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Welcome to this second volume of the EIPM Journal of Supply Excellence.

This year saw the launch of the first class in Shanghai 上海 of our Global Executive MBA Programme. The programme brings together the best of a Generalist Executive MBA with "state-of-the-art" specialised Purchasing Strategy modules. With participants from, ABB, Alstom, Areva, Bitron, Bombardier, Caterpillar, Clariant, KPMG, Moog, Rio Tinto, Whirlpool and other leading companies a wealth of exchange is taking place. Leveraging that exchange, the Shanghai cohort joins their European counterparts for the annual Master Class and the EIPM conference, in December.

This year's journal again provides us with a great occasion to take a deeper look at the maturity of international purchasing offices with Dr. Fu Jia from the University of Exeter Business School. He proposes a five stages IPO evolution process that can help practitioners plan future developments. Xavier Sarrat shares with us his analysis and calls for a new vision where Chinese suppliers need to be perceived as a source of value and not a low cost option.

2013 will be a year where EIPM investigates risks and opportunities in global supply chains. Robert B. Handfield is the Bank of America University Distinguished Professor of Supply Chain Management at North Carolina State University; he shares with us his views on the supply chain intelligence as a strategic response to develop resilience.

Corey Billington & Rhoda Davidson prolong his analysis by offering us some insight into two approaches particularly relevant in our current economic context. They show how the use of sourcing contract portfolios can help to minimize the cost of supply chain volatility and how "extended innovation" can help to increase innovation efficiency.

On the opportunity side, we offer you a four page overview on how purchasing teams can help to support differentiation strategies and create value. We use the metaphor of surfing where, depending on the wave you want to catch, you need to take a different surfboard.

People and society are not forgotten in this second volume. One of our MBA Professor, Michael Dickmann, from the Cranfield School of Management, shares some of his research on international assignments and global talent management. Christian Kaemmerlen also reports on this year's EIPM talent management workshop. He encourages all procurement professionals to think and act diligently about talent.

The EIPM vision is to act as a bridge between academics and practitioners, therefore we give the opportunity to a young promising academic to publish in the EIPM Journal of Supply Excellence. Jury Gualandris received this year's Best Paper award at Ipsera, the leading network for purchasing research. He and his co-author share their findings about sustainable supply chains.

In 2013 we will pursue research and knowledge sharing activities on strategic differentiation, the prospect of a manufacturing renaissance in the western world and the role of leading companies in main-streaming sustainability practices across their supply chain. I expect purchasing to take a leadership role and contribute to a sustainable renaissance. EIPM will play a key role in accompanying this transformation

Looking forward to our exchanges throughout this coming year.

*Bernard Gracia
EIPM Dean and Director*

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WHEN PURCHASING TAKES THE LEAD IN SUSTAINABILITY...

By Gualandris, J., Golini, R., Kalchschmidt, M.



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With the paper entitled "Sustainable supply chain management: the role of supply chain management investments and global sourcing", authors have recently won the Best paper award at the 2012 IPSERA (International Purchasing and Supply management Education and Research Association) conference.

Jury Gualandris is attending the PhD program in Economics and Technology Management of the Università degli Studi di Bergamo. His studies focus on supply chain risk management (SCRM) and sustainable supply chain management (SSCM). Is currently visiting Ph.D. at Ivey School of Business (ON) Canada. With the research entitled "Sustainability implementation in industrial supply network: Why and How?", he is the Runner Up of 2012 POMS College of Sustainable Operations Ph.D. Proposal Award Competition.

Ruggero Golini is Assistant Professor of General Management and Supply Chain Management at Università degli Studi di Bergamo. In 2011 he received his Ph.D. His research interests are focused on global supply chain management and global value chains.

Matteo Kalchschmidt is Associate Professor of Innovation and Project Management at Università degli Studi di Bergamo. His current research interests are in global supply chain management and sustainability. He has published in several international journals on Supply Chain Management and Demand Planning.

A sustainable business aims at continuously improving its environmental and social performance (i.e. reducing CO₂ emissions and waste disposal, improving working conditions, avoiding discriminatory practices), assuring the possibility for future generations to meet their needs.

A critical aspect on businesses' agenda regards the adoption of environmental and social programs. These programs can be internal (e.g. ISO certifications, environmental management systems) or external (e.g., sustainable supply chain management practices such as monitoring supplier sustainability and developing new sustainable products with suppliers).

The first kind of initiative is usually undertaken to improve the company's sustainability performance, while the second is usually developed to improve the suppliers' performance in this field.

This present article puts emphasis on the role that purchasing and supply management functions have in improving company's environmental and social performance. It relies on data collected by the fifth edition of the International Manufacturing Strategy Survey from more than 700 companies around the world; this article provides evidence supporting the following statements:

- Sustainable supply chain management (SSCM) significantly contributes to the reduction of companies' social and environmental impacts;
- Combining traditional SCM (i.e., supply base reduction, partnerships, supplier rating programs, asset-specific

investments) and SSCM allows companies to further improve their sustainability performance. Sustainable supply chain management (SSCM) mainly consists of two groups of initiatives:

- Monitoring suppliers' sustainability (e.g. by means of suppliers' self-assessments, suppliers' code of conduct, or vendor rating tools integrating environmental and social criteria)
- Collaboration toward sustainability: involving suppliers and collaborating with them to design and develop new sustainable products/processes (e.g., Life cycle analysis, co-design and close-loop processes)

Figure 1 sheds some light on the role that such programs have in fostering companies' sustainability performance. Companies are clustered in two groups: best performers (i.e. firms that have significantly improved their environmental and social performance during the last three years and declare to be leaders in sustainability) and worst performers (i.e. firms that have improved less their performance during the last three years).

The graph below shows the average level of investment into SSCM programs for such groups of companies. Investments are measured on a five point scale, where 1 represents a scarce effort put into the implementation of SSCM initiatives during the last three years, while 5 represents a high level of effort.

Figure 1 : SSCM investments by Best and Worst performers

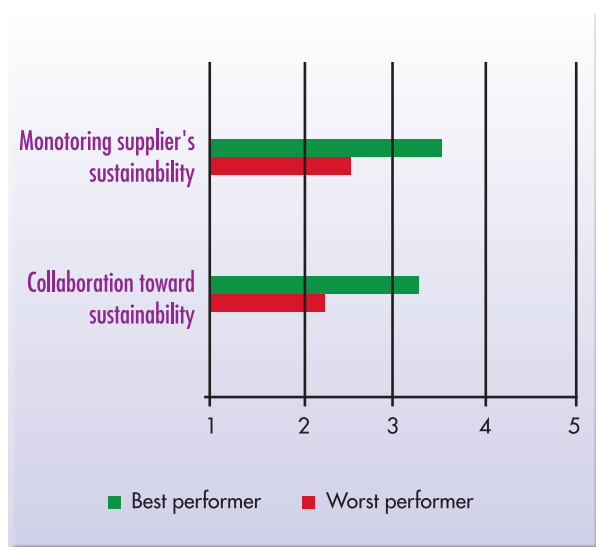


Figure 1 tells us that sustainable supply chain management (SSCM) represents an effective lever for companies that have improved their performance over time and also perform better than their direct competitors (i.e. best performers).

Therefore, purchasing managers can have the opportunity to improve their performance and create value for their companies by developing and institutionalizing activities such as:

- Requiring suppliers' environmental and social certifications (e.g. ISO 14001, OHSAS 18001, SA 8000) and developing questionnaires or codes of conduct in order to monitor suppliers' compliance. The benefits of such investments are twofold: on one hand the company can guarantee the achievement of certain standards along the supply network, on the other the company can identify suppliers that show higher performance and could represent sources of value creation.
- Conducting joint planning on sustainability issues and working together with suppliers to anticipate and resolve sustainability related problems (e.g. reduce social and environmental impacts of logistics and production processes);
- Facilitating the involvement of suppliers in the design of products and processes (e.g. supporting Life Cycle Assessments, co-design etc.).

Such activities entail problem-solving routines involving suppliers; they can instil additional capabilities in the company and can then lead to superior sustainability performance.

The evolution of sourcing strategies and the inclusion of sustainability requires a necessary transitory period for purchasers to change the focus of their actions:

<i>BEFORE (from)</i>	<i>AFTER (to)</i>
Buying decisions are usually made by evaluating profits and quality	Buying decisions should consider the interrelatedness of social, environmental and economic issues
Dominant focus on the current price	Total cost of ownership including the impact of the generation of pollutant and waste
Procurement of standardized inputs	Joint-value creation initiatives such as co-design and collaborative life cycle assessments
Focus on products and suppliers	Focus on relationships and supplier networks in a long-term perspective

Table 1. The evolution of sourcing strategies

Accordingly, three categories of SCM improvement programs can be potentially supportive:

A. Reducing the supply base and adopting partnerships.

One can argue that the reduction of the supplier base may expose companies to transaction-related risk arising from supplier's opportunism and loss of flexibility because of high relationship specific investments. Nevertheless, having close ties with a limited number of suppliers fosters greater trust, allows the transfer of key knowledge and facilitates reciprocal monitoring and learning. Moreover, we could argue that the exploitation of bargaining power may be beneficial in the short term, but tends to be self-defeating in the long run. Victims of exploitation ultimately find ways to resist, while other mechanisms of governance (i.e. goal congruence, trust and reputation) are generally the most effective way to offer the greatest value to suppliers.

B. Implementing stronger suppliers' selection and development activities.

When formal processes exist to strengthen supplier selection and involvement are in place, companies have clearer guidance on how to balance priorities. This facilitates the integration of environmental and social issues within their supply management process.

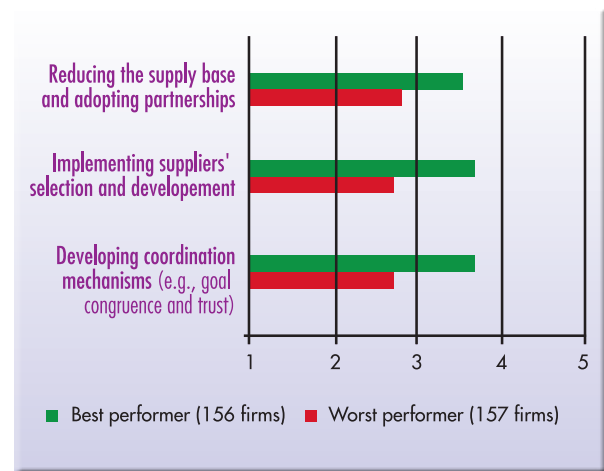
C. Developing coordination mechanisms.

Establishing communication lines (e.g. liaison roles, meetings), joint information systems (e.g. ERP system integration, Supplier Management Meetings) or logistics systems (e.g. vendor managed inventory, co-location of plants) facilitates

communication and goals alignment between the firm and its suppliers. Furthermore, such assets-specific investments can foster mutual trust in buyer-supplier relationships. Such elements represent effective mechanisms of governance that enable firms to develop the suppliers' commitment toward the improvement of environmental and social performance.

Consistently with this hypothesis, our global survey shows that best performers (i.e. firms that have significantly improved their environmental and social performance during the last three years and declare to be leaders in sustainability) have put more effort in implementing SCM improvement programs than worst performers. As before we measure the level of effort on a five point scale, where 1 represents "very low effort" while 5 represents "very high effort" ■

Figure 2 : SCM improvement programs by Best and Worst performers



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GLOBAL TALENT MANAGEMENT – KEY QUESTIONS AND INSIGHTS

By Professor Michael Dickmann; Cranfield School of Management, UK



JOURNAL OF SUPPLY EXCELLENCE

Michael Dickmann

Prof Michael Dickmann advises and teaches in the area of international management. He has consulted or worked with a large number of multinational companies (such as HSBC, Deutsche Telekom, BMW, BAe Systems, Mars, Pepsi etc.), governments (Singapore, UK) as well as international non-governmental organisations (United Nations, People in Aid). He is Professor of International Human Resource Management at Cranfield University, School of Management.

His areas of expertise include strategic international management of multinational companies, international effectiveness and global careers. Before joining Cranfield, Michael was Head of Marketing and HR in a German multinational organisation. He has also worked for two major management consultancies in Germany and Britain. Michael has published more than 100 academic and professional papers and reports. He is the lead author/editor of two recent books in the acclaimed Routledge series on global management.

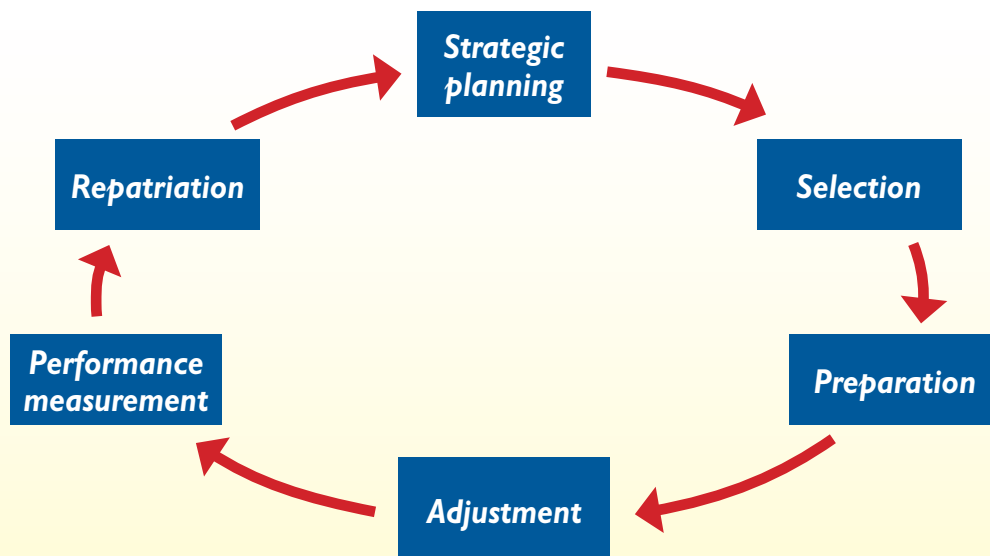
High profile foreign football managers and stars populate many national football leagues – e.g. the English premiership; Bundesliga - and the international war for talent is raging. In the minds of the current leaders of organisations with global reach there are a number of key questions that apply irrespective of whether the context is one of business, sports or arts:

- What kind of global leaders does my organisation need?
- How do we identify, motivate and manage top talent?
- What does it take to achieve the best return on our investment?

Developing leaders who can manage the increasing complexity of running global organisations is the number one human resource priority for many chief executives and other organisational leaders. While organisations will recruit

in talent at higher levels, ensuring a pipeline of internal talent is a key priority to further consistency and in-depth understanding of the business. For many companies a ratio of 70/30 internally developed to externally acquired talent guarantees continuity of corporate culture and knowledge. At the same time, the new entrants allow learning from other leading companies.

There are many paths to acquire the global mindset, cross-cultural experiences and business insights that are needed to belong to the leadership team of a multinational organisation and to contribute to its success. International mobility is seen by most global firms and individuals as a key element in this journey. The expatriate cycle visualised the stages that HR department in international firms think about when managing their global talent.





Strategic Planning

The strategic objectives of international assignments vary substantially but often include global leadership development. For instance, HSBC has an aim of 80 percent developmental international assignments. A few critical questions organisations ask themselves in determining their strategic needs could be:

- What would it take to prepare our organisation for its global future?
- What is the profile of our future leaders?
- Can this profile be 'built' or do we have to "buy" it?
- In what ways do international work experiences contribute to the needed capabilities, networks and motivation patterns of our high potentials?
- What do individuals seek to further their own careers?

While organisations work hard to address the first three points, the last two are relatively neglected. In an environment that is increasingly shaped by careers that are moulded around the individuals' self-guided desires and inner drives and that aim for knowledge, skills and abilities that guarantee employability, these questions increase in relevance. Work at the UK's Cranfield School of Management addresses all of the above points and has developed tools and approaches that are being used by organisations such as Masterfood, Pepsi or Philips.

