a policy or the presence of a political leader who has support from

politicians and will spearhead innovation, can prove successful in introduction of innovative policies, services or ideas.

Whilst there are great incentives in the private sector for identifying and satisfying new market spaces, in the public sector, there may even be disincentives since meeting new markets may disrupt existing comfortable relationships and cultures. Therefore it might be helpful to consider how the private sector goes about doing this (Kim and Mauborgne 2001). To cite an example Dell Coporation revolutionized the PC marketing with its "build to order" and E Commerce strategies.

It must also be borne in mind that the capacity of an organization to innovate is different from the sum of the capacities of individuals in it. There are many different ways of looking at organizational capacities (Iles and Sutherland, 2001). These generally include three themes: resources, processes and culture (Christensen and Overdorf, 2001) and include resource availability such as cash, skills, tacit knowledge etc, processes such as knowledge management, communication, decision-making, and cultural aspects such as organizational ethics, risk averse management or 'can-do', and inward-looking or outward-looking attitudes.

Again 'Innovation cannot be effective unless it is guided by the vision of its leader made to manifest in a model. A model is a general concept of the future of the organization and evolves from an understanding of the limitations of traditional organization and experimentation with alternatives' (Walton, 1987). This emphasizes the role of leadership in developing a coherent vision within which innovation can take place.

In every effective organization, there is some kind of implicit contract between the leadership and the staff members down the line. The line will produce what the leadership wants; in turn, the leadership produces what the line wants. The organization's leadership wants to make this message as explicit as possible: "You produce for us, and we'll produce for you" (Behn 1991).

This implicit contract is needed by any organization and more so a public organization that seeks to become innovative. Frontline workers will not help an organization's leadership to do a better job of achieving its mission unless they believe these leaders will help them. The organization's top leadership needs to go out of its way to make sure that the frontline workers realize that management is on the workers' side and they understand the big picture. It is also necessary that each and every individual in the organization has a basic trust and belief that the leadership will deliver. It is therefore very important that the right signals are sent throughout the organization.

6. The Indian Experience- Indian Railways

Financially, the Railways were at one time moving towards a debt trap. Between 1996 and 2001, its net revenue receipts (NRR) crashed from Rs.4135 crore to Rs.1,071crore, a fall of 24 per cent per annum. This was followed by the worst years (1998-99), and (1999-2000) when there was a fall of 29 per cent, and another 28 per cent. However in the next year the revenues improved to Rs.4,479 Crore. Mr. Lalu Prasad Yadav moved in as the Railway Minister on 23rd May, 2004. and the railway officials called this the era of 'turnaround' ('Turnaround' of Indian Railways: A Critical Appraisal of Strategies and Processes, G. Raghuram, IIM (A).2007).

After Mr. Lalu Prasad Yadav took charge as Railway Minister, he tripled the revenues to Rs.14,293 crore in the next two years – the highest ever rise. To put this number in perspective, it is India's second highest profit maker, after the Oil and Natural Gas Corporation - Rs 15,143 crore. The operating ratio has returned to below 90%. (Source: Indian Express, April 2006)

Thus the Indian Railways, which was declared to be heading towards bankruptcy as per the Expert Group on Indian Railways in 2001, is today the second largest profit making Public Sector Undertaking. The total investment that is being planned for the eight-year time frame (2007-2015) is tentatively in the order of Rs.350, 000 crores.

The operating ratio had reached a peak of 98.3 in 2000-01, reflecting a relatively poor performance. After that, it had reduced year-on-year to 91.0 in 2004-05. It dropped sharply to 83.8 in 2005-06 due to better utilization of rolling stock The Railways had targeted an improved operating ratio of 77 for 2006-07. The deferred dividend payments were also expected to be cleared by 2006-07. (Business Line, May 6, 2006). To quote the words of Mr. Sudhir Kumar, Officer on Special Duty to the Minister in an interview to the media "There is conclusive evidence that the leadership of the minister is helping to build up this beautiful team with excellent consensus and teamwork Under his leadership 1.4 million railway family-members made it happen".

