

**ICM:**

**SKILLS TO HELP COMPANIES SURVIVE THE PRESENT  
ECONOMIC CRISIS AND SELECT WINNING APPROACHES FOR  
LONG TERM VALUE GROWTH IN A MODERN KNOWLEDGE  
RICH ECONOMY.**

**General Assembly Annual Meeting**

**The Arab Federation for Engineering Industries**

**Damascus, Syrian Arab Republic**

**7 June 2009.**

Dr. Gordon McConnachie,  
Coordinator Global Association of IC Practitioners,  
Chief Technology Officer APICC Hong Kong SAR China,  
Founding Chairman and Director IA Centre Scotland,  
Owner GM IAM Services.

Tel: +66-8-9923-5110 (Mobile)

Mail: [gordon@gmconnachie.com](mailto:gordon@gmconnachie.com)

Web: [www.gmconnachie.com](http://www.gmconnachie.com)

## **ICM: SKILLS TO HELP COMPANIES SURVIVE THE PRESENT ECONOMIC CRISIS AND SELECT WINNING APPROACHES FOR LONG TERM VALUE GROWTH IN A MODERN KNOWLEDGE RICH ECONOMY.**

### **1. Summary.**

The world economic crisis is having a profound and negative effect on many industries and is impacting on the lives of many people. The extent of the recession resulting from this economic crisis has resulted in a significant market failure which is impacting all sectors. There will now be a period of consolidation as stronger companies survive and weaker companies are either absorbed or cease trading. In most economies the majority of companies are small or medium sized enterprises and these companies are particularly vulnerable. However this recession is so deep that large companies which have failed to keep pace with developments in the modern economy are no longer assured of survival, as witnessed by the significant problems currently being experienced by General Motors (USA).

In this process of natural selection, those companies which have managed well their structural capital and their tacit knowledge and have empowered their employees to deliver innovation and service in line with changing customer needs and the business plan will serve the customer better and have a higher chance of success. In the motor industry, Toyota is the prime example: although hurt in the short term by this market failure, their excellence will ensure that Toyota emerges from the recession stronger and with an improved market position.

The growing practice described above which I call ICM (Intellectual Capital Management) has developed and been validated over the past years into a robust and proven approach. It is applied today by leading companies and made available by leading nations as a service to their small and medium sized enterprises.

A key role for employers federations is to critically look at new and proven approaches such as ICM, to decide in what measure these approaches can benefit their members, and to initiate a programme to make the most valuable elements available to their members.

ICM can in the short term provide a concerted solution to identified critical problems and in the longer term provide strategic breakthrough change in the

way companies structure and execute their business. ICM is a powerful competency which adds to the ability of companies to survive short term crises and to perform over the long term in the sustainable creation of long term value.

## **2. Powerful Questions.**

2.1 Given recent events which led to the global financial crisis and the resulting recession, we may be forgiven if at first glance we think the business rules have changed. Is this really the case or have these recent events which have affected so many people simply reminded us of the fundamental rules of doing business?

2.2 What are the best approaches for short term survival and success, and for long term value growth?

## **3. Simple Answers.**

3.1 We are all in this situation together as today we look at an economy of scarcity: a scarcity of confidence, a scarcity of financing, a scarcity of customers prepared to buy and perversely a scarcity in some sectors of skilled personnel.

3.2 We live in a time of great change, a time of great risk and uncertainty, and a time of great opportunities. Truly we live in a time of abundance of knowledge and skills.

3.3 We live in a time when the capitalist free market model is in question: most of what I read suggests that the model works but in its implementation we need balance, transparency, the target of long term sustainable value creation, and more government checks and balances to detect and control excesses.

3.4 The fundamental rules of doing business have not changed and the traditional values of honestly providing the correct product or service to the customer at the correct time at the correct price are still true today.

3.5 We must all make short term adjustments to survive the current crisis and these adjustments will depend on the individual situation of each company.

3.6 We should also take this opportunity to prepare better for the future so that we emerge from this recession stronger and more fit to play a role in the world market.