Selection and Preparation

Selection concentrates mostly on the existing (domestic) track record of candidates, their potential and their language capabilities. The process and criteria are often informal and characterised by a "coffee machine" approach. Yet, personal traits such as inter-cultural adaptability, desire to learn or the ability to challenge own cultural norms and values and job-related factors such as the degree of similarity of the new position are rarely taken into account. This is puzzling as these factors have a strong influence on performance within the host environment. A few pertinent issues in selection are:

- What is the balance of competencies and personal traits candidates need to possess for their foreign post?
- What can we do to make the selection and preparation processes in international mobility more successful?
- How can we reduce the barriers to mobility and increase the incentives in a cost effective way?

The most common forms of pre-assignment preparation remain language training, location visits (with and without family) and cross-cultural seminars. Studies show that about 40 percent of expatriates are not satisfied with either the extent or the quality of their own preparation.

The Cranfield research shows that while most international firms have sophisticated assignment policies in place, they know much less about the actual expectations and wishes of their assignees. For instance, while the policies and communication in a food organisation concentrated on showing what competencies assignees could gain, the expatriation candidates were predominantly worried about what would happen to their social networks. Being away from their power base at head office was perceived to be the biggest threat – consequently, many expatriates would spend much effort in the last year abroad on securing a new job in their home base.

Adjustment & Performance Measurement

Adjustment to the host environment is a key factor that allows individuals to be productive abroad. Personality, job and wider factors determine the speed and extent of adjustment. Factors that facilitate adjustment are the desire to adjust, technical / managerial competence, interpersonal skills orientation, tolerance for ambiguity, self-confidence and expectations that prove to be realistic. Previous foreign work experience, good pre-departure preparation and discretion in one's role are also important. One of the factors that is often underestimated by organisations is the way that family members make sense of their new environment and the quality of contacts with host nationals. They play a large role in how assignees and their families feel abroad.

Effective performance measurement is plagued by issues such as goal clarity of the assignment and the possible divergence between objectives that were agreed in the head office and local needs the assignee encounters when in the host environment. Most assignees go through a performance review with their immediate – predominantly local – superiors, often supplemented by some central input. Since the local and global needs and perspectives are likely to diverge, many companies register tensions. In the case of an international assignment for developmental purposes it is important to have some head office input and an understanding of the expatriates skills, abilities and insights that may be used in the next position.

Repatriation

Repatriation is the area of highest dissatisfaction of expatriates with respect to organisational policies. International assignees hope for a holistic process which gives them an early indication of their next position and an adequate prospect of further career advancement. They would welcome more opportunities to re-establish old contacts in the corporate centre (in the months before



return), hope to be mentored in the changed realities at the head office and expect to be de-briefed. They also find honesty important. Because these expectations are very frequently not fulfilled, surveys show that more than two thirds of expatriates are not content with the repatriation approach of their firms. This raises a number of questions:

- How can we increase the retention of our best talents?
- What can we do so that repatriation is smooth?
- How can we lessen the repatriation shock?

Global Talent Management beyond International Assignments

We know much about what competencies are seen as successful for performance on international assignments. Based on these insights, sophisticated selection, preparation and review processes could be designed to manage this group of executive talent. However, the available data indicates that about a third of expatriates either leave during or shortly after their international assignments. This is unacceptable for many organisations – especially if the key aim is to create the global leaders of the future.

What is needed is a shift from regarding international mobility predominantly as a one off process and seeing it as one of the stages in which individuals acquire the necessary

set of capabilities for a global leadership position. To do this, it is paramount for companies to understand what their group of talented people want from their careers. These talented people can be traditional expatriates, global managers and other talent within the organisation but can also be found in the external market place such as self-initiated foreign workers (Dickmann and Baruch, 2011). A useful starting point would be to look at the career capital high potentials strive to acquire – the set of skills and abilities, social contacts and inner values that drive them to excel in their working lives. Only then can organisations design flexible approaches that meet the expectations of their most valuable individuals. It also means that firms must work on understanding how their future leaders can use the knowledge, insights and networks they have acquired while working abroad in their future positions.

While a partial indication for the return on investment in football would be the transfer payment that a club gets when a player joins another team, a business organisation typically attempts to retain high performing individuals. If companies fail to understand their best people they may find themselves in a position that their 'captains' may walk out on them just before the next season starts ■

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Note:

An earlier, revised version of this paper has been published in an internal publication of Cranfield School of Management.

EVOLVING SUPPLY CHAIN INTELLIGENCE TO MANAGE RISK IN TODAY'S VOLATILE ENVIRONMENT

By Robert B. Handfield



JOURNAL OF SUPPLY EXCELLENCE

Robert B. Handfield is the Bank of America University Distinguished Professor of Supply Chain Management at North Carolina State University and director of the Supply Chain Research Consortium (www.scr.ncsu.edu).

Dr Handfield's research focuses on benchmarking best practices in supply chain business processes and has been published in the Sloan Management Review, California Management Review, Journal of Operations Management, Decision Sciences and IEEE Transactions in Engineering Management. Dr Handfield serves as editor-in-chief of the Journal of Operations Management.

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Current modes of supply chain planning fail to consider the volatile nature of the political and economic environment we find ourselves in. Organizations that are truly proactive in creating agile and responsive supply chains are able to develop well-tuned supply chain intelligence functions that build scenarios and consider managing risk in this environment. In doing so, the supply chain becomes a strategic weapon that is able to act in advance of major disruptions, and is more resilient and able to recover

more quickly than other enterprises in the face of major disasters and economic fallout. We cover some of the key attributes that exist, and explore how organizations are building these concepts.

KEY CONCEPTS

New product development, supplier integration, supply management

The author wishes to thank Tim Cummins of IACCM, Vel Dhinagaravel of Beroe and other executives who helped to develop these insights.

Introduction

On the economic front, 2012 was really about another year of uncertainty. A global economic recovery remains underway, although it is alarmingly long and slower than any other. The economy is likely to remain tepid, and job market recovery in the US will take years. Europe is grinding forward, and in all likelihood, we may see the end of Greece in the EU, and indeed, the question of the euro continuing forward in 2012 is questionable.

Ironically, we are still likely to see commodity prices rising on trend, the dollar weaken, but housing prices to remain relatively flat for a number of years. As one economist recently noted, "Fear Uncertainty and Doubt" are the reigning themes. Which means that in this environment, supply chain agility is more important than ever. And yet in this environment, some organizations are able to do better than others. In a recent meeting of the SCRC on "Creating Agility in a Globally Volatile Environment", a variety of executives provided a broad set of perspectives

on the approaches that supply chain executives need to consider when building strategies for navigating difficult economic and disruptive minefields.

Multiple forms of volatility exist, from oil prices, currencies, commodities, and disruptive events that are now part of the day to day backdrop against which we operate. Indeed, history has shown that we can expect a recurring pattern of one or more major disruptions every year.

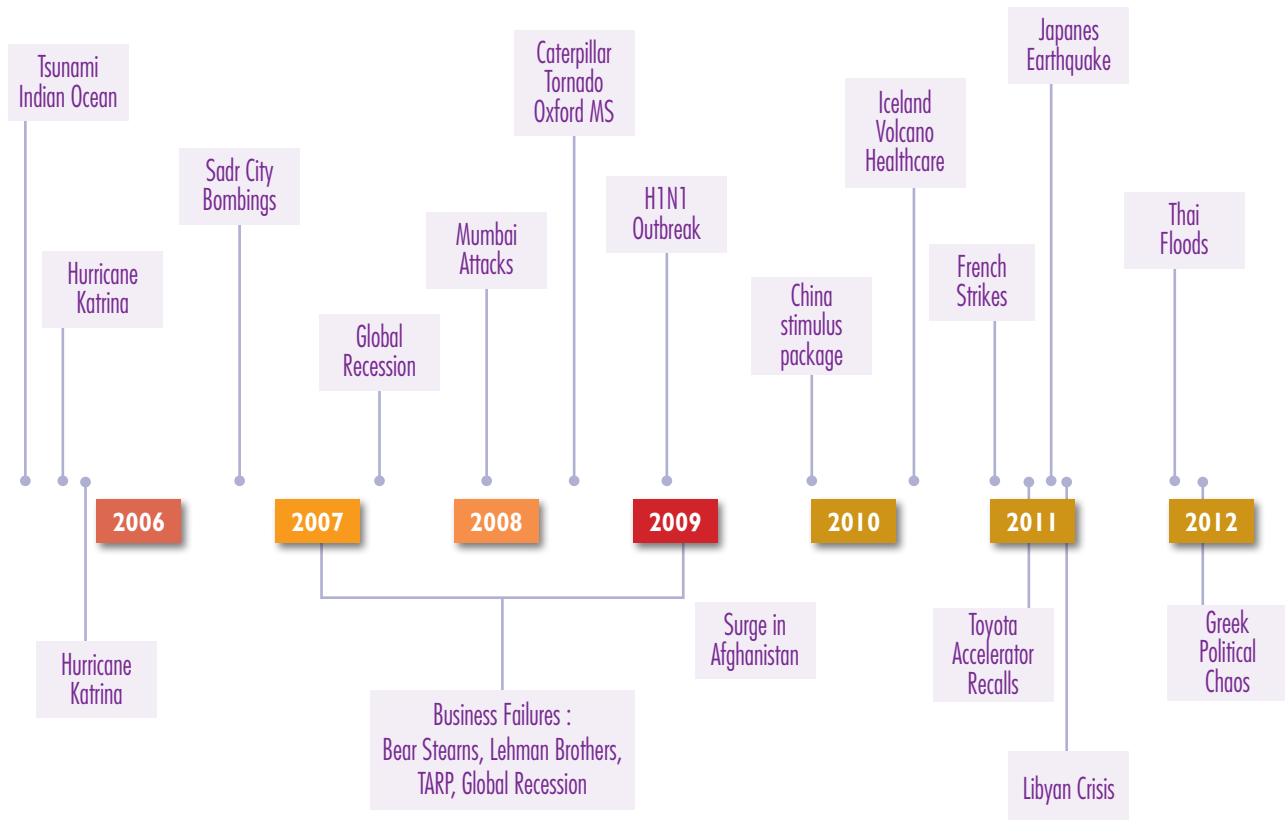
To my mind, the real test of how "world-class" a supply chain is, is how they react under duress and severe supply chain disruptions.

There is no doubt that as we go into 2013, there will be a major disruption, whether in the form of an earthquake, hurricane, flood, tornado, cyber-terrorist act, civil war, or other element.

The track record over the last decade indicates that we have at least several disruptions every year...and sometimes multiple ones.



Global Risks are frequently generating Supply Chain disruptions



The impact of these disruptions can be unpredictable, swift, and devastating.

In 2011, a major incident was the Japanese Tsunami that wreaked havoc on the semiconductor and automotive industry, as well as the Thailand floods, which drove computer and hard drive manufacturers to get their fly fishing waders and poke around trying to determine how much damage they had incurred in their supply chain! In this framework, organizations have begun to think about how to find their way in rugged ecosystems, and how to co-evolve those supply chain partners that they are now reliant on for business continuity.

A company impacted by the Tsunami was General Motors, who had three different carburetors in three different vehicles. Once you drilled down into the bill of materials, however, you might have discovered that there was one part common to all three of them, and that 70% of the volume of that part was sourced from a supplier 10 miles from the nuclear disaster site. Naturally, that supplier was shut down for a period of time after the Tsunami. GM, being a "lean" company of course, had a short supply inventory. As a result, the tsunami closed down GM for a good amount of time.

Another company impacted was Lenovo during the Thailand Floods of November 2011.

Lenovo's Response to the Disaster

At the 2011 SCRC meeting, John Zapko, VP of Global Procurement at Lenovo (the #3 PC manufacturer in the world) described their approach to responding in a resilient and immediate fashion. Lenovo has a Business Management System which emphasizes monthly progress to key stakeholders, which includes customers, investors, and of course, suppliers. During the Thailand flood, this communication was escalated to provide daily delivery of progress to stakeholders. The thinking here is that because Lenovo's supply chain is embedded and critical for execution it is critical that daily communications occur with customers, investor relations, and of course suppliers.

John emphasized that the impact of the Thailand flood on Lenovo's supply chain was different to that of the Japanese tsunami and had been the biggest test of Lenovo's Business Management System for communications. The reason is that first of all, it is a major impact to a specific piece of business – hard disk drives – which is in EVERY machine that Lenovo builds (as well as those of its competitors)! Almost 50% of the world's supply of hard drives is in a flood zone.

John noted that "We first had to work through the realization of the impact and had to convince customers



and ourselves it was a major issue. As you got to mobilize quickly we had to first of all convince ourselves and then convince others that this situation was WORSE than the Japanese tsunami in terms of impact to our business. People challenged us – how could it be worse? Floods happen all the time! We got through Japan so well – we can do the same here....”

“The realization that it was worse than Japan required us to mobilize and assess and get on the ground and send people there. We shifted immediately to a crisis management role and leadership got involved with key supplier relationships. We had to go in and establish an understanding of the details of the situation, and establish close communication with suppliers to truly understand the impact, bring it to credibility, and describe it to the business and to customers. This played out in weeks (getting a handle on what is happening) and our suppliers were also trying to figure out how to answer our questions and competitors’ questions!”

“Getting a handle on the facts and getting the business re-set was the second phase of our response. Once you understand supply impact, cost impact, and competitive response, we had to figure out our response, and that is still in process for us. The driver for all of this was focused on our key supplier relationships, which we have cultivated

through our actions. Lenovo’s supplier relationships are a core part of our strategy, and we establish very close relationships with suppliers that are most often NOT about commercial terms, but are truly focused on a long-term relationship. We communicated with our suppliers to really, really understand what was happening, and what we could count on. They were willing to tell us, because they trust us based on our actions in the past.

We also had to navigate as well what other parties in the ecosystem were doing. First, Seagate said they would raise prices – and then Dell informed the market there would be a huge impact – and this caused even more complexity for us. Once we understood this we began creating a plan focused on optimizing the business.”

From an agility driver perspective, the Business Management Systems at Lenovo that focuses on transparency and communications is central to being agile in this environment. The second core element is the ability to execute to the plan! It is one thing to communicate –but another to drive major alterations and do it daily. We have an ability to re-set and unify decisions based on the most recent changes to the plan. This crisis has not only tested Lenovo’s agility in a formal manner, but is real proof to investors that Lenovo is able to deal with adversity and land on its feet.

Building Resilience in the Face of Uncertainty

In terms of actions, a common theme runs in Lenovo and other organizations that are able to succeed, which boils down to the essential steps shown in Figure 1.