The Indian Railways, Asia's largest network, bagged the IT Transformation Award 2006 of NASSCOM, the national platform of the Indian IT industry. "Indian Railways is an extraordinary example of a turnaround story, and their plans of public private partnerships for IT", said Kiran Karnik, President of NASSCOM. The growing interest of international entities like HSBC, Deutsche Bank, Goldman Sachs and McKinsey in the railways' current and future development programmes disproves whatever apprehension that might exist about the future of Indian Railways.

7. What constituted Leadership

Now Mr. Lalu Prasad Yadav as Railway Minister has demonstrated that good economics is good politics. His leadership style has been a common sense-based approach, showing an astute understanding of the market reality, the asset base of the IR and the expertise and capability of the management and systems. His sound principles of leveraging the existing assets, empowerment and delegation, gave him a position of strength to build organizational alignment to see through fundamental initiatives. He had established a direct communication approach with all his General Managers and a caring attitude towards staff and unions, all of which served to build the requisite trust. On his vision for organization, his pitch was, "regenerate competitiveness and leverage resources rather than restructure and downsize." This instilled hope and excitement rather than fear and anxiety ("Sizing up the Railway Ministers" -Indian Express, April 2006).

The Indian Railways was an organization capable of functioning well on its own for routine and to rally around whenever routine was disrupted (like in the case of accidents). However, while many ideas had been generated from within the structure, the right atmosphere for innovations to take place was missing. In fact most of the initiatives implemented over the past two years (and earlier) have been ideas from within. But these needed active involvement and leadership to drive the initiatives.

8. Indian Railways strategy for innovation

The railways have followed a strategy of incremental innovations. The strategy for freight rates was for high volumes and made a clean departure from the past recognizing the market scenario and price elasticity of demand. The strategy to achieve higher volumes was also carried through in the passenger business with a differentiated pricing policy. Incremental actions such as more turn around of trains, increasing the length of the platforms and the trains resulted in higher capacity and revenue.

In the other business areas of parcel, catering and advertising, the strategy of outsourcing through public private partnership and wholesaling rather than retailing was adopted. This strategy was to increase asset utilization.

Innovative initiatives planned in the past were also executed during these years. "This has brought in a confidence and up-beat attitude right through the organization". (Raghuram and Shukla, 2006).

9. Conclusion

A study of the success of Indian Railways amply bears out the literature on the subject of innovation in public sector service organizations. The premise that an empowered political leader with consistency of direction and follow-up is required for innovation in a public sector organization is clearly substantiated by this case study. The Indian Railways is an organization with a good set of people and good systems, but it does not have a corporate structure and approach such as to fructify policy initiatives in a timely manner independent of strong leadership. The study further clearly reinforces the concept that public sector companies on most occasions go for incremental innovations as against radical ones. The philosophy that to enable innovation, there is a need for an atmosphere of trust at various levels coupled with appropriate empowerment of the management also stands clearly established.

Reference :

A CRIC Report for the Department of Trade and Industry, Bruce Tether, Andrea Mina, Davide Consoli and Dimitri Gagliard, September 2005 ESRC Centre for Research on Innovation and Competition, University of Manchester, Manchester, M13 9QH, UK

Bhatta, G. (2003), "Don't just do something, stand there! - Revisiting the Issue of Risks in Innovation in the Public Sector", the Innovation Journal

Borins, S. (2001): The Challenge of Innovating in Government, the PricewaterhouseCoopers Endowment for the Business of Government, February 2001

Christensen, T. and Lærgreid, P. (2001): New Public Management: the Transformation of Ideas and Practice. Aldershot: Ashgate

Creating new market space – by Kim, W.C. and Mauborgne, R. (2001) in *Harvard Business Review on Innovation* Boston MA: Harvard Business School Press.