#### **4. ICM: One Powerful Approach for Long Term Value Growth.**

I worked for Dow Chemical for over 25 years through the global expansion of the eighties, the consolidation of the nineties out into the subsequent acquisition phase which the Dow Chemical total efficiency drive had made possible and which culminated in the acquisition of Union Carbide and in recent times of Rohm & Haas Company to create the largest global chemical company.

I initiated an ICM approach within my business and was fortunate to be one of the team who created the global ICM approach within Dow Chemical. ICM was only one of a series of pillars on which the secure future of the company was built at a time in which the chemical industry was commoditising.

ICM is really a pure, simple common sense approach. The symbols ICM represent Intellectual Capital Management but do not let us worry about a name: it is the concept which is important.

ICM means that in an organisation you first of all make sure that you know the main aims, objectives, goals and plans of the organisation and the measures of success.

ICM then takes the structural capital of the organisation (fixed assets and recorded knowledge assets), the tacit knowledge in the minds of the teams of employees and managers, and the way in which the workforce is managed and empowered to perform and in one holistic activity manages all this in line with the company or business or society goals while simplifying work processes if possible.

You may not be surprised to know that only a few but increasing number of organisations have embraced and benefitted from applying such an approach to date: embracing the approach is the start of a long and powerful journey which can be taken at whatever pace and on whatever scale best fits an organisation's needs. Important is only to start NOW and not to wait for a crisis situation by which time it may be difficult to realise optimum benefit.

Those companies which have implemented a deep ICM approach such as Dow Chemical, Toyota or Royal Bank of Scotland (RBoS) have seen great benefits but as you will understand ICM is but one approach and in the case of RBoS all the good work was undermined by the losses sustained during the recent toxic assets crisis with the

result that RBoS is now effectively restructuring under UK State control. By the way, only Dow Chemical explicitly uses the term ICM: Toyota and RBoS do not but have equally powerful activity in place. So let us not be prescriptive about the exact terms we use: let us rather make sure we use the resources at our disposal to create, extract and release value in line with our goals to benefit the organisation overcome short term crises and set it more and more on a path to sustainable long term value growth.

## **5. ICM in Detail.**

ICM is all about breaking down artificial barriers and working together for the future success of the organisation. This can be a difficult task and so it is essential that the first step is to have top level support before commencing.

The stages of implementation are (i) awareness raising, (ii) education, (iii) describing the present situation, (iv) describing the desired situation, (v) stating the changes to be made, (vi) implementation, (vii) tracking progress, (viii) reporting progress, (ix) reinforcement or redirection of the approach and (x) imbedding the approach in the institutional culture of the organisation.

As the Chinese philosopher Lao Tzu (604 – 531 BC) said “A journey of a thousand miles begins with a single step”. In any organisation it is important to start out with the most burning issue at hand: the first work will develop its own momentum and prove its own worth.

In the short term this may be finding a way to export in order to fill capacity use, acquiring access to a new technology in order to stay competitive, finding a business partner to market a new product or fighting off a competitive challenge to your right to sell in a foreign market.

In the longer term this may be to modernise your innovation culture in order to remain competitive, to cut costs, to understand where your market is going and who the real competitors and customers are, to understand the importance of intellectual property (e.g. trade marks, patents, copyright) to your business perhaps more in foreign markets, to develop and commercialise new products or services more effectively or to look towards other ways of capitalising on your IC package through licences, joint ventures or other partnerships in order to increase your value income streams.

In the normal course of events a selection must be made from the most pressing issues and the “low hanging fruit” selected as the first step. For Dow Chemical this was imbedding the management of its IP portfolio in the business process in order to manage it better and draw out better returns. For RBoS it was developing new businesses and forms of customer service. For Toyota it was quite simply overcoming the fact that they had been denied access to the US car market after GM terminated a joint venture in the USA and achieving their dream to become the largest and most successful auto maker in the world through providing excellent products and customer service.

At a personal level, I firmly believe in the fundamentals of these three companies. I am grateful to have worked with Dow Chemical for just over 25 years, happy even in today’s climate to use a major credit card from RBoS and a very satisfied owner and driver of a Toyota Camry. I believe in these brands because I know a little of the hard work which has gone into building them, and thus I support them. Every customer makes such value judgements, and an ICM approach can provide one more opportunity to tell your customers what you are doing to build products and services which they may wish to buy today and in the future.