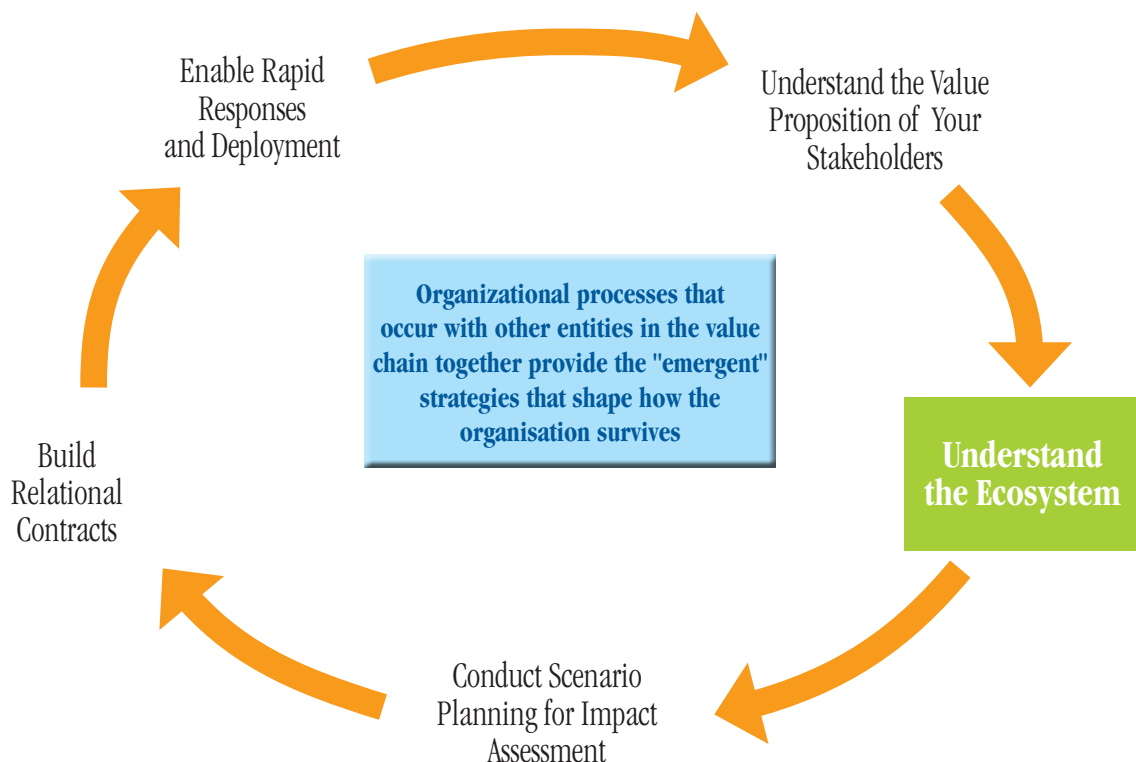


Figure 1 : What does this mean for agile supply chain planning?



1) Engaging with Stakeholders.

In this sense, it is critical for organizations to really understand the core business drivers, above and beyond cost, that are important to business stakeholders.

Stakeholders rarely care about cost. More important to them are the types of capabilities that ensure they are able to withstand the shocks that confront them in the business environment, and emerge as a dependable and reliable provider of products and services to their core customers.

2) Understanding the Ecosystem.

This capability requires a deep understanding of supply chain intelligence, and not the kind you find on websites. Moreover, intelligence gathering is often driven by understanding the right questions to ask first, and then finding the subject matter experts in your supply chain (or internally in your organization) who can put the question into context. Through this process, you begin to develop an understanding of the core risks, which leads to the next step of:

3) Developing Scenarios for Planning.

Scenario planning is a function of how well your organization documents “Lessons Learned” or post-mortem experiences. This is a cultural norm in intelligence agencies and the military, where Lessons Learned associated from different events are integrated back into Standard Operating Procedures, as well as training materials. Setting up scenarios and getting the right people in the room allows you to then think about how to build the right responses, and the different sets of triggers that will drive either more information gathering, or trigger the right mitigation strategies in your supply base.

Once you identify what you expect from your key supply chain partners, you then need to get on with:

4) Building Relational Contracts.

Relational contracts are not the standard legal agreements that we impose on partners using “our paper”, but rather identify the expectations and elements for measuring performance, as well as expected behaviors and methods of collaborating in the event of UNPREDICTABLE events. If we’ve done the right scenario building, we should be able to then drive the right type of planning with key suppliers, and ensure that they have the ability to carry out the requirements.

For example, if a cyber-terrorist threat shuts down our networks, how do we continue to communicate and place orders? How do we ensure that we have inventory positioned at the right locations? And what are allocation expectations in the event of major disruptions? The final piece of this involves:

5) Enabling Rapid Response and Decision-making.

Speed of decision-making and rapidity of execution once a decision is made is the final and perhaps most important step. The only way this is achieved is by being perfectly transparent with all involved, ensuring clear roles and responsibilities, a strong governance model over who directs activity across the enterprise in different situations, and a team of people who understands how to do this. When these elements are in place, the core parts of an agile organization are in place.

A Final Thought

If any of us drills down into our supply chains – where are the real risks? And today, which part of the supply chain should we be concerned about? This question involves looking at more than our current products, but indeed, should begin looking at future products in the pipeline that are coming down the pike. And once we have constructed a baseline for our current risk, managers should be looking at their supply chain operating model. What is the impact of making a change to the operating model based on the questions you would ask to get to a resilient score?

To answer this question, we need to start thinking proactively about risk. One big area of risk is the impact of the global recession on Asian suppliers. In a recent interview, an executive in Asia shared that suppliers in India and China had not been too badly impacted by the recession in 2008. However, with the threat of inflation in China, and the housing bubble that is surely about to burst... a sudden drop in volume could catch up with suppliers who have a thin working capital pipeline... and could shut them down quickly if the banks are unforgiving.

The last piece of advice to remember – Agility is about more than performance – it is about performance in context. It is not about being the smartest or fastest – but being smarter than the nearest competitor. Being the fastest can cost money. If you spend a lot of money becoming the fastest and most expensive, there are no guarantees this is what the business or the customer requires! Think about the antelope and the elephant – clearly the antelope is faster, and would be expected to win. But if the predator in this environment is the lion, the winner isn’t going to be the antelope, because strength is the performance element required in this context. Similarly, business people, as they move forward into the complex interrelated world of 2013, need to think about these tradeoffs to manage. This is where the decision-support part of the business comes into play. Those who are the best at understanding the environment and are better at planning around scenarios will make the decisions that ensure they win ■

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RELATIONSHIPS WITH CHINESE SUPPLIERS: THE NEW TREND

By Xavier Sarrat

JOURNAL OF SUPPLY EXCELLENCE



Xavier Sarrat started his career with PSA Peugeot Citroen. In his last position, he was in charge of wood-pulp sourcing and supply chain management for the 15 Mills of the Arjowiggins Group in Europe for a total spend of € 500 M. Through his career, he has been working within sourcing organisations and occupied various positions, covering various industries e.g. Automotive or Paper. He had the opportunity to successfully implement all the key strategies of sourcing in order to provide as much value as possible from the sourcing side. As senior manager, he experienced both centralized and decentralized organisations.

Xavier Sarrat is now General Manager of EIPM China and gives courses and develops research activities for companies mainly on competences and excellence model. Xavier spent most of his career abroad, in France, Belgium and China.

Global Sourcing is a major trend in the evolution of purchases in recent years. Global companies, attracted by the growth prospects of BRICS, have heavily invested in emerging markets. These investments were followed by an unprecedented wave of relocation and creation of new suppliers to meet local needs.

Global Sourcing is a consequence of the international development, encouraged by new technologies, effective communications and competitive transport costs.

The main reason for Global Sourcing is to look for the best cost and the term "Low Cost Supplier" reflects this fact. Sourcing competitive suppliers for their low cost of labor was followed by an overhaul of the selection process of suppliers with setting global competition of the entire panel.

This evolution is also accompanied by the development of international purchasing offices involved in sourcing and managing local suppliers.

Today, as companies accelerate their development strategies in China and other emerging countries, companies rely increasingly on local suppliers to meet their particular needs. The adaptation of the specifications to the needs of Chinese consumers requires a good knowledge of the local market. "Think Global, Act Local". A word has been invented for this: Think GLocal!

In parallel, another evolution of recent years has been the emergence of large companies in China with an international vocation and exponential growth driven by the size of the domestic market.

The official support from the Chinese government, mainly thanks to protectionism laws or regulations helped a lot. Haier, Lenovo, Geely, Saic, Lining, and Huawei but also Baidu and Sina in the new technologies were still

unknown players a few years ago but are becoming major competitors.

In this context, the EIPM has witnessed increased competition to attract and retain the best suppliers as they no longer have much to learn from foreign companies in China. Indeed, the transfer of technology and know-how have already occurred and Chinese suppliers once very demanding to work with western companies for reasons of prestige and learning move away from them gradually. We therefore observe a change of focus from them to Chinese companies.

Points put forward for this change are linked in particular to differences in both culture and behavior. The problems inherent in many international companies: payment of suppliers, technical demands often more stringent than their local competitors, no flexibility on quality and logistics, communication problems and differences in corporate culture ...

These difficulties are not facilitated by the mistrust and arrogance perceived by Chinese suppliers who seem to be still considered as second-class suppliers from corporate buyers sitting in Headquarters.

Instead, the national champions highlight their appeal and attract more Chinese suppliers due to their growth prospects in China and abroad, investment in innovation and patriotic feeling: participate in the development of China international ambitions of world dominance. In addition, these relationships do not suffer the culture gap which could frustrate many western companies.

It is therefore urgent to rethink our relationship with Chinese suppliers and balance our trade if we do not want to lose these opportunities to work with the expert suppliers of tomorrow. To do this, we must recognize



those suppliers not only as low cost providers but as creators of values. The increase of labor costs endangers the competitiveness of suppliers with the emergence of competition from other countries still considered as low cost so this transition will have to happen anyway.

The solution is to change our vision. No longer speak of Low Cost Countries to talk about countries such as China, but prefer Best Value Countries!

Implement supplier relationships based on respect for our differences rather than imposing our vision and way of doing business! Meet our commitments and gain credibility! Offer growth opportunities over the long term! Respect

their expertise and recognize them in their contribution to our future success!

However, let's not be naïve and do not forget about the risks of sourcing in China such as compliance with international environmental and social standards (CSR) or respect of intellectual property rights.

The EIPM works closely with international buyers in Asia to change mentalities about our perceptions of Chinese suppliers. Overall, it is necessary to review the way we work and ensure that international companies are again regarded in China as preferred customers ■



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A NEW PERSPECTIVE ON TALENT MANAGEMENT

By Christian Kaemmerlen



JOURNAL OF SUPPLY EXCELLENCE

Christian Kaemmerlen has graduated as Engineer from Arts et Métiers ParisTech in 1970, and from Université de CAEN Droits et Sciences Economiques in 1973. He started his career as a Consultant at AT Kearney and Bossard Consultants, and joined Texas Instruments France, where he held several senior positions in the Supply Chain and Logistics before he became member of TI World-Wide Procurement and Logistics Leadership team and Texas Instruments Europe Procurement Director. He lately joined EIPM to develop its maturity assessment tool for the organisations, and is the project manager for the Annual EIPM Peter Kraljic Awards.

EIPM organised a one-day workshop on the topic of Talent Management in March 2012. This paper gives us a snapshot of the new aspects of a comprehensive talent management programme within an organisation like a sourcing, procurement, or supply chain management organisation.

Scope of Talent Management

Talent management is a relatively new concept, which stems from a natural evolution within HR management. It is a holistic approach to the employment lifecycle in which some of the relevant talent development activities are shared between employees and their managers.

First let's review the current situation of companies, people and society and their impact on the workforce.

Since the onset of the recent financial crisis, companies' management, of all sizes, have recognized their purchasing organisations to have a far more vital role in the achievement of sustainable performance for their companies.

For some of these purchasing organisations, the inversion of the ratio between the value created internally and the external value brought in from suppliers has been so progressive that the change has only been perceived more recently, along with the huge opportunities resulting from the new situation.

Purchasing organisation structures and teams have to be set up to respond to these new expectations, and have to be ready to deliver on these new responsibilities.

For the rest, providing their contribution year on year is imposing other demands on their managers: they have to maintain their teams in the best condition to keep up with ever more challenging objectives.

Company priorities are constantly changing, mostly as a reaction to a changing world. Beyond sudden severe crises, there are also underlying economic cycles and expectations

from the markets that have a considerable impact, besides geopolitical tensions and the associated conflicts that bring instability to our planet. And add to this list the new technologies that day after day modify the way we live, work and learn, the changes in environmental conditions, the recently highlighted reality that most earthly resources are limited and, and, ... We could cite numerous other reasons that influence the people aspirations, expectations, and behaviours.

Individuals have changed under the influence of these external factors and have applied a critical judgement to the behaviours and achievements by the successive generations of their parents and grandparents. They project themselves onto a world they feel they can shape differently. The generation Y, of children born with a computer in their cradle, is the symbol of a world in mutation and which carries new sets of values.

The biggest change lies in the refusal of a sacrificial dimension; the work is no longer seen as a burden or due loyal service with dismissals at the end. Today, Generation Y claims to live life to the fullest with a good life-work balance, not work-life anymore!

This requirement is proportional to the feeling of insecurity they experienced while they have been continuously exposed to unemployment and crisis.

The companies where these people spend eight hours a day, most of their life, cannot ignore these changes and their responsibilities towards their employees. In addition there is now a recognised correlation between the individual capabilities of the people, the way they are managed within their organisations, and the level of performance of the organisation.

In such a context the make-up of organisations with appropriately skilled people and their development and level of engagement within these organisations, create an on-going challenge. It is the fundamental condition for



purchasing organizations to perform at the expected levels of performance. This is true for any organisation.

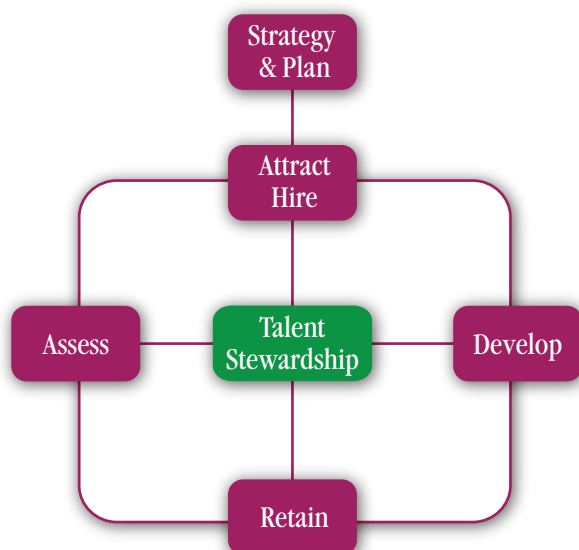
Talent definition

Hopefully, in the recent years the terms used to talk about company employees have been evolving from “people” to “headcount” and more recently to “talent” meaning that employees are not just numbers, but they are now considered for their current and future capabilities, competencies and skills.

Calling someone a “talent” is a positive look at that person with the belief that some skills already present can be further developed with the person becoming more “talented”. Put back in the company context, this terminology also matches the mind-set that emphasizes the importance of talent to the superior performance or success of organizations.

In some companies anyone is a ‘talent’. In others ‘talents’ are referred to as only those high potential individuals who supposedly will make a difference in organisational performance, by their immediate or longer-term leadership contribution. They distinguish themselves by higher capabilities to drive and manage change, coach and develop others, make difficult decisions, and execute strategy. In this document we will employ the former definition.

In such a context managing the human resources of an organisation implies higher responsibilities and some new activities, grouped under the terminology, ‘Talent Management’:



*Planning for talent,
Attracting and hiring talents,
Developing talents,
Rewarding and recognizing talents,
Retaining talents.*

Mature companies are creating a 'Talent Stewardship', a mind-set where every manager feels ownership and accountability for talent on behalf of the organisation. It is no longer the exclusive role of the HR department.

The manager takes responsibility not only for managing today's talent, but also for strengthening the team and readying the organisation for the future. Once talent stewardship is an integral part of the management disciplines in the company, it transforms the talent strategy from a functional initiative to a competitive business advantage.

What are the challenges or specific situations companies are facing?

The labour market conditions may be so competitive in certain regions or for certain positions, that it is actually difficult to recruit or retain talented employees, thus the term 'war for talent'.

As expected, global companies are facing completely opposite situations in their talent management activities, between the countries with mature or declining economies, and those with booming economies. Satisfying their employees' aspirations and rewarding their performance requires very different solutions.

Main attributes and good practices for the five Talent Management activities

Strategy and Plan

The deliverable of this activity is a multiyear plan describing what kind and how many talents are needed to support the company vision, strategies and long-range plan.

The organization structure should not only be aligned with the company diversity, the business requirements and its dynamics (business evolution, productivity and process improvements), and feature a relevant balance between strategic and operational activities; it will also be influenced by the dynamics of the workforce, like its turnover (normal, including retirement, forced, unexpected), the new behaviours and expectations of the older or younger generations (shorter assignments, desire to try new experiences, lower loyalty, better life-work balance), as much as by the type and location of talents required over time.

The talent management roadmap takes into account the outcome of a global talent gap analysis, the various employment situations, the availability of qualified resources, the diversity of people and contains the associated skill and competency models (especially for managers) required for the jobs or job families, and their anticipated evolution.