Diffusion of Innovation – by Rogers, E.M. (1995) 4th ed. New York: The Free Press

Indian Railways: Moving to the Fast Track, McKinsey & Company, Inc, December 1997

Innovation; lessons from the private sector *Professor Tom Ling, November 2002*

Innovation; lessons from the private sector *Professor Tom Ling, November 2002*

Iles, V. and Sutherland, K. (2001), Professionals and Researchers London: NCCSDO

Mulgan, G. and Albury, D. (2003): Innovation in the Public Sector, Strategy Unit, Cabinet Office, October 2003

Meeting the challenge of disruptive change - by Christensen, C. M. and Overdorf, M. (2001) *Harvard Business Review on Innovation* Boston MA: Harvard Business School Press.

New Public Management: the Transformation of Ideas and Practice – by Christensen, T. and Lærgreid, P. (2001): Aldershot: Ashgat

Performance Excellence Principles – Drivers of Innovation in Public Sector Organizations - by Malcolm Macpherson1

Turnaround of Indian Railways: Axle Loading, Raghuram G and Shukla N (2006). Indian Institute of Management, Ahmedabad, Study jointly conducted with Railway Staff College, Vadodara, Sponsored by Indian Railways

Turnaround' of Indian Railways: A Critical Appraisal of Strategies and Processes – by G. Raghuram W.P. No.2007-02-03 February 2007

Understanding and Applying Innovation Strategies in the Public Sector-by Steven Cohen and William Eimicke. Graduate Program in Public Policy and Administration, School of International and Public Affairs, Columbia University

How Does Successful Innovation Impact on the Demand for Skills and How Do Skills Drive Innovation? A CRIC Report for The Department of Trade and Industry – by Bruce Tether, Andrea Mina, Davide Consoli and Dimitri Gagliardi ,September 2005

Business Line (May 6, 2006). '*Railways Targets Operating Ratio of 77 in 2006-07.*'

Business Line (July 26, 2005). '*To Export or Not?*'

Business Line (Nov 26, 2003). '*Freight, Passenger Fares May Be Spared in Rail Budget*

India Today (May 29, 2006). 'The Best & Worst Ministers.

Indian Express (April 2006). *'Sizing up the Railway Ministers,'* Express Survey on Railways.

KPMG report on Indian Railways Conference 2007 :McKinsey & Company, 1997.

* * *

BOOK REVIEW

Globality – Harold L. Sirkin, James W. Hemerling and Arindam K. Bhattacharya

Reviewed by

Prof. C.P. Ravindranathan

Xavier Institute of Management & Entrepreneurship, Bangalore

The Boston Consulting Group (BCG) has been a spawning ground for many instant business theories, often decked out with new coinages and seldom failing to cast a spell on students of management. The present book, written by three consultants from the Group, runs true to form. It is all about the phenomenon of "competing with everyone from everywhere for everything" that the authors say, with deliberate hyperbole, characterizes the present global reality – they use the intriguing term 'globality' to describe it.

A set of companies from the rapidly developing countries / economies (RDC/Es) rising up and challenging the established players of the developed markets - challengers vs incumbents – is the leitmotif of globality. There have been such contenders before, the Japanese manufacturers in the 1970s and the Koreans in the 1990s, but if they had come like waves, the present set of global challengers from China, India, Russia, Mexico and Brazil are sweeping the developed country markets like a tsunami. But the tsunami is not only a metaphor in the book, it is also, in a temporal sense, the beginning of a new epoch in universal history where both incumbents and challengers have 'to face and work through' what the authors call seven struggles of globality: minding the cost gap; growing people; reaching deep into markets; pinpointing; thinking big and acting fast; going outside; innovating with ingenuity and embracing manyness.