It is not possible to be prescriptive in how an ICM approach should be applied: each organisation is different with different opportunities and limitations. The key is to follow steps like those outlined below:

- (i) Awareness raising: showing people in the organisation how true long term, sustainable value can be created by working together to create (innovation), extract (product and service creation) and release (bringing to market) value from the sum total of the relevant IC in the organisation or available to the organisation for a given project.
- (ii) Education: providing basic learning on new skills which may be required many of which may be human relations skills and ways of working together across traditional functional barriers. This involves over time creating the spirit and culture of performance and cooperation as opposed to the destructive culture of internal competition.
- (iii) Describing the present situation: how is the combination of structural capital, tacit knowledge and team building used today.

- (iv) Describing the desired situation: is the present situation optimal (this would be rare) and if not what is the ideal process?
- (v) Stating the changes to be made: action to be taken, management challenges, measures of success and expected timelines should be assessed. Internal and external benchmarking should be undertaken to verify need and acquire new skill respectively.
- (vi) Implementation: putting the required steps together and working to effectively create, extract and release value as an empowered team.
- (vii) Tracking progress: measuring progress and tracking how this progress meets expectations.
- (viii) Reporting progress: reporting success and difficulties to stakeholders and management in a no-blame culture to inform and provide learning.
- (ix) Reinforcement or redirection of the approach so that a self motivated high performance team is built.
- (x) Imbedding the approach in the institutional culture of the organisation and creating a culture of freedom and trust.

## **6. ICM Case Studies.**

### **6.1 Dow Chemical.**

The Dow Chemical Company (USA) [www.dow.com](http://www.dow.com) founded in 1897 is one of the pioneer companies in creating a universal ICM approach. Its genesis in the early 1990s grew from a realisation that the chemical industry was commoditising and that all efforts must be made to extract value from the company assets and convert these into value streams.

The first approach was to integrate fully the management of intellectual property and technology into the business activity. The short term results were a saving of US \$ 40 million in IP maintenance fees and the creation of a new business Corporate Licencing which generated over US \$ 100 million per year in new income streams at incremental cost. The longer term effects were more understanding and focus on the entire innovation process, a new process to develop and commercialise technology, the identification of business gaps and the identification of best available technology leading to the acquisition of process technology which led to

the creation of a polypropylene business, and the identification of best fit acquisition partners which led to the acquisition of Union Carbide Corporation and of The Rohm and Haas Company.

The lessons from the Dow story are that while technical problems can usually be solved if the relevant resources are applied, it is in the resolution of human issues that the greatest value can be achieved. Considerable effort was placed on the creation of self empowered high performance teams and on coaching them in working together. This effort in creation of an inclusive culture where cooperation was rewarded and destructive competition was discouraged has paid off in greatly improved team performance.

## **6.2 The Royal Bank of Scotland.**

The Royal Bank of Scotland (UK) [www.rbs.co.uk](http://www.rbs.co.uk) founded in 1707 has always pursued a path of innovation, customer service and employee empowerment. It became the first bank in the world to offer an overdraft service in 1728, the first to offer a mobile bank vehicle in 1946, and one of the first banks globally to offer telephone and later internet banking. Always ahead of the trend RBoS was also the first bank in the UK to sell insurance by telephone after acquiring Direct Line Insurance with its now famous red phone logo. The fruits of this hard work by RBoS were realised in the form of acquisitions which created one of the world's largest banking groups. However in the past years RBoS leadership has taken its eye off the ball and a combination of the acquisition of the Dutch bank ABN AMRO at an inflated price and write downs in its assets following the 2008 international financial crisis has led to it losing its independence and being forced into UK State Control as a partly nationalised company. The lesson here is that striving for value growth is a continuous process, and past successes do not guarantee a positive future. As the large banks struggle to come to terms with the credit crunch, the small Airdrie Savings Bank in Scotland (the only independent savings bank in the UK) [www.airdriesavingsbank.com](http://www.airdriesavingsbank.com) has avoided contamination by toxic assets and is making record profits. At the correct time this small bank adopted a low risk strategy with a very positive outcome, again a classic ICM approach.