Attract and hire

The shinier the image of the company and the hiring organisation, the more the vacancies will attract the

attention of good candidates. A branding program is as important, as a new state of mind where the organisation is proud to not only attract and hire talents but also to export talents, and to become a valuable experience on someone's curriculum.

Having clear plans is helpful to timely organize promotion campaigns and advertising programs internally but also externally, towards young graduates through partnerships with universities, set-up of 'promotion or open days', or even to look at non-traditional pools of talents.

The companies that promote global mobility in-house (between functions/ countries) have a solid process, usually web based or through social networks, to advertise open vacancies internally and externally.

Once you have attracted those you want, you still have to recruit the best people

The selection and hiring processes have also improved and evolved to include multiple steps, specific assessments and in most cases now the final decision is by co-optation.

On-boarding and induction activities are seen as critical for a fast integration of the newcomers and frequently, introduction programmes are made and implemented at a global level for new employees (company, other functions, procurement & SCM), complemented by special coaching during the first six month or year and additional "conversations" with the managers and sometimes by short rotations in various SCM jobs or SCM related jobs.

The new hire is having his assignment defined through the finalisation of his/her precise job description, defining roles, responsibilities, KPIs, timelines and targets.

Assess

There is no talent management without a strong and engaging performance management process for the benefits of both the organisation and the employees.

Employees are looking for feedback and indication on how their contribution is perceived, while the managers of the organisation want to ensure their deliverables are going to reach targets.

Talents have to be assessed, frequently and in a fair manner

Honest talent-management discussions, facilitated and consistently calibrated, take the form of a series of annual conversations (up to 5 per year) covering: Performance goal setting and KPI, Performance, Mid-year review, Career discussion, Development discussion, Compensation.

The review is geared towards performance enhancement (goals/objectives), assessment of behaviours, alignment of competencies with needs, and individual and career development (aspiration and associated development activities). HR organises the training of managers to

conduct efficient reviews and monitors the execution of and compliance with the process and its schedule, and reports exceptions to executive management.

Identification of high potential talents

High potential employees are identified, and specific individual development plans are designed for them as a yearly company-wide structured process with cross-function and bottom-up reviews. Often, leaders are plotting their resources based on their performance and potential on a nine-box matrix.

POTENTIAL PERFORMANCE MATRIX				
POTENTIAL	High Has potential to progress to next work level (&	7. POTENTIAL TOP PERFORMER	8. DEVELOPING TOP PERFORMER	9. STAR PERFORMER
	Medium Has potential to move to next work level	4. POTENTIAL PERFORMER	5. DEVELOPING PERFORMER	6. STRONG PERFORMER
	Low Little or no potential to move to next work level	1. UNSATISFACTORY PERFORMER	2. INCONSISTENT PERFORMER	3. DEPENDABLE PERFORMER
		Low	Medium	High
PERFORMANCE				

Higher rated people are confirmed as or become part of the high potential talent pool and their further development will be personalized to prepare them for future assignment with higher contribution. Specific talent dialogs will take place with them.

On the other end, special actions are decided for the people with the lowest performance/potential rating.

Identification of critical roles and succession plans

To secure the continuity of the performance, critical jobs are reviewed yearly to identify possible successors, with 'ready-now', 'ready-next', and 'ready-future' candidates. These talents become part of other specific development programs and their progress is monitored to ensure their progression matches the plan.

Quite often the ready-now talents are very close in age to the incumbents, or there is a relatively small group of 'utility successors' or individuals who are deemed ready for multiple positions. If one of these leaves or is promoted, it affects the succession bench for the concerned positions.

Develop

In order to deliver superior results individually but also as part of their organisation or their company, talents



capabilities, skills and competencies, have to be developed and maintained at the appropriate levels and with the required scope.

Continuous talent development implies a combination of training and development programmes (training courses, on the job learning, coaching, mentoring or shadowing, international assignment, rotation).

Training catalogues are made available to the talents and their management to select from and the learning approach is a blend of various delivery formats (incl. advanced technologies, distance/eLearning, on the job application, desktop applications, face to face, quiz), more and more often orchestrated by a Procurement Academy or a Purchasing Faculty integrated into a company Business Academy.

It is important that employees remain responsible and take ownership for the execution of their own development plans, driven from the top. External certification at completion of specific cycles is still debated.

There are specific leadership development routes defined to ensure a continuous flow into the Leadership pipeline.

Key training topics are focused on the development of the employees' expertise (managing performance and change, understanding motivation, organisational awareness, and managing stakeholders), creativity (critical thinking, complex problem solving, influencing strategy, policies design and input, and understanding innovation), leadership (understanding values, power and authority, team building and engagement, situational leadership, performance acceleration), and initiative (establishing credibility, decision-making, managing priorities, skills development path, leadership selection).

Retain

The most effective ways to retain high performers and other talents you want to keep include.

1. Career Advancement Opportunities backed by mentoring programs that encourage advancement
2. Dedicated career & development planning nurturing highly skilled candidates, with possible twin-track career progressions (experts and leaders)
3. Challenging work assignments
4. Promotion and transitioning
5. Encouragement of good balance between work and life through work environment initiative (work from home, flexible office area)
6. Innovative compensation and benefit plans
7. Non-financial incentives
8. Individual succession plans
9. Company culture/confidence in management team

10. Handling the least effective performers

Programmes based on well-structured communications about and by the whole company, or more organisation-centric, as well as surveys, and other supportive actions enhance people's engagement. Good communication is key to having motivated talent, as the more you share information, the more people feel engaged.

Employee satisfaction or engagement surveys are run periodically to sense the mood of the organisation and measure the trend, and detect areas of improvement. Surveys include a set of standard questions to benchmark results with other companies of same or similar industries.

Rewards and recognitions (financial and non-financial) are based on a differentiated reward policy, with a performance based merit increase system (with fixed and variable salary), including where appropriate, a bonus booster when stretch goals are achieved, and sometimes creative non-financial rewards to timely acknowledge a noticeable achievement.

Caring for people is taking on new dimensions going far beyond the improvement of working conditions and flexible working time, when companies are organising information and medical prevention for employees and their families.

Key message

Advanced talent management programmes tend to serve the double objective of getting people more engaged behind the company they work for, and delivering a higher and sustainable performance, which is the return on company investment.

To be successful they need to demonstrate the commitment and active involvement of senior management, be transparent and perceived as fair and integrated in the continuum of the other HR policies.

Talent stewardship is a recommended complement to these programs, supported by the HR organisation to ensure a corporate consistency, high level of standards and synchronisation across of the various functions.

Purchasing professionals can be proud of their achievement over the past years. During the last crisis they have particularly gained recognition and a license to act.

This workshop has been a great opportunity to learn from the past, share new practices, and map the steps ahead.

Tomorrow will call for more. We know that going beyond technical expertise is a must. Acting boldly as entrepreneurs to create value and manage the extended enterprise is now our next collective challenge.

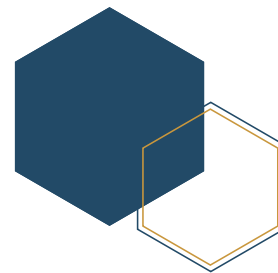
EIPM will keep working with HR experts and purchasing professionals to make this happen ■

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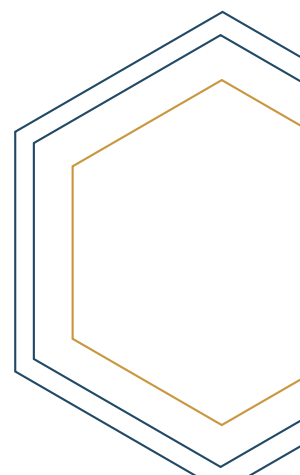


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THE PROFESSIONALIZATION OF PROCUREMENT IN BRAZIL

By François Dousset



JOURNAL OF SUPPLY EXCELLENCE

François Dousset is General Manager for EIPM Brazil.

François Dousset, of French nationality, graduated in economics from HEC (Paris), took post-graduation studies in Sociology (Paris 8), and obtained a diploma from the Ecole Florent Drama School also in Paris. Currently working as a consultant and a trainer for Supply Management with a strong dedication to EIPM clients, François Dousset specializes in purchasing techniques and methodology, with a particular interest in Market Analysis, Strategic Positioning in addition to Cost and Value Management.

Since 1994 François has worked as a consultant and a researcher in various cities throughout Brazil. From 2010 to this day, based in São Paulo, he develops the EIPM Brand and training services all over South America.

Furthermore François teaches Purchasing Strategy and Negotiation for the EIPM Executive MBA classes in France and in China. François is also a very accomplished linguist, mastering fluently the following languages: English, French, Italian, Spanish, and Portuguese.

Brazil needs strong investment in Procurement competencies.

The high investment levels of multinational companies in Brazil drive the strong development of their supply markets. As a consequence, a great number of these multinational companies have a significant need to develop Procurement competencies and tools in Brazil.

Foxconn, the major Taiwanese manufacturer of iPads and mobile phones, that recently established themselves in Jundiaí, near São Paulo, is a good example of massive investments under the authority of the Federal state, making use of fiscal advantages, in exchange for undertaking the urgent development of local supply chains.

Since 2003, strong industrial investments (18.5% of GDP) have been made under the PAC (program for the acceleration of growth). The PAC is said to have generated 5 million jobs in the supply chains of the major multinational companies that have settled in Brazil.

Under these conditions, procurement has had to lead the development of local Supply Chains - and has had to urgently develop their Procurement departments, and staff in the process.

The necessary skills to lead sourcing and supply were sorely absent at first and skills and competencies are still deficient. Brazil does not lack manpower, but lacks training, skills and qualifications.

Top management development has kept pace with the industrial development of the country, but Procurement has not invested sufficiently into the professionalization of its leaders and staff.

In the Brazilian subsidiaries of large multinational construction and equipment groups, middle management aims at homogenising local Procurements skills with that of other countries. Among other advantages, this may contribute to the international mobility of Brazilian Executives.

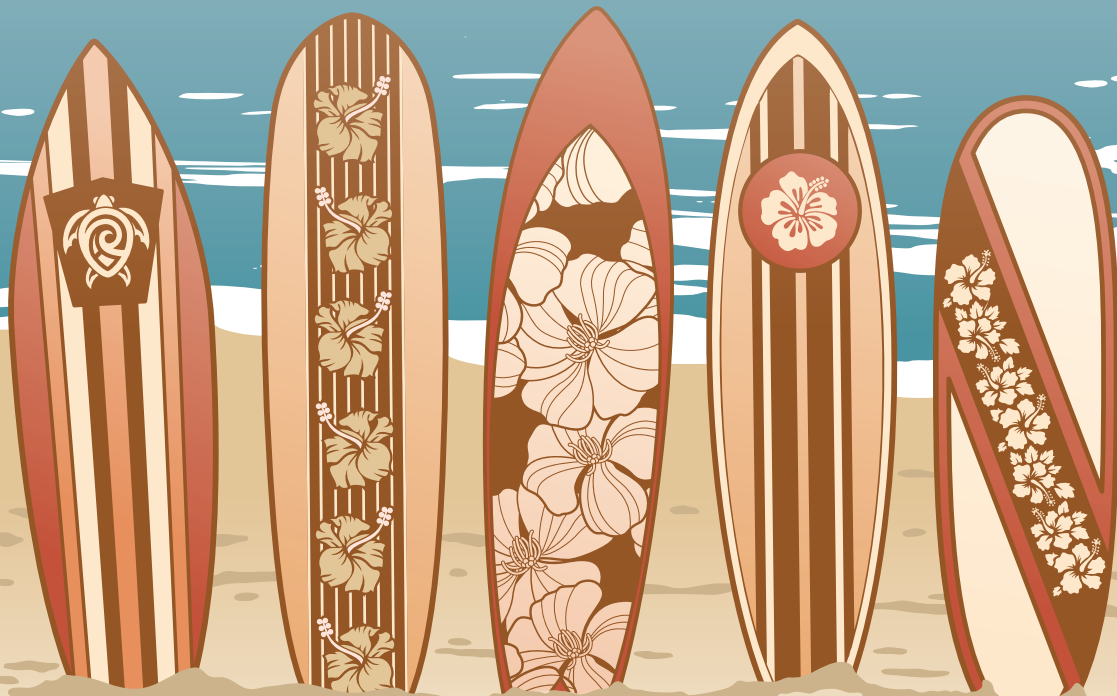
Certification courses of world-class institutes are always more popular. Certification brings recognition and an image to Brazilian Procurement departments that goes far beyond Brazilian borders.

Through the professionalization of Procurement, Brazil is also investing in retaining its talents. The country has, for decades, been suffering the loss of talent who tended to pursue careers abroad and is today confronted with a very high rate of turnover of people.

Major automotive businesses are combining investments in Education with the implementation of re-organization programs, like re-organization of Procurement, cost re-engineering and strategies' redefinition....

All this aims at communicating to the rest of the company that Procurement is modernising and gaining competency and communicates internally that it is strongly advised to become "World Class" As soon as possible ■

Welcome to EIPM Surfboard Shop



Value creation is the simultaneous quest for differentiation, lower cost and new markets. As buyers attempt to seize new opportunities, they need to better equip themselves. Today, they experience the sensation of a surfer on the beach who is about to chose the right surfboard to go catch a wave...



Scenario planning - resilient supply chain - dual sourcing

Value protection is achieved by minimising risks. It requires preventive actions and an outstanding ability to react swiftly when something goes wrong. It builds on risk monitoring practices, mitigation plans and emergency response teams. It starts upstream with scenario planning, resilient supply chain design and dual sourcing strategies.

Risk monitoring - mitigation plans - emergency response teams



Cost models - standardisation - complexity reduction - value engineering

Capturing value means getting more for less; it is commonly achieved through the use of cost models. It leverages standardisation, complexity reduction techniques and value engineering tools. Joint improvement projects and collaborative lean initiatives can lead to further optimisation.

Joint improvement project + collaborative lean initiative



Co-innovation teams, consortiums, joint R&D centers

The foundation of value creation is a systematic search for differentiation opportunities. Buyers can facilitate the early involvement of suppliers in product development activities. Innovation capacity can be increased by fully outsourcing the design of some new products and services. Co-innovation teams, consortiums and joint R&D centers offer opportunities to establish collaborative advantages.

Early supplier involvement - design outsourcing

Joint branding – brand promise

Brands are part of the formula for value creation. Joint-branding can be very attractive to customers. Buyers need to understand the impact of suppliers on the brand promise. Sustainable supply chains are often an integral part of brand management. Customer facing suppliers can be leveraged to deliver a positive brand experience.

Brand experience - customer facing suppliers

Customer experience - marketing – communication - retail

A customer experience includes all interactions between the final customer and your company, its products and services. Suppliers in the field of marketing, communication and retail have a direct impact on the customer experience. Purchasing teams can leverage existing or potential customer facing suppliers to develop outstanding customer experiences in line with the company's marketing plans.

Customer facing suppliers

Cross-selling – marketing collaborations

A purchasing team can create value by creating sales opportunities. The credibility of suppliers can be leveraged, cross selling implemented, joint marketing initiatives can be developed. Buyers can source from second-tier suppliers to consolidate volumes and stay in contact with innovation leaders. Purchasing can be established as a profit center serving different units, joint ventures and partners.

Profit center – busy & sell



Game changers - pricing models - financial innovation

Developing game changing innovations means combining different types of innovation and integrating them in a specific business model. Innovative pricing models, financial innovations and partnerships are combined to deliver new value propositions that are difficult to imitate.

Business model - partnerships - value proposition

EIPM Surfboard Shop



See you soon!

INTERNATIONAL PURCHASING OFFICES IN CHINA: AN EVOLUTION PROCESS MODEL

By Fu Jia

JOURNAL OF SUPPLY EXCELLENCE



Dr. Fu Jia is a Lecturer in Operations and Supply Management at the University of Exeter Business School, England. His research interests include supply relationship management in a cross cultural context, global sourcing, supply chain learning and innovation and sustainable supply management. His research interests and current projects include supply relationship management in a cross cultural context, global sourcing, supply chain learning/innovation and sustainable supply chain management.