Chapters in the book elaborate each of these themes, with many companies forming part of the "BCG challenger 100" – "the biggest, most successful, most influential and most interesting to study further" – featuring in them. These are the challengers, the movers and shakers of global business in the future. They come from fourteen high growth countries, notably forty-one from China and twenty from India

and they operate in a variety of fields, accounting for an output of $ 1.2 Tr. in 2006. At the start of globalization and in the course of their own countries' opening up these companies had found themselves working to mutual benefit with sophisticated and demanding businesses from all over the world, but after this phase of two decades or more, the locals started the big rewrite, gaining world class expertise and building tremendous volumes. Quite soon, they became global challengers, benefiting from an amazing access to the wealth of resources and knowledge the world had to offer. Thus commenced the stories of China's Boasteel, India's WIPRO and several others, putting the incumbents on notice that the challengers could not be 'ignored, avoided or explained away".

A crucial element in the rise of the challengers, say the authors, is the fundamental advantage of low cost - an advantage that extends to wages, compensation, capital assets, raw materials and components. So the first struggle in 'globality' for the incumbents is to "relentlessly drive towards the global low cost". Much as they are not always able to succeed, what they could do is to reduce their costs to the point that the price gap with the challengers becomes insignificant. An alternative strategy for the incumbents is to differentiate their products in terms of innovation, branding, distribution and other factors. The ways mastered by the challengers to keep their costs low, offer themselves to the incumbents as well, even though the wage differential between the countries of incumbents and challengers bids fair to persist for the next twenty years. These are: optimizing with labour (good work force management is an imperative for both incumbents and challengers); clustering (China is "chock-full of clusters" and in India there are clusters like Chennai for auto industry); super scaling (among challengers with capability to manufacture on a 'world-leading scale' are Chinese companies like Hisense in consumer electronics and Goodbaby, the maker of children's goods – and the champion of all, Johnson Electric, the world's largest independent maker of micro motors) and simplifying (the forte of challengers since their approach to product design, unlike that of incumbents, consists of simplifying both products and services and the processes they use to create them). The authors' advice to the incumbents is: Skillfully work the levers of cost advantage like locational economies that are available outside expensive cities; relocation of functions apart from manufacturing such as research and development; learning (like understanding not only what consumers want, "but how they think and how they operate on a daily basis"); presence (meaning lower-cost and far-flung locations) and partnership (joint ventures and other forms of collaboration with challengers). Not much that is new in all this; but the authors argue out the case rather persuasively.

The chapter 'Growing People' provides an insightful treatment of talent formation and retention in the context of 'gloablity'. Authors argue that when competing in the era of 'globality', it is necessary to pay attention to the main tasks involved in growing people: recruiting for rapid growth (an urgent need not only in China and India owing to their high rates of economic growth, but also in transitional economies like those in Eastern Europe); 'developing for depth' (the process of training, educating and developing people so as to impart to them the needed skills as well as a deeper commitment to the company, something for which Brazil's redoubtable Embraer is a great example); deploying for early results (the challengers, unlike incumbents, have perfected the art of rapid deployment and productive utilization of their talent, as observed by the authors in China's Hisense and Huawei, India's WIPRO, TATA Motors and Bajaj) and letting leaders build (according to the authors, in RDEs, successful companies recognize their builder leaders and give them plenty of room to operate).

A notable argument that the book makes should draw the attention of management educationists as well as all those working in the domain of skills development. "Of all the resources that everyone from everywhere will be competing for, talent is the most precious and hard to come by. Many challengers are working to grow their own talent. The rest..... will be looking to poach". It mentions the massive numbers of students graduating every year in India, but cites Hewitt Associates, an HR consulting firm, to the effect that only about one-fourth of all such graduates are directly hirable without extensive in-house training. Other estimates put employability at one-fifth. And when it comes to the availability of technically trained manpower, there are predictions from analysts of a likely shortfall of 500,000 workers in the IT and BPO industries in India by 2010. The book speaks of the proliferation of China's colleges having led to an increase in the percentage of places available for students in universities from 4% heretofore to 17% at present, but is silent on the quality of Chinese education. It does not mention the reported fact that MNEs have found the employability of Chinese graduates to be of the same level as for those from India.