## **6.3 Toyota.**

Toyota of Japan [www.toyota.com](http://www.toyota.com) is today the largest and most successful auto manufacturer in the global market place. How does an organization implement one million new creative ideas each year, and become a perennial top ten profitable companies of the world, and achieve market leadership while relentlessly pursuing perfection and delivering some of the best new innovations the world has ever seen. Welcome to Toyota's Innovation Factory and The Toyota University. A continuous application of lifelong learning for employees and ICM principles has allowed this company founded as a handloom manufacturer in 1898 and almost destroyed in the collapse of Japan in 1945 to become the premier world auto company. In Hong Kong and in Bangkok almost every taxi is a Toyota: proof of reliability and value for money. Please read the article <http://creativityandinnovation.blogspot.com/2006/10/toyotas-innovation-factory.html> for more detail and the Business Week review and imbedded [http://www.businessweek.com/innovate/NussbaumOnDesign/archives/2007/02/toyota\\_shows\\_th.html](http://www.businessweek.com/innovate/NussbaumOnDesign/archives/2007/02/toyota_shows_th.html) article for a second opinion.

Let us remember that Japan was the first country to mention ICM but the articles were only published in Japanese. Today Japan is the first country to introduce a compulsory Intellectual Assets Based Management Programme for its companies: for more please see [http://www.meti.go.jp/policy/intellectual\\_assets/english.html](http://www.meti.go.jp/policy/intellectual_assets/english.html) Today Toyota is far more than just an auto company: Toyota is a knowledge company.

Toyota has shown that by staying with ICM based principles especially in times of adversity it has built a leading edge company which will emerge from the current recession stronger than many of the companies with which it shares the market.

## **7. Benefits.**

The leading companies have shown us the results of studying and applying a true ICM approach. The benefits are there for all to see and can be stated as: a clear appreciation of capabilities, a defined and accountable plan of action on a project by project basis, agility, the creation of a highly innovative and empowered culture, a set of measures to track progress against plans, and true leadership.

## **8. Cautions.**

The approach is powerful and requires application and persistence: it creates fundamental change in the organisation culture and should only be undertaken with top level support and sponsorship.

## **9. The Role of an Employers' Federation.**

A key role for employers' federations is to critically look at new and proven approaches such as ICM, to decide in what measure these approaches can benefit their members, and to initiate a programme to make the most valuable elements available to their members, especially small and medium sized enterprises.

## **10. The Role of Government.**

A key role for Government is to be aware of leading edge tools including ICM which can help develop the national economy and where appropriate create support structures to raise awareness and provide training to national companies.

The Intellectual Assets Centre in Scotland, The Beijing Intellectual Capital Centre in China, The IP Academy in Singapore and The Syrian Enterprise and Business Centre are good examples of Government support in this respect.

## **11. Advice and Sources of Help.**

Feel free to contact me at any time: Dr. Gordon McConnachie, [gordon@gmconnachie.com](mailto:gordon@gmconnachie.com) , [www.gmconnachie.com](http://www.gmconnachie.com) , Tel: +66-8-9923-5110 (Mobile).

The website of the International Association of IC Practitioners [www.iaicp.org](http://www.iaicp.org) which contains links to 15 individual world IC Centres.

The developing website of The Asia Pacific IC Centre in Hong Kong SAR, China [www.apicc.asia](http://www.apicc.asia) which is conceived as a link centre between China, ASEAN and the Rest of the World.

The website of the IA Centre in Glasgow, Scotland. [www.ia-centre.org.uk](http://www.ia-centre.org.uk) which is a small service centre targeted on supporting small and medium sized companies.

The website of the IP Academy of Singapore [www.ipacademy.com.sg](http://www.ipacademy.com.sg)

The website of the Syrian Enterprise and Business Centre [www.sebcsyria.com](http://www.sebcsyria.com)

The website of The Finland Futures Research  
Centre [www.tse.fi/EN/units/specialunits/ffrc/Pages/default.aspx](http://www.tse.fi/EN/units/specialunits/ffrc/Pages/default.aspx)

The website of The Arab Knowledge Economy Association [www.akeame.com](http://www.akeame.com)

---