Dr. Jia has a track record of publication in supply chain management and logistics in such journals as International Journal of Logistics Management and International Journal of Operations and Production Management, among others. Prior to his academic career, he had worked in the 3PL sector in Beijing, China. Dr. Jia holds a B. Eng in Mechanical Engineering, China, a MBA from Birmingham Business School, UK and a PhD from Cranfield School of Management, UK.

The role of the International Purchasing Office (IPO) in the management of international sourcing activities of multinational corporations (MNCs) has steadily increased in significance, in both developed and emerging economies, since the first adoption of this supply chain strategy in the 1980s. The aim of the paper is to develop an activity/role-based evolution model for the IPO, employing a multiple case study method. The findings suggest that there is an IPO evolution process containing five stages, differing in the depth and scope of activities. It also appears that the stage of the IPO is determined by its strategic importance to its parent company and the development of roles assigned to it.

Keywords: Global sourcing, IPO, Case study, China.

Introduction

Global sourcing research has increasingly attracted the attention of operations management researchers since 1980s. The research on global sourcing has been focusing on a few topics: global sourcing strategy (e.g. centralized, decentralized and hybrid); a process choice (standardization/adaptation) and choice of entry modes (e.g. trading companies, International Purchasing [or Procurement] Offices (IPOs) and foreign direct investments) (Arnold, 1999; Gelderman and Semeijn, 2006; Kotabe and Murray, 2004; Quintens, Pauwels, and Matthyssens, 2006; Trautmann, Turkulainen, Bals, and Hartmann, 2009). Among them, IPOs have been considered a supply market entry strategy in the global sourcing research. Further scrutinizing this body of literature, one could find that little research has been devoted to the organizational structure associated with success in the global sourcing strategy represented by IPOs. The role of IPOs in the management of global sourcing activities of multinational corporations (MNCs) has steadily increased in significance, in both developed and emerging economies, since the first adoption of this supply chain strategy in the 1980s (Yue, 1997).

It is expected that the establishment of IPOs will continue to be a success factor in integrated global sourcing (Monczka, Trent, and Petersen, 2008). Nassimbeni and Sartor (2006b) have shown that creating an IPO has become one of the most frequently adopted strategies by companies in managing their international sourcing activities.

Having established the strategic significance of this strategy for global sourcing in MNCs, we turn to the roles played and activities carried out by IPOs. The activities (i.e. what they do) have attracted the attention of several authors (Bendorf, 1998; Humphreys, Mak, and McIvor, 1998a, 1998b; Nassimbeni and Sartor, 2006a, 2006b). However little is yet known about the role of an IPO (i.e. what part they play within the overall sourcing and supply chain strategy).

The first formal definition of an IPO (Goh and Lau, 1998) used activities in its description: "An International Procurement Office ... can be described as an offshore buying office or buying house set up to procure components, parts, materials and other industrial inputs to be used by manufacturing plants globally". This definition positions IPO an "offshore buying office" and was based on research in the IPOs of Western and Japanese electronics companies' in Singapore in the middle of 1990s. Given its geography and stability, Singapore was a popular IPO location at that time with manufacturing representing 28% of GDP at the start of the decade, falling to 25% by the turn of the century.

Other definitions of an IPO consider it to assume the role of 'intermediaries' (Humphreys et al., 1998a, 1998b), 'shared service entities' (Mulani, 2008) and 'full-service procurement centres' (Kumar, Rehme, and Andersson, 2011; Monczka et al., 2008). These definitions and descriptions of IPOs only capture one or two aspects of the roles played by an IPO at a surface level and do not capture what roles exactly an IPO plays in a host country as it grows over time.

In the two decades since this development, it may be expected that the activities and roles of IPOs have expanded and



changed. The majority of recently built IPOs have been set up in 'low-cost countries' (e.g. China and India). Many MNCs appear to have reached a mature stage of global sourcing. In this period, China has risen to become the world's prominent region for manufacturing and market (Lee and Humphreys, 2006; Nassimbeni and Sartor, 2007; Salmi, 2006). It is now a popular location for IPOs.

In this paper we attempt to develop an activity-based classification and a process model of IPOs. To do this, we have conducted interviews with the IPOs of fourteen Western MNCs in China.

Literature Review

The IPO as one stage of global sourcing

Hartmann, Traumann, and Jahns (2008) observe that when implementing a global sourcing strategy, firms need not only to integrate and coordinate global sourcing requirements across sites but also to remain cognisant of local supply market, government demands, and national differences in costs and skills.

Narasimhan and Carter (1989) identify decentralised, matrix and centralised global purchasing structures. Giunipero and Monczka (1997) add a further type of centralisation in global purchasing – functionally unique global purchasing groups (e.g. internal trading companies and IPOs), which assist foreign purchasing. Arnold (1999) proposes differing optimal degrees of centralisation, depending on the internationalisation of the firm.

Building on information processing perspective, Hartmann, Traumann, and Jahns (2008) argue that the level of centralisation/decentralisation a firm adopts depends on the information processing capability of the purchasing function to process routine information and that of managing unstructured and non-routine information. In practice, a hybrid approach is most commonly selected (Trautmann et al., 2009).

Much of the existing mainstream research on global sourcing takes a headquarter-centric view, ignoring the proactive roles played by other internal stakeholders (e.g. IPOs, business unit and the purchasing departments located in manufacturing plants).

During the period in which the major research on IPOs was carried out (1990s and early 2000s), it is apparent that MNCs set up IPOs as their 'ears and eyes' in a specific target country. It is therefore perhaps not surprising that a supportive role was taken for granted for IPOs, as they were seen as an extension of the corporate purchasing organization.

The potential for proactiveness or a strategic role for the IPO in global sourcing decision making is ignored in the existing literature.

Rajagopal and Bernard (1993) propose a process model

for international sourcing, or modes of international sourcing entry strategy:

- Local sourcing
- Import via agents or distributors
- Import through subsidiaries/own representatives
- Establish International Procurement Offices
- Integrate and Co-ordinate global sourcing through direct investment

The last four stages are related to IPOs. Importing agents can be seen as independent IPOs. Importing through a subsidiary's or own representatives can be seen as an arrangement of sharing the purchasing team/personnel with the foreign subsidiary, a transitional stage IPO. The final stage may represent a mature stage IPO i.e. full service procurement centre. However the model doesn't differentiate explicitly the roles assumed and activities carried out by an IPO in the different stages of a company's global sourcing process.

Roles played and activities performed by IPOs

We apply role theory in this study and consider that IPOs, as 'actors', may assume multiple roles. The central premise of role theory is that an actor should be viewed as a collection of roles and that 'roles are evoked by situations and the content of roles is socially constructed' (Montgomery, 1998: 97).

Few roles are identified for an IPO in the literature. We reviewed and employed those identified for supply managers, who assume multiple roles. For example, Wu, Steward, and Hartkey (2010) show how supply managers span the boundary between the buyer's and supplier's organisations.

They identify four such roles played by supply managers: a buyer's negotiator, a facilitator, a supplier's advocate, and an educator.

Hallenbeck, Hautaluoma, and Bates, (1999) claim that the purchasing manager's position is a classic example of organizational boundary spanning and propose that the roles played by purchasing managers include: gathering, filtering, and transmitting (gatekeeping), transacting, being proactive, and protecting.

Knight and Harland (2005) identify a number of roles played by a buying organisation's purchasing managers in the public health sector i.e. coordinator/facilitator and advisor to a range of constituents.

Roles are seen as clusters of behaviours expected of parties in particular statuses or positions (Allen and van de Vliert, 1984: 4-5; Zurcher, 1983: 11). Jia (2009) for the first time propose the concept of cultural broker in a western buyer and Chinese supplier interaction context and claim that the IPOs could assume this role reducing cultural tension and adapting to cultural differences.



Accepting that an IPO is a major step in a global-sourcing strategy, that this form of supply entry strategy needs to be differentiated further; and using role theory in the IPO research, we are able to develop a role/activity based model of IPOs, as intermediary stages of implementing global sourcing.

Research Method

The case study approach and case profile

In order to build an activity-based typology and process model, we adopted a multiple case study method since research on IPOs is in its early stages especially in the roles played by IPOs and there is little theory (Eisenhardt, 1989; Voss, Tsikriktsis, and Frohlich, 2002).

Case studies are also appropriate for our focus on IPO evolution process, which is not easy to obtain through survey and ideal for cross-cultural research (Ghauri, 2004; Marschan-Piekkari and Welch, 2004). Table 1 shows the profiles of the 14 IPO cases.

We interviewed thirty four individuals working at all levels and across the fourteen IPOs, including heads of IPOs (14), purchasing directors and managers (14), quality managers (2) and buyers (4) working at the IPOs and Corporate Purchasing Organizations (CPOs) of fourteen MNCs in China, UK and Italy in between 2011 and 2012 with majority of the interviewees based in China. Research instruments included face-to-face semi-structured interviews lasting 60-90 minutes per interview, archival data from the internet and company documents.

Table 1: Analysed sample (Profile: SA – Stand-alone; P: Inside a plant)

Case	Country origin	2010 Turnover Billion	1st IPO	Financial profile	Profile	No. of staff	No. suppliers
<i>Appliances</i>	<i>SE</i>	<i>EUR 11,12</i>	<i>1998</i>	<i>Internal Trading Co.</i>	<i>SA</i>	<i>70</i>	<i>N/A</i>
<i>Automation</i>	<i>IT</i>	<i>EUR 0,18</i>	<i>2007</i>	<i>Internal Trading Co.</i>	<i>SA</i>	<i>6/7</i>	<i>N/A</i>
<i>Engine</i>	<i>USA</i>	<i>USD 13,2</i>	<i>2003</i>	<i>Centrally funded</i>	<i>SA</i>	<i>75</i>	<i>100+</i>
<i>Engineering</i>	<i>IT</i>	<i>EUR 2,58</i>	<i>2004</i>	<i>Funded by the plant in China</i>	<i>P</i>	<i>250</i>	<i>N/A</i>
<i>Identification</i>	<i>USA</i>	<i>USD 1,26</i>	<i>2006</i>	<i>Internal Trading Co.</i>	<i>SA</i>	<i>6</i>	<i>N/A</i>
<i>Industrial A</i>	<i>USA</i>	<i>USD 13,2</i>	<i>2003</i>	<i>Centrally funded</i>	<i>SA</i>	<i>7</i>	<i>20</i>
<i>Industrial B</i>	<i>USA</i>	<i>USD 1,9</i>	<i>2004</i>	<i>Internal Trading Co.</i>	<i>SA</i>	<i>20</i>	<i>20+</i>
<i>Industrial C</i>	<i>GB</i>	<i>GBP 0,38</i>	<i>2006</i>	<i>Funded by the plant in China</i>	<i>P</i>	<i>3</i>	<i>4/5</i>
<i>Industrial tools</i>	<i>USA</i>	<i>USD 8,4</i>	<i>1998</i>	<i>Internal Trading Co.</i>	<i>P</i>	<i>8</i>	<i>98</i>
<i>Lighting</i>	<i>NL</i>	<i>EUR 25</i>	<i>2003</i>	<i>Centrally funded</i>	<i>SA</i>	<i>500</i>	<i>N/A</i>
<i>Printing</i>	<i>GB</i>	<i>GBP 0,3</i>	<i>2004</i>	<i>Centrally funded</i>	<i>SA</i>	<i>4</i>	<i>12</i>
<i>Retailer A</i>	<i>SE/NL</i>	<i>EUR 23,5</i>	<i>1992</i>	<i>Centrally funded</i>	<i>SA</i>	<i>500</i>	<i>300+</i>
<i>Retailer B</i>	<i>GB</i>	<i>GBP 1,08</i>	<i>1994</i>	<i>Centrally funded</i>	<i>SA</i>	<i>300</i>	<i>5-600</i>
<i>Solar</i>	<i>DE</i>	<i>EUR 2,38</i>	<i>2005</i>	<i>Centrally funded</i>	<i>SA</i>	<i>7+30 Inspec.</i>	<i>4</i>

An Activity-based Classification of IPOs

We classified the roles played and activities carried out by each IPO into five types, on the basis of their breadth and depth: 'Intermediary International Sourcing Office'; 'In-house International Sourcing Office (ISO)'; 'Exporting

International Purchasing Office (E-IPO)'; 'International Purchasing Office responsible for both global and local plants (E&L-IPO)'; and 'Overseas Corporate Purchasing Organization (O-CPO)'.

We explain below the activities carried out and roles assumed by each type (table 2). We provide a case example for for each category.



Table 2: Roles assumed and activities carried out by ISOs, IPOs and OCPOs

Roles	ISO	IPO	Overseas CPO
	Activities	Activities in addition to ISO	Activities in addition to IPO
Gatekeeper	<ul style="list-style-type: none"> - Managing information relevant to the purchasing function; - Timely identification of manufacturing defects; - Identification of new suppliers; - Visits and auditing existing and new suppliers; - Knowledge transfer to the suppliers. 	<ul style="list-style-type: none"> - Routine quality control after the supplier is certified; - Control IP violation. 	Same as IPO.
Negotiator	<ul style="list-style-type: none"> - Negotiation support; - Support in the contract definition. 	<ul style="list-style-type: none"> - Negotiating contracts and managing contract fulfillment to safeguard the business interests of the buyer. 	
Coordinator	<ul style="list-style-type: none"> - Development of a collaborative trust relationship with local suppliers; - Communication support; - Inter-organizational project management support. 	<ul style="list-style-type: none"> - Logistics management (in-house or using 3PL); - Inter-organizational project management. 	Coordinating relationship between the supply base and related departments at the headquarters.
Supplier's advocate	<ul style="list-style-type: none"> - Comprehension of the suppliers' doubts and difficulties; - Representing the interests of the supplier and communicating the supplier's needs to the buyer. 	Same as ISO.	Same as ISO.
Internal advisor	<ul style="list-style-type: none"> - Passively providing some advices to HQ or plants in the world; - A long-term and consistent lobbying effort to keep the internal customer informed (passively). 	Providing passively or actively advice (critical or general) to global purchasing decision making.	Same as IPO.
Supplier developer	<ul style="list-style-type: none"> - Educating or training suppliers and providing technical support to suppliers before they are qualified. 	Actively educating and providing technical support to suppliers after they are qualified.	Same as IPO.
Supply policy maker	N/A	Reactively or actively engaging in supply policy making, i.e. supply structure and practice making of the company.	Taking overall responsibility of making global supply policy.
Network structuring agent/supply network orchestra	N/A	<ul style="list-style-type: none"> - Monitoring the structure of exchange relationships between the company and the supply network in China; - Taking a sector level perspective on supply markets and acting to promote competitiveness; - Preventing disruption of and improving the reliability of the supply network in China. 	Same as IPO.
Innovator	N/A	<ul style="list-style-type: none"> - Promoting and facilitating new product development (NPD) and process innovation; - Searching for technical solutions; - Checking the results of possible quality improvement projects. 	Leading the R&D department of the company.
Knowledge broker	N/A	Acting as a supply chain management knowledge center of Excellence to promote the best practices among the operations of the parent company and the supply chains in the host country. (IPO E&L only)	Same as IPO.
Cultural broker	<ul style="list-style-type: none"> - Managing an effective communication aligned with the Chinese culture; - Understanding both cultures and adapting to Chinese culture as appropriate; - Helping to reduce tension caused by cultural differences. 	Same as ISO.	Same as ISO.
Others	<ul style="list-style-type: none"> - Administrative activities; - Recruitment and training of new personnel; - Other legal activities that support the company operations (e.g., filing patents in the Chinese markets, filing the company logo, supporting the legal definition of agreements involving Chinese actors). 	Accounting and finance.	<ul style="list-style-type: none"> - Sales support; - Managing operations in the host country.