The authors would have the incumbents systematically build a programme to fast-track the path to leadership for local employees. They cite the example of Cisco which is planning to create a second headquarters in India to capitalize on the opportunities in the RECs by basing 20% of its leadership team in the country. Incumbents, counsel the authors, have to become or at least appear to become, more like locals to take on the challengers' home markets.

And markets themselves engage the attention of the authors at length, with focus on the big RECs like China, India and Brazil. Citing numbers that speak for themselves, they emphasize that RECs are in a fair way to becoming the most important growth markets, although there is "uncertainty ..... about how the markets will develop, what segments will take off and which companies will be successful in them". Their hypothesis is that market growth will be achieved through actions such as creating new categories (consumers and businesses having been so limited in their consumption for so long that it is easier for a challenger to find new territory to explore and develop, as evidenced in the case of Huiyuan natural and healthy drinks company in China); finding the sweet spot (which in developing countries is at a price point lower than what the incumbent might expect) and facing the challenge of segmenting the huge and heterogeneous populations; localizing (the need to customize offerings to specific consumer segments, something that challengers "intuitively understand", say the authors, as shown by the fascinating story of Natura in Brazil, that "beauty too has local meaning"} and distributing amid chaos (needing no elaboration for people in India who form a sizeable part of the RDE markets). The book's broad conclusion is that at this stage of development of markets in RDEs, both challengers and incumbents must serve organized retailers as well as mom-and-pop stores to reach deep into the populations. "While the size of the prize is compelling", says the book, "going to market in the rapidly developing economies involves a struggle to define, reach and understand your customers". The authors' advice on how to capture a share of the market growth is very much the standard formula : know the consumer, learn the distribution system and take a long-term view. Elsewhere in the chapter they illustrate how, when a product or service hits the value-for-money sweet spot in one developing market, it could likely appeal to customers in other developing and even developed countries without an equivalent segment. Bajaj Auto is featured while in other contexts there are China's Goodbaby, India's ICICI and China's ZTE, diverting stories all.

Taking a cue from Ratan Tata's reported query at an important meeting of the Tata Group, "can the rest of the world not do something for us?", the authors provide an interesting narrative of the possibilities of pinpointing (i.e., the process of companies disaggregating their value chains into discrete elements and locating them based on considerations of cost, customer needs and the like) as accomplished by challengers and even incumbents like IBM and American Power Conversion. China's Johnson Electric and India's WIPRO are described as examples in the book which goes on to elaborate three actions involved in pinpointing that yield significant pay-offs: connecting with customers (through end-to-end capabilities offered for clients' benefit by challengers, as done by Bharat Forge through its design, forging and

machining competencies spread across different locations); distributing complexity (as manifested by WIPRO which "leverages the US for its globally advantaged operations" with acquisitions like Infocrossing and its integration into its organizational architecture; TATA Technologies is featured as another example) and reinventing the business model (VSNL which distinguishes itself through a combination of telecommunications and IT services as well as CIPLA figure as examples). In the authors' words, pinpointing requires that a company "completely rethink its processes, reconfigure its value chain and even reinvent its business model". While many of the challengers have made the grade owing to the advantage of building their value chain from nothing, the process can be quite tough for incumbents because of the bulk and heft of their value chains. For them, the authors' advice is: face up to the legacy, practice seamlessness and play the entire field.