International Sourcing Office (ISO)

An IPO starts from a sourcing, or re-sourcing, need i.e. collecting supply market intelligence, searching, auditing and selecting suppliers, and basic quality control. Such activity is more properly termed an International Sourcing Office (ISO) since it serves as a basic sourcing office, serving as the 'eyes and ears' of its parent company in the host country or region. An ISO could be an independent, intermediary trading company or an in-house buying office located either within an operational facility or a stand-alone office.

MNCs may or may not initially use intermediaries, subsequently building their own ISOs. Among the 14 cases, only Industrial Tools and Retailer B used intermediary ISOs at the beginning of their sourcing from China. All the case companies set up in-house ISOs.

ISOs are used to find and certify suppliers and then pass them to global plants, without being actively involved in the execution of orders, quality control, supplier development and logistics management. So, we can say that ISOs assume a gatekeeper role. They support negotiation but do not normally play a significant role in negotiations with suppliers; they support the inter-organizational projects; they represent the suppliers in front of the internal customers; they provide advice to international customers, passively; they develop suppliers before they are qualified and passed to global plants; and they help to reduce cultural tensions. Specifically, an ISO carries out these activities whether it is an independent or in-house entity.

We define the first stage of IPO development as an 'Intermediary ISO.' This includes the use of an intermediary trading company or an intermediary plant. An in-house ISO is one that has a dedicated sourcing team searching for auditing suppliers for global plants.

Identification, Industrial A and Industrial C were ISOs. The main duties of these ISOs were seeking and developing Chinese suppliers. When the suppliers were qualified they were handed over to the global plants. The ISOs were not actively involved in quality control, logistics management and supplier development.

Identification's ISO ran a 'buy for resell to internal customers' model and was a profit centre. The head of the ISO intended to change its status to a cost centre (i.e. to have the ISO centrally funded). In this way it was felt they might bring more projects to China without being constrained by the profit-making purpose. It was still at the stage of justifying its existence. Industrial A was trying to recruit a 'Supplier Quality Engineer' (SQE) to develop the existing suppliers and could be seen as starting to evolve into an IPO. Both Identification and Industrial A were at the in-house ISO stage at the time of the research. Before the in-house ISOs were established, Industrial A had used an intermediary sourcing consultant.

International Purchasing Office (IPO)

When volumes of purchasing in the host country increase significantly a buying office or ISO may be given responsibilities beyond simply seeking suppliers and collecting supply market information. At this point, the foreign buying office enters into a stage of an IPO, potentially with all the functions of an ISO plus activities related to duties after suppliers are qualified, e.g. order fulfillment, logistics/shipping and quality control/inspection, supplier policy maker; network structuring agent; innovation facilitator and knowledge broker; the last of which is not discussed in the literature before (Table 4). For other roles, the description in the literature seems not to go beyond the ISO stage.

An IPO can be further classified into two types: an IPO focusing on serving global plants (i.e. exporting) and then an IPO serving both global and local plants. Where a strong link exists between the IPO and the company's Corporate Procurement Office (CPO), (e.g. where knowledge and expertise in supply management are shared), the IPO may become a centre of functional excellence and be required to conduct not only supply base management in the host country for global plants initially but also the same task for local plants.

Not all the cases reached the stage of the 'exporting IPO': Automation, Industrial B, Industrial Tools and Solar reached this stage in 2011. Appliance, Engine, Engineering, Lighting, and Retailer A had reached the stage where the IPO was serving both global and local plants. We illustrate the E-IPO and E&L-IPO with Printing and Engine cases.

Printing (E-IPO)

Printing set up its first production facility in Shanghai in 1996. It started sourcing through the purchasing team based in the Chinese plant until the set up of an in-house ISO in 2003/04.

Over 30% of the highest volume products were sourced from China in its heyday between 2003 and 2008, before the financial crisis. The ISO gradually developed into an IPO solely for exporting i.e. being responsible for supplier development and logistics management and so on. The IPO's head reported to the group Global Sourcing Director and followed her orders closely. By 2011, there were two buyers and two Supplier Quality Engineers (SQEs) responsible for the development of existing suppliers.

The IPO was considered an extension of the global sourcing team at HQ. Due to its corporate strategy of providing customized products (low volume and high mix) to customers, and following the rise in labour costs, sourcing in China became infeasible for some products. In 2011 Printing started considering pulling some sourcing out of China and back to Europe.



Engine (E&L-IPO)

Engine's IPO illustrated the evolution process well, evolving from an ISO to an E&L-IPO. Engine was one of the earliest US companies entering the China market. The initial sourcing was supported by the JVs in China. Motivated by the low-cost production in China, Engine started increasing its sourcing from China in 1998 and in 2000 an in-house ISO was officially set up to search for suppliers in China for global plants. Gradually, the company penetrated into China's market through its JVs and Wholly Owned Foreign Enterprises (WOFEs). China became a main supply and sales markets. Its global procurement strategy also changed, away from the centralised approach. The China IPO was assigned more responsibilities, such as being involved in more new product development projects, global purchasing decision making, developing the supply base, and order fulfilment in China.

The ISO developed into an exporting IPO in 2003 when the existing head of IPO took the position. The head of the Engine China IPO was a keen promoter of sourcing from China, led his team in developing potential Chinese suppliers and actively persuaded global plants to consider Chinese suppliers, changing their image from a backup source to a default choice. Engine had seen a great deal of manufacturing transferred from the west to China; for some components this reached over 90 percent. On many occasions, the IPO led the sourcing projects and made decisions on global procurement strategy for China. His team has grown from a few people in the late 1990s to 70 in 2008; this level of staffing remained the same in 2011 despite the financial crisis.

Having proven its ability to manage the supply base in China, the IPO had been empowered further to lead a joint venture (JV) sourcing council consisting of four Engine's joint ventures, and orchestrating the supply management in China since 2009. In this way, the IPO served as a knowledge broker to disseminate its supply chain management knowledge among Engine's Chinese operations in China. Many of its employees were promoted to the General Managers or Operations Directors of the operations in China.

Overseas Corporate Purchasing Organization (O-CPO)

Evolving further, it appears that an IPO can fill the role of a CPO. We can refer to this as an Overseas Corporate Purchasing Office (O-CPO). It contains all the supply functions of a CPO based at HQ and all the functions of an IPO but it is located overseas. An Overseas CPO may be the supply policy maker and innovator; take overall responsibility for coordinating the relationship between the supply base in China and the relevant departments of a company, and sometimes provide sales support and manage operations in a host country.

Retailer B (O-CPO)

Retailer B is a specialist retailer headquartered in the UK. In 2011, for the first time, the group sales coming from outside UK overtook that of the UK. The company expects that 75% of its revenue will be generated outside the UK, mainly from China and India, by 2014. Aligned with its internationalization strategy, Retailer B intends to close down hundreds of its stores in the UK.

In 2011 its CPO (including the product design team) was relocated from the UK to Hong Kong, bringing it closer to both main supply and sales markets in both India and China and therefore became an Overseas CPO.

The company does not conduct manufacturing and thus relies heavily on its supply base. It has a highly developed and expert supply chain team in Asia, having acquired a toy design house there in 2007; it considers this a huge competitive advantage. Purchasing value in China represents 55% of total spending of the whole company. The balance is spread reasonably broadly, with a significant proportion in India and Bangladesh. Sourcing in Asia represents most of the company's spend.

There are three sourcing hubs (IPOs) in Asia: HK for toys; Shanghai for home and travel systems; and Bangalore (India) for clothing. There are four satellite offices for the Bangalore hub: India (2), Bangladesh (1) and China (Guangzhou). A new distribution centre was opened in Shenzhen in 2010. The global purchasing function (i.e. the CPO) is now based in HK with all three hubs reporting to it. China remains a key growth market for Retailer B and the number of its stores there continues to grow (22 stores in 15 cities in China in 2012).

A retailer JV with a Chinese brand was set up in 2007, providing production capacity, supply base, complementary design capacity, and market channels.

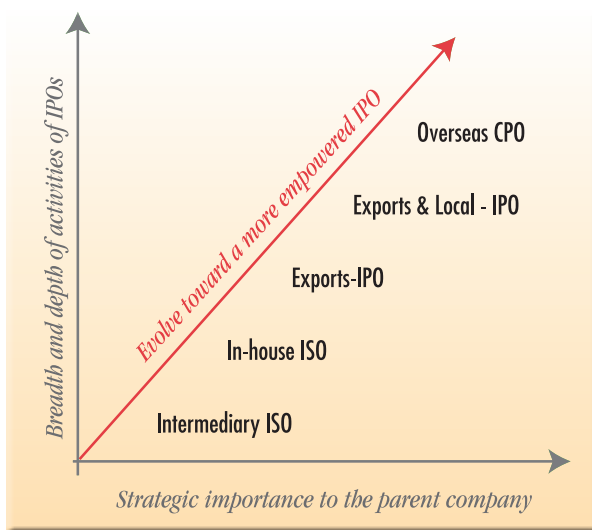
The toy design house had been using an intermediary trading company to manage its sourcing from China before 1994, setting up its own ISO in that year. Other businesses of Retailer B used the Shanghai office of a HK-based intermediary initially and then set up a Shanghai sourcing hub (initially an in-house ISO) in 2007 when its first store was opened in China. The ISO soon evolved into an IPO, serving both global and local markets in 2008 - it omitted the exporting IPO stage.

Discussion

An Evolution Model of IPOs

Figure 1 shows an evolution model from an Intermediary ISO to an Overseas CPO (O-CPO). In this model we propose that an IPO can be placed on a continuum between a simple intelligence-collection office and a fully fledged CPO; the stages between these two are all mapped.

Figure 1: An Activity-Based Evolution Model for International Purchasing Offices



This research shows that an IPO doesn't necessarily go through each of the five stages in the model. In fact, the Lighting IPO was the only one that went through all the stages. The intermediary and in-house ISO stages are the only steps gone through by every company. The majority of initial sourcing in China was supported by the production plants established for penetrating local sales market or sales representative offices in China, apparently because these companies intended to penetrate the China market first before sourcing supplies there (see Table 3). The few exceptions are Retailer A, Industrial A and Industrial Tools who sourced from China before they sold products to China and used intermediaries for sourcing initially. Although Retailer B opened its first shop in China in 2003 and the IPO was established later in 2007, it used an intermediary briefly because it didn't have an operation to host the IPO.

Table 3: IPO strategic importance and types

Company name	China sourcing	Revenue by China	IPO type	Entry mode
Appliances	50%	20%	IPO (E&L)	Market/Production entry first, JV (1996); sourcing follow (1998)
Engine	60%	15-20%	IPO (E&L)	Market/Production entry first, JV (1979); sourcing follow (late 1990s early 2000)
Engineering	70%	20%	IPO (E&L)	1st Rep office (1981); Started purchasing (1998); IPO (2004); 1st plant, WFOE (2006)
Lightings	40%	More than 10%	IPO (E&L)	Market entry/ Production first, JV (1985); sourcing follow (2003)
Retailer A	22%	More than 10%	IPO (E&L)	Sourcing 1st (1992); 1st shop (1998) follow; no production
Retailer B	55%	17%	Overseas CPO	1st shop/Market (2003); sourcing (IPO) (2006); no production
Industrial B	50-60%	8%	IPO (E)	Market/production entry 1st, JV (1990); sourcing follow (2004)
Industrial tools	90%	Less than 5%	IPO (E)	Sourcing 1st, (1985); Market entry/ Production follow (1995)
Solar	90%	0	IPO (E)	Sourcing only for the solar products (2005)
Printing	30% of highest volume	Less than 10%	IPO (E)	Market/production entry first, WFOE (1996); sourcing follow (2004, ISO)
Automation	5%	Less than 10%	IPO (E)	Market entry first (2002); sourcing follow (2007); no production
Identification	Less than 10%	Less than 10%	ISO (In-house)	Market/Rep office entry first (1998); 1st plant (1999); sourcing follow (2006, IPO)
Industrial A	Less than 10%	7%	ISO (In-house)	Market/production entry 1st, 1st plant (2001); sourcing follow (2003)
Industrial C	Less than 10%	Less than 10%	ISO (Intermediary)	1st rep office/market entry (1980s); Production/sourcing, WFOE (2006)



The Lighting case shows that the decision-making power of an IPO reaching the O-CPO stage can be rescinded and the office downgraded to an E&L-IPO. Hence, the level of development in the path of evolution may be upwards or downwards depending on the company's global purchasing strategy (i.e. evolution may lead to a less sophisticated organism, or at least one in which certain features disappear with the passing of time).

Similarly, Industrial C, Printing and Solar may gradually withdraw from the supply market in China, if the country's cost advantages continues to erode.

Conclusion

Synopsis

In this paper, we set out to develop an activity-based IPO typology and an IPO evolution model. We have achieved these goals by identifying five types of IPO based on the roles assumed and activities carried out. We have also built

an 'IPO evolution model.' We have shown the causal links between IPO types and the breadth and depth of activities they carry out, and between its strategic importance to its parent company and the breadth and depth of activities. We also found that an IPO does not necessarily pass through all the model's stages and could evolve to higher or lower levels of sophistication and responsibility depending on the benefits sought from it by its parent company's global purchasing strategy.

Practical Implications

This paper has significant practical implication to MNCs' global sourcing. First, MNCs could use the evolution model to assess the stage of their global purchasing and IPOs and decide whether they want to upgrade, degrade or remain the same. Second, the roles of activities identified allow the companies to assess the roles assumed by their IPOs and decide what activities and roles they want their IPOs to perform or assume ■

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BOTTOM OF THE CYCLE? NOW IS THE TIME TO ACT

By Corey Billington & Rhoda Davidson

JOURNAL OF SUPPLY EXCELLENCE



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Introduction

Business cycles are a fact of life and there is no doubt that we are currently in a cyclical downturn. Since 2007, nations around the world have experienced a series of major economic and financial problems. The financial crisis and the bailout of the banks by national governments have led to a global recession.

Government overspending and poor policy have magnified the problem and contributed to the sovereign debt crisis, dragging Europe into negative growth and leading to the Eurozone crisis. Austerity has led to massive demonstrations in Greece, Portugal and Spain as standards of living fall and unemployment soars.

Although the US economy officially emerged from recession in 2009, its performance is hardly exciting and growth is slowing in China after 30 years of growth rates in excess of 10%. Businesses are suffering from underutilized plants and tough sales conditions. Suppliers are hurting as inventory piles up. All in all, it is a bleak time.

However, one thing that we know about cycles from our historical experience is that eventually the economy will turn up again and the recession will be over. And in the upturn companies will be back competing for supplier attention and fighting for security of supply.

Given this current business environment, what should Procurement departments be working on now that can be of benefit during these hard times and will continue to deliver value when the economy turns up once more?

We believe that there are a number of trends superimposed on the current business cycle which make it an excellent time to be addressing 2 major procurement opportunities:

- Using sourcing contract portfolios to minimize the cost of supply chain volatility.
- Competing using "extended innovation" to increase innovation efficiency.

Tackling both these projects during the downturn will yield immediate benefits and also put companies in a winning position later during the upturn. Failure to act could lead to more adventurous competitors clinching a big competitive advantage.

The goal of this paper is to describe these two Procurement opportunities and to explain why it is the perfect time to develop enterprise capabilities in these two areas. We provide you with examples drawn from our own experience and the experience of other companies with whom we have worked, and describe how companies can get started.

Sourcing Contract Portfolios to Minimize the Cost of Supply Chain Volatility"

There are a number of important mega-trends that are superimposed on the current business cycle.

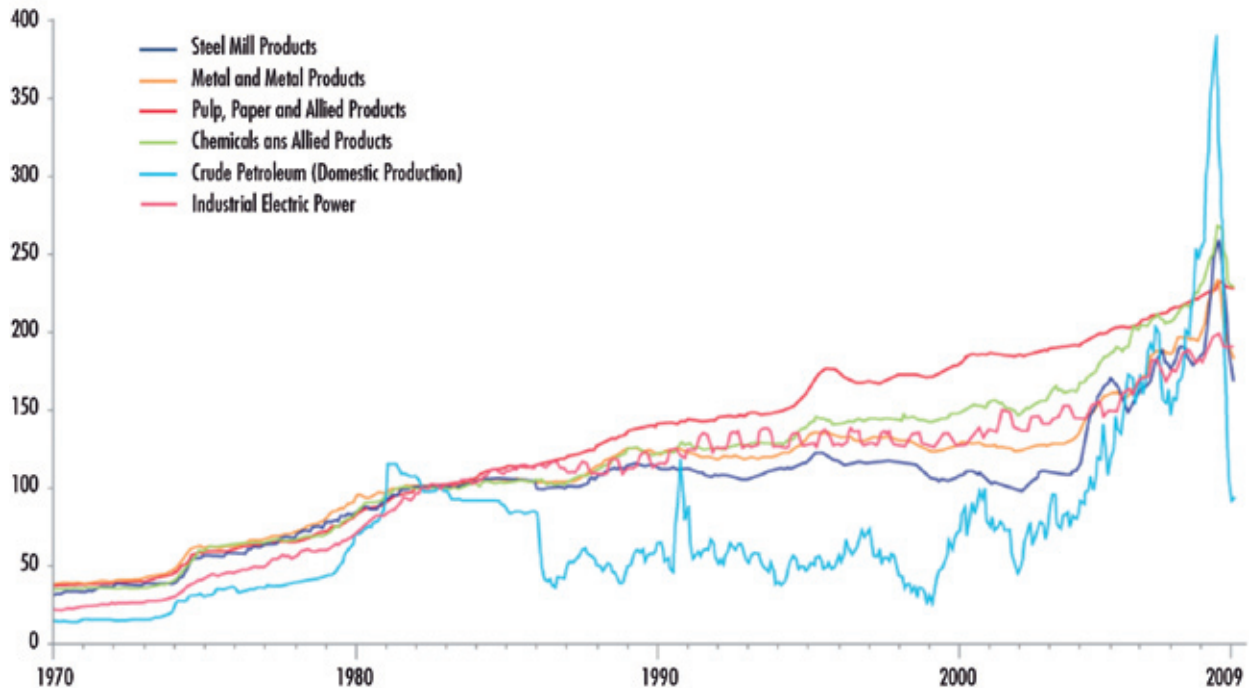
The most important mega-trend is that we are reaching the limits of globalization and this is causing the national economies to move together more closely in their business cycles. Increasingly, nations are moving into recession and boom at the same time.

We see that strong global links come at a price, as witnessed during the financial crisis – the ramifications of which were felt globally, proving that all countries are vulnerable to one another's shocks.

The impact of more highly interlinked economies combined with globalizing industries is to increase the price volatility of commodities, purchased goods, and services by reducing natural national hedges (Figure 1 - commodities example).

An inability to pass on price increases to customers and times of poor availability impacts a business' top line. This is frequently the case; a recent cross-industry research report found that 64 percent of market price increases cannot be passed on to final customers¹. The net impact is to reduce earnings and to create earnings "surprises", an impact that does not go unnoticed by the stock market.

Figure 1: Increasing volatility of commodities



Source: US bureau of Labor Statistics, Price Producer Index of selected commodities - January 1970 through February 2009; Accenture analysis

Given the increase in the future price uncertainty for supply chain inputs and that sometimes availability cannot be assured at any price, what should Procurement departments be doing now? What processes should a Procurement department be using?

At the bottom of the cycle a company has something of value to offer to suppliers that does not cost anything. It is called "being a customer". The bargaining power in relationships with suppliers is rarely as high point as at the bottom of the cycle. The big question is: can Procurement use this power to create assets that provide returns not just during the downturn but also when the market swings upward?

Multi nodal global supply chains typically have significant amounts of structural waste. Structural waste is spending more than absolutely necessary i.e. above minimum possible cost. This waste is largely created through combative relationships which prevent suppliers and other supply chain members from scheduling their resources efficiently. Much of the waste translates into higher prices and results from companies incorrectly pushing uncertainty (i.e. risk) onto their suppliers. Also there is an inability for suppliers to openly discuss these problems.

Let's look at two examples:

- Companies regularly retender contracts with suppliers for volumes that make up a substantial percentage of the suppliers' capacity and then switch to the supplier with the lowest price. Over time this can become self-defeating. Suppliers hold back from investing in new capital equipment because of the risk of losing the contract and ending up with unused capacity or tooling. As a result suppliers no longer offer the lowest price that could be achieved by refreshing production assets. The Procurement department achieves the "lowest price available" but "not the lowest price possible". For instance, until recently GM was notorious for violating supplier trust and had to go through a near-death experience to understand that there are better ways to work with suppliers².
- Procurement departments often use outsourcing with the assumption that suppliers can more effectively cope with the demand volatility. The logic is that if demand for components from individual firms is volatile then suppliers can better deal with this volatility by aggregating demand from multiple customers. If company A is ordering fewer

components, then company B may be ordering more and the supplier bears less risk by working with both parties. In reality this is seldom the case and we all know how even small amounts of volatility translate into expensive information distortions (“bullwhips”) throughout the supply chain. The cost of periods of excess and shortage invariably find their way back, in one form or another, to the ordering companies as increased costs. For instance, Compaq routinely pushed demand uncertainty onto component suppliers and in the merger with HP a careful analysis showed that for similar purchase volumes from the same suppliers Compaq was paying 4% more.(A more complete list of supply chain risks is shown in Table 1.)

Table 1: Supply chain risks affecting business performance

Procurement risk	Cause
1. Hidden material costs	Demand uncertainty imposed on our suppliers results in hidden material costs
2. Price predictability impact on earnings	Component price volatility causes significant earnings variability
3. Inventory-obsolescence	Demand uncertainty causes significant write-offs on custom components
4. Components shortages	Demand uncertainty or commodity allocations cause significant shortage costs
5. Predictability of price – impact on market share	Component price uncertainty results in lost revenue opportunities

These examples show that Procurement departments which focus entirely on price are creating waste in the supply chain by making it harder for suppliers to schedule resources and hence reduce joint supplier-customer costs. Flexibility offered by suppliers is a valuable service that costs money to provide and should be priced rationally and not ignored. Pretending that volatility has no cost in the supply chain is just plain stupid!

Procurement departments need to develop processes that allow suppliers to schedule their resources more efficiently and then share the financial advantage of these new arrangements and behaviors. Leading companies that are excellent at working with suppliers in this way are Honda, Toyota, Caterpillar, HP, and Harley Davidson.

If your company has been in the mode of combative procurement or has been simply ignoring volatility then there is no better time to break these poor behaviors and work more closely with selected core suppliers to drive out supply chain waste. The time is ripe now because in an upturn, when supply is short, Procurement departments will be competing just to gain attention from suppliers and suppliers are often focused on getting payback for the Procurement department behavior during the downturn.

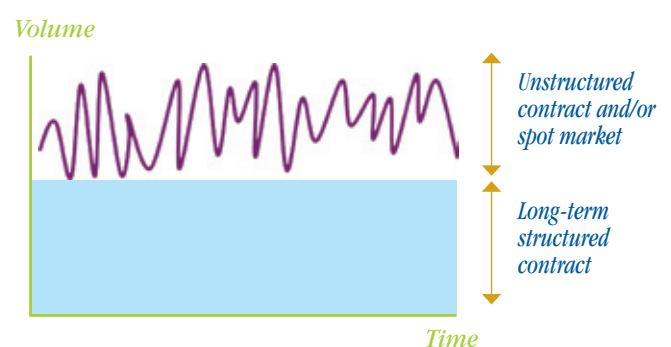
One such set of collaborative procurement processes is to create portfolios of contracts. Working with sourcing contract portfolios can allow Procurement departments, under certain circumstances, to simultaneously achieve four great benefits; reduce cost, reduce future cost uncertainty, improve security of supply, and assure least-cost supplier infrastructure³.

Figure 2: Characteristics of a volatile supply input and addressing volatility using contract portfolios

A. Supply input volume over time



B. Portfolio of contracts to address volatility





To explain how this works let's take an example (Figure 2a). Looking at Figure 2a we see how the volume of a supply input (e.g. component, subassembly, commodity) used by a company to produce goods varies over time. Both demand and hence price for this input varies, with price rising during times of high demand and vice versa. In the combative mode the company simply retenders the contract every year to get the best price and orders whatever is needed from one or more suppliers.

The suppliers bear the risk that they may not be selected by the company, and bear the risk of holding extra inventory or stranded capacity if the Procurement department does not accurately forecast demand. But in cooperative mode different behaviors towards the suppliers allow the company to construct a portfolio of contracts (Figure 2b). This portfolio consists of some combination of:

Long-term structured contract: The buyer commits to buying a specified number of units over a specified period of time, for a fixed price with penalties if the units are not ordered ("take-or-pay"). Here the buyer bears the risk as they are obligated to purchase the units or pay the lost margin, even if they don't need them.

PLUS

Unstructured contract: The buyer provides a forecast and expects the supplier to supply an uncertain quantity without changing the price. There is usually a commitment to giving the supplier a fixed percentage of the business for that particular input. Here the supplier bears the risk because the buyer is not committed to purchasing a certain quantity but still expects the same price and service. The supplier is rewarded for this by being able to charge a higher price.

AND/OR

Spot market: Shortfalls in supply for the input are met by soliciting suppliers for a specified number of units at the time when the shortfall is recognized. Here the buyer assumes the risk by purchasing on the open market.

The result of combining these contracts is to create a sourcing contract portfolio that has the effect of driving waste out of the supply chain by more effectively reallocating risk onto the party in the supply chain who is best able to bear that risk.

The buyer now has longer term security of supply for a base committed volume. The suppliers with the long-term structured contracts and hence security of future sales can now invest in items such as new capital equipment or additional staff. This allows these suppliers to reduce costs and, as part of the contracting arrangement, a fraction or even most of these savings is passed along to the buyer in the form of lower prices⁴.

The suppliers with unstructured contracts can price in the volatility that they bear. Suppliers that bid for this type of

volume have typically designed their production capabilities to deal with uncertainties of demand in an efficient way. Suppliers that bid for take-or-pay contracts typically have a higher fixed cost base in comparison with suppliers that can more easily handle flexible contract quantities. These higher prices are now charged on a lower volume and the uncertainty of demand is localized to this lower volume, lowering the risk of extreme bullwhips. The net result of this is to move volatility to the party most willing and able to manage it.

An example of sourcing contract portfolios that most companies employ without even realizing is contracting for labor. Companies typically use a mix of full time equivalents (FTEs) on permanent contracts, part-time employees, employees on short term contracts, consultants, and temporary staff paid on an hourly basis. By using a diversified mix of labor contracts, this greatly increases the flexibility of the company to match supply with demand. For instance, during the 1990s HP went to a highly diversified labor portfolio and subsequent analysis showed that this move reduced total labor costs by 13%⁵. This in part explains the large growth in the contract labor market e.g. Manpower, Adecco.

Utilities can also be purchased in the same way. For instance, a manufacturing company in San Diego, US used the same approach when negotiating for electricity at its local plant.

Under a conventional "combative" contracting approach the company achieved a quarterly average cost of \$555k with a standard deviation of \$49k. But with a portfolio approach average costs were reduced by 36% and just as importantly the standard deviation of the price was reduced by 99%!

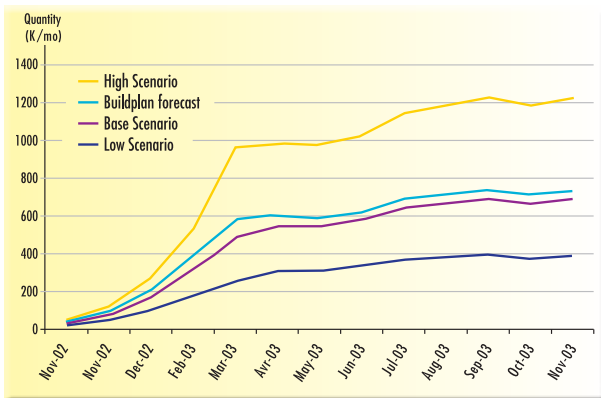
Another example from HP is the purchase of electronic sub-assemblies for making consumer electronic products (Figure 3a). The demand volatility was forecast using a most likely scenario, a high demand scenario, and a low demand scenario. Two contracts were used; a take-or-pay contract for the low schedule and another contract for flexible quantities to cover the highest schedule (Figure 3b). Price for the two contracts was determined by the different suppliers bidding for the contracts based on their factors of production (cost and labor).

The take-or-pay contract was fulfilled by a Japanese supplier using highly automated manufacturing. The unstructured contract was fulfilled by Chinese suppliers using manual assembly.

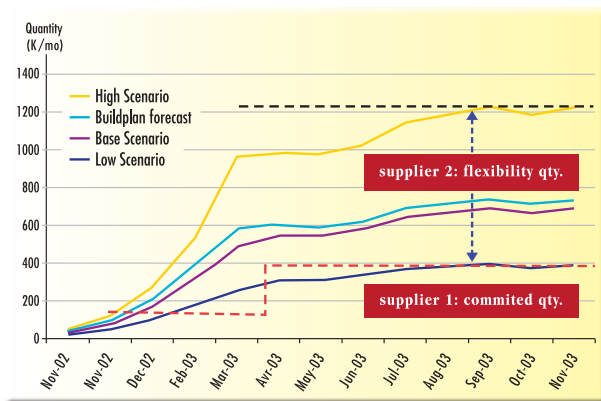
The Japanese supplier was able to offer a lower price for the guaranteed volume. The Chinese suppliers did not increase price as there were no economies of scale in their production and so the risk did not hurt them to the same extent. HP realized 17% savings (\$6m) in savings from using a portfolio of contracts.

Figure 3: Assembling sourcing portfolios for sub-assemblies

A. Demand scenarios for sub-assemblies



B. Portfolio of contracts used to procure sub-assemblies



Sourcing contract portfolio thinking also opens up more sophisticated plays. For instance, under certain circumstances companies may choose to use a long-term structured contract to buy slightly more than the minimum consistent quantity required; perhaps because the price per unit in the unstructured contract is quite high.

Then when supply is short the buyer can at least partially cover the peaks, perhaps supplemented by supply from the spot market. And when the buyer has excess then this can be sold off on the spot market, sold to non-key competitors, or even sold to competitors on an irregular basis.

For instance to ensure sufficient supply, HP regularly buys excess memory chips and then sells them to contract manufacturers or competitors with a modest mark-up.

This is a particularly attractive offer for smaller competitors who, even with the mark-up, cannot achieve the same price with their own negotiating power. And it also provides these players with a guarantee of the authenticity of the memory chips in an environment where counterfeit products are relatively common.

Or rather than selling off the additional input factors, the Procurement group can also go ahead and produce the primary product, or another product to consume the excess components. And then the company ensures that these additional volatility-consuming products are sold off in a way that does not damage the brand value or ruin the price point for the primary product.

This can be achieved in several ways. Firstly, the brand and product might be sold through other channels but labeled in such a way that it does not appear to be equivalent to products sold through regular channels.

For instance, electronics goods manufacturers regularly use internet channels such as E-Bay to sell off excess products at a cheaper price and label the goods “refurbished” to distinguish them from standard products sold through retail and to avoid channel conflict.

Or secondly, products can be sold as part of a “while supplies last” bundle together with other products that might appeal to a certain customer segment. For instance, HP regularly sells bundles including printers, PCs, and cameras, which incidentally also resolves the issue of excess capacity in these other products.

If any of these product types are in excess this allows effective discounting without impacting price points or brand. HP termed these procurement initiatives as “bring out your dead”. Suppliers regarded bundles as a valuable volatility reducing service provided by the Procurement department and it increased supplier loyalty. This approach can also be applied to services. Services exhibit the same characteristics as other supply chain inputs; they go through cycles and there is price volatility, and availability challenges.