India figures prominently in the chapter on challengers 'thinking big, acting fast and going outside' in regard to the important processes involved in the endeavour: scaling up (Tata through its acquisition of CORUS; Mahindra & Mahindra through its journey to greatness as the fourth largest tractor-maker in the world, the other outstanding example being Mexico's Cemex); building brands (acquire, if you cannot develop, as in the story of Tata Tetley); filling credibility gaps (in areas such as technology and market access: Bharat Forge, Tata Technologies and Bajaj Auto, in the company of China Mobil, through acquisitions, partnerships and leveraging outside talent to build in-house expertise). Bartering in the form of market opportunities in the challenger's home economy for technology is another option, but that has been tried more by Chinese companies like Hisense in collaborations with Matsushita, NEC, Toshiba and the like. As against these audacious moves, the incumbents are advised by the authors to emulate the challengers and venture outside their current geographical and organizational boundaries. They should eschew arrogance, but aggressively build linkages with challengers driven by broad strategic needs, such as gaining distribution or building scale. They should think strategically, evaluate the value chain and organize to go outside. They could also play many roles, as Kawasaki did when it chose to sell Bajaj products in the Philippines.

Challengers' efforts in innovation are reviewed by the authors in terms of adaptation, leveraging and 'rapid-fire inventing'. Brazil's Embraer deservedly has the pride of place, having become the largest global manufacturer of commercial jets upto 120 seats, with $ 4 billion annual revenues. And in the department of rapid-fire innovations, there is indeed Tata's Nano and, somewhat unexpectedly, Arvind eye-care for productivity in cataract surgeries.

'Embracing manyness' is one of the quintessential features of 'globality', it being a world of poly-centricity, with global companies more and more having no single site of operations as 'world headquarters'. In the authors' view, tasks for the companies in managing manyness are : choosing global presence, retaining local character and poly-centralizing. Significant Indian examples under these different heads are Bharat Forge by virtue of its system of semi-independent operations at the global level, Tata enfolding its 96 business units in a unique federative structure with its Group Corporate Centre functioning as a mechanism for the sharing of resources, expertise, knowledge and best practices across all the businesses of the group and CIPLA which distinguishes itself with the incredible flatness of its organization. With these salutary examples in mind, the authors believe that just as the challengers have synthesized western business practices with those of their own cultures, incumbents need to "adopt, adapt and synthesize ideas from everyone and everywhere".

In the part on competition as seen from the standpoint of the incumbents, the author tells the remarkable story of how Nokia learnt the right lessons about globality from China – achieving success in large part by learning to behave a little more like the challengers that went after its market in China. The other story is that of Emerson which comes out a winner on the back of a fundamental strategy of leveraging opportunities around the globe, pinpointing operations, sourcing from advantageous locations and creating growth by meeting its customers' needs with a world-wide presence as "sourcers, makers and marketers". What these stories emphasise, according to the authors, is that incumbent companies can move towards a global transformation by evaluating their competitive position, shifting mind-sets, encouraging ingenuity and leading the transformation from the front.

A robust sense of optimism pervades the authors' depiction of the theme of 'globality'; it is a reassuring narrative with stress on its beneficial effects even if its metaphor of the tsunami and its relentless displacement of the west's certitudes may evoke images of confrontation and conflict. But then, reading the book 'on this bank and shoal of time', with the daily news of the financial meltdown in the west and its consequences for the rest of the world surging about, may also bring intimations of another set of effects of 'globality'.

For all that, the book is an engaging analysis of the rise of multinationals in developing countries, many of which likely to dominate international business in the days to come. Students of business management will find a great deal here to stimulate their interest.

* * *

JME SUBSCRIPTION FORM

To subscribe to the Journal of Management and Entrepreneurship, please make your payments through Demand Draft or Cheque payable at Bangalore par only, in favour of ***Xavier Institute of Management & Entrepreneurship,*** and send to Editor, ***Journal of Management and Entrepreneurship, XIME, Electronics City, Phase - II, Hosur Road, Bangalore - 560 100.***

The subscription rates are as follows :

Subscription Rates	Individual	Institution
☐ 1 year	Rs.300/-	Rs.400/-
☐ 3 years	Rs.750/-	Rs.900/-

Please provide the following details :

Name _____

Designation _____

Address _____

_____

City _____ **Pin** _____

Country _____

Tel./Fax No. _____

E-mail Address _____

Subscriber Number (if renewal) _____

XIME

Xavier Institute of Management and Entrepreneurship

Knowledge Management Workshop

January 09 - 10, 2009

Objectives:

On successful completion of the workshop, participants will be able to;

- Investigate and critique existing theoretical framework for knowledge management
- Understand the role of technology in achieving the goals of knowledge management in organizations
- Exploit the techniques of knowledge audit and systems analysis in identifying and characterizing organizational knowledge and information needs
- Understand the process involved in capturing and sharing an organization's assets, both tacit and explicit
- Understand how knowledge management supports business objectives in organizations
- Identify knowledge management implementation areas
- Highlight how knowledge management could be used to drive innovation in organizations
- Bring home the benefits of knowledge management in harnessing a company's most important resource namely its people

Resource persons

- Dr. T. Kanti Srikantaiah, Director and Professor, Centre for Knowledge Management, Dominican University
- Prof. J. Philip, Founder & President XIME, Bangalore
- Dr. J.K. Suresh, Associate Vice President and Principal Knowledge Manager, Infosys Technologies Ltd.
- Ms. Shoba, Senior Manager, Perot Systems
- Mr. Kottai. A, Head - KM/ ECM services, Technologies Excellence group, Tata Consultancy Services
- Mr. Ritendra Banarjee, Asst. Vice President, Testing (QEDGE), Satyam Computer Services Ltd.
- Dr. Madhan Mohan, KM Consultant
- Ms. Maria Christine, Lead KM, Honeywell Technologies solutions Pvt Ltd.

Programme Fee

Industry delegates	: Rs.5,000/-
If a group of three nominated	: Rs. 12,000/-
Academicians	: Rs. 2,500/-
Last date for registration	**: 2nd Jan, 2009**

Target Audience

The workshop is designed to appeal to a wide variety of participants; including, Industry executives / professionals engaged in KM initiatives, Academic faculty, and senior professionals in IT, Knowledge workers and various levels of managers

Programme overview

Introduction

Definitions and concepts

Review of knowledge based environments

- Learning organizations
- Information repositories
- IT

Three stages of knowledge management

Knowledge portfolio

Explicit and Tacit knowledge

Knowledge inventory and mapping

KM strategies

- Nonaka's model
- Boynton's model
- Others

Knowledge management applications

Business objectives and

User requirements

Content management

- Evaluating contents
- Managing internal contents
- Managing external contents
- Communities of practice
- Barriers to knowledge sharing

Case studies

Knowledge management system and design

System requirements and specifications

KM conceptualization

A programme for KM

Knowledge management education and training

Academic and Non-academic training

Knowledge management trends

Developments, policies and issues

Building learning organizations

Organizational renewal & employee growth

The Institute

XIME was established in 1991 by a group of distinguished academicians under the leadership of Prof.J.Philip, who have made significant contributions to the field of management and professional education. Currently XIME is regarded as one of the best business schools in India and it is the proud recipient of the highest accreditation by the National Board of Accreditation of AICTE. Consistently it is rated as A++ institute by Business India.

For further details / Registration

Contact

Vinodh Arockiaraj J
Programme Coordinator
XIME, Electronics city,
Phase – II, Hosur Road,
Bangalore – 560 100

Ph: 080 – 2852 8597 / 98, +919742768798
Fax: 080 – 2852 8733 / 2852 0019
Email ID: vinodhaj@xime.org / xime@xime.org
Website: www.xime.org

Journal of Management and Entrepreneurship
Published by Prof. J. Philip, Xavier Institute of Management & Entrepreneurship
Electronics City Phase II, Hosur Road, Bangalore – 560 100
Printed by Mr. Joy Kottackal, Matha Prints, 4/1-24, II Main Road, Brindavan Nagar
Bangalore - 560 029
Reg.No.MAJ(2)CR/PRB/135/05-06 KARENG/03344/10/1/06-T6 dt. 29.11.06

Retail Selling Price : Rs.100/-