For instance, in the area of logistics you cannot assume that unlimited amounts of goods can be moved between any two locations. In 1999, just before Y2K, airfreight capacity between Singapore and Oakland was in limited supply and it was felt that the risk of logistics disruptions was high if there were to be any disruptions due to “Y2K bugs”.

To manage this risk one firm engaged in take-or-pay contracts committing to the maximum of a ranged forecast. The firm satisfied its needs fully and then sold the excess capacity on the spot market for a small profit. In this case the sourcing contract portfolio provided high availability, protected from a risk that did not occur, at no additional cost.

The challenge of establishing sourcing contract portfolios is that it is impossible for companies to know the potential for using multiple contracts in any given category until they explore the possibilities with suppliers.

Companies need to work closely with their suppliers to be able to pick up the signs that restructuring a given contract can yield benefits for all parties through more effective



handling of volatility. In our experience, some tell-tale signs are (although this is an open research question):

- High levels of volume and price volatility; 40% or more.
- Link between purchase volatility and earnings surprises.
- Presence of different business models within the supply chain; some suppliers have higher fixed costs than others.
- Category is not a pure commodity for which spot price and long-term contract price are essentially the same (in fact in our experience there are very few true commodities).
- Suppliers can provide a response to the question, "what behaviors do we have that cost you money?"

HP has extensively used sourcing contract portfolios since 1996 to lower supply chain risk and manage volatility with great success.

The Finance department was even able to measure the positive impact on the HP stock price and so calculate the return on investment of the program.

It was found that for DRAM memory alone, the sourcing contract portfolio cost approximately \$1.5m annually to administer and this had a permanent positive increase of HP market capitalization of \$240m.

This was because major shifts in DRAM prices and availability created either positive or negative earnings surprises (Figure 4).

Figure 4: Relationship between memory chip price (DRAM) and HP earnings surprises



Negative earnings surprises are more highly punished than positive surprises in the short term and increased earnings volatility decreases stock price in the long term (through increased Beta value).

Component price volatility was shown to be of the same importance to shareholders as currency risk!

To get started on really managing volatility, a firm should aim to set up three credible, replicable and feasible pilots ⁶ using the following process:

1. Pick a category and measure the requirements for flexibility by projecting different demand scenarios over time.
2. Create a theoretical portfolio that partitions the risk between different types of possible contracts.
3. Conduct a series of sourcing events where potential suppliers are invited to submit bids for contracts in which risk is born to different degrees either by the purchasing firm or the suppliers.
4. Analyze the results to find out if any of these different contract portfolios are likely to yield a better financial result than the existing contract structure, including the valuation of earnings surprises.
5. If the analysis looks promising then go ahead with the sourcing event and form the new portfolio of contracts and carefully measure the value created.

Once a company has three successful pilots then it is possible to begin a formal program to create an enterprise capability.

This program is analogous to currency risk hedging activities conducted in treasury. Setting up a program requires data collection and management processes, analytical tools, and a change management program to train Senior Management, Treasury, Procurement and suppliers.

Managing supply chain volatility presents an immensely attractive set of investments and properly harnessed, it can double the return on investment of the average Procurement department AND allow the department to become strategically relevant.

Use the sourcing contract portfolio maturity rating table to judge the sense of urgency for your company.





Question To what extent....	Score (1 to 5)*
<i>... are you actively managing risk in the supply chain (with KPIs)?</i>	
<i>... do you have categories where the demand is highly uncertain over time? (+/- 40%)</i>	
<i>... do you have categories where changes in price or availability have an impact on forecast earnings?</i>	
<i>... are these categories served by different business models? E.g. low fixed cost manual production from developing countries and high fixed cost automated production from developed countries</i>	
<i>... do you think that there are categories where the supply chain is inefficient i.e. has significant information distortions (bullwhip)?</i>	
Total	

* 5 = to a great extent, 4 = to some extent, 3 = to a moderate extent, 2 = limited extent, 1 = no extent
(If you score more than 15 then your company should consider taking action)

Extended Innovation to Increase Innovation Efficiency

Two other megatrends resulting from increased globalization have a profound impact on Procurement.

Firstly, cheap labor is becoming progressively harder to access as developing countries become developed countries with their own demands for consumption. Witness that in 2012 China passed from being primarily an exporter of manufactured goods to consuming more than 50% of manufactured output within the domestic market. Secondly, the “clockspeed” of innovation is increasing, and so companies have less time to harvest the margins from new product and service ideas because competitors can copy faster than ever.

These trends mean that innovation efficiency is becoming increasingly critical for companies that want to continue grow revenues ahead of competitors.

Leading companies are now using the “extended enterprise” to innovate and grow revenues more quickly and more efficiently. By the “extended enterprise” we are referring to suppliers of the company. These may be existing individual suppliers or existing suppliers working in networks or ecosystems or new suppliers that are found in “the Cloud”.

“The Cloud” includes organizations or individuals that are not company suppliers but that can be reached directly through the Internet or through intermediary networks. These “seeker-solver networks” are essentially novel procurement structures enabled by the Internet. Innocentive is an example of an intermediary network that

allows companies to seek answers from the company's 170,000 solvers. The network provides the facilitation mechanism to link a problem presented by a manager or organization (the seeker) with a myriad of organizations or people worldwide who have the skills and time to consider the problem and share a solution if they already have one.

Using intermediary networks is particularly salient for complex innovation with unforeseeable uncertainty. By using these networks companies can rapidly extend the boundaries of innovation search and essentially put millions of brains to work.

We call this ability to innovate with existing suppliers and with the Cloud “extended innovation” because by using the extended enterprise to innovate, companies have the potential to leverage resources that they control AND resources that they do not control.

These additional uncontrolled resources can also be used to innovate. In the case of existing suppliers it is clear who these companies are and the extent of their resources. But for the Cloud the suppliers of these resources have not been identified by the company, have not worked with the company in the past, and may only be used on a one-off basis.

The wisdom of using the extended enterprise to conduct extended innovation is undeniable. Toyota is legendary in the way they have built and facilitated the Bluegrass Automotive Manufacturing Association⁷. Honda used this approach to make the redesigned Honda Accord the most popular selling car in the US. Research suggests that

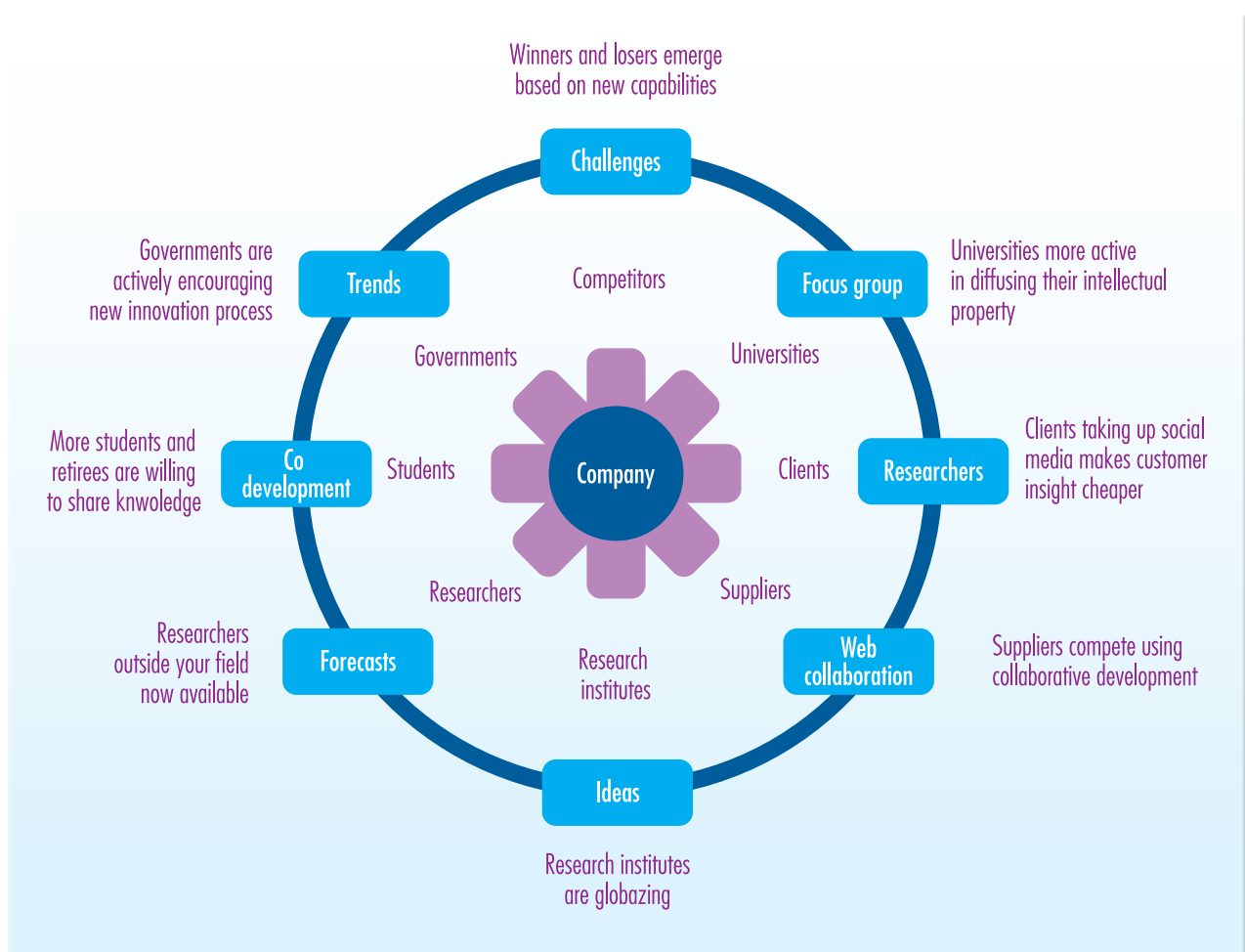


it is faster and yields materially less expensive components, not because the same part is cheaper for Honda than GM but because innovation with suppliers allows for cost avoidance through better innovative designs.

For instance, a study by Honda of America that covered a five-year period suggests that they were able to gain a 20% purchase price advantage.

In terms of using the Cloud there is increasing amounts of empirical evidence about the extent to which it increases R&D productivity. Studies from the pharmaceutical industry found that a seeker-solver network in the R&D domain can be more than 20 times less expensive than traditional R&D paths⁸. Trends within the environment suggest that open innovation processes will become more increasingly more prevalent over time as key stakeholders all change the way in which they are working (Figure 5).

Figure 5: Trends leading to higher levels of open innovation



This move to extended innovation has the potential to put the Procurement function in the driving seat of these new ways of working. After all, Procurement is a great interface for accessing supplier knowledge and the ability to locate potential suppliers is fundamentally a procurement process. Research conducted by the authors on 55 major multinational companies shows that the ability to leverage suppliers is a major determinant of innovation center effectiveness, ahead of many other factors.

However, for most companies the Procurement function only plays a limited role in innovation related to revenue growth. A research survey conducted by the EIPM showed

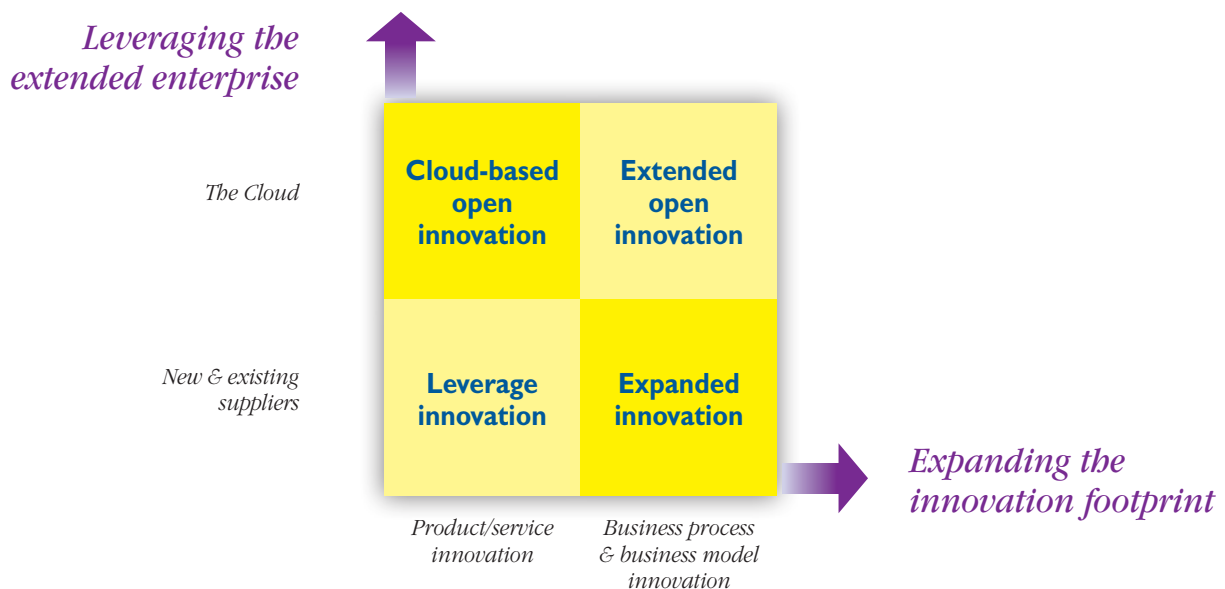
that only 1 in 50 companies have innovation as one of the Procurement objectives and that most Procurement functions rate themselves as poor in terms of innovation. The survey also showed that the Procurement function is generally only involved in extended innovation processes on an ad hoc basis. For instance, only 35% of the respondents regularly involve suppliers in product development process and only 10% of the respondents conducted strategic alliances with suppliers to generate radical innovations.

For companies that are considering gaining an extended innovation enterprise capability, there is no time like the present. Suppliers likely have time in the current market

to devote to developing these processes, and because of the market cycle they are desperate to curry the favor of customers. If you wait until the upturn then not only will your Procurement department be running flat out but the suppliers may be too busy fulfilling orders to support your innovation process, and even worse these favored relationship may even have already been established with others. So how should a company start to create extended innovation capabilities at this point in time? Firstly, realize that you are developing an enterprise capability and that the way to do this is to start with a set of credible, replicable, feasible pilots in a number of different innovation domains⁹.

We see fundamentally four different innovation domains that can operate simultaneously within organizations in addition to traditional internal lab-based innovation. These include **leveraged innovation** (innovating on a core product or service with new and existing suppliers), **expanded innovation** (innovating on business processes or business model with new and existing suppliers), **cloud-based open innovation** (innovating on a core product or service with the Cloud leveraging intermediary networks), and **extended open innovation** (innovating on business processes or business model with the Cloud). Working effectively in all of these four domains, in addition to traditional techniques, allows companies to optimize their innovation capability (Figure 6).

Figure 6: Innovation domains employing extended innovation



Some examples can help describe the types of pilots which companies should consider:

Leveraged innovation

Companies should consider the list of R&D projects that will not be completed with internal resources. Every R&D manager has projects that they would dearly love to pursue but time and budget constraints do not allow them. These are the perfect candidates to take to suppliers. For example, when HP wanted to create a radically improved docking station for PCs in 2001, this project did not make the cut for resources but the need was communicated to suppliers. One supplier was able to work with the procurement team to complete the R&D project. This product is still sold by HP and won a gold medal design excellence award.

Expanded innovation

All companies benefit from improving their business processes and it is nearly always the case that some suppliers

are materially better than their customers at certain processes. Given that business processes are much more similar than the underlying products and services that companies provide, this creates an enormous opportunity to make a high return investment. And suppliers are happy to share their IP in return for a closer relationship. For example, a major bank wanted to change from point selling to solution selling and rather than developing this process internally they used an open innovation format to gain the process knowledge of two suppliers. The process was quickly designed and implemented and lead to a greater than 10 point increase in market shares¹⁰.

Cloud-based open innovation

There are many examples of firms successfully using seeker-solver networks like Innovative. For example, P&G, Eli Lilly, Unilever, Dow Agricultural Science, Du Pont and many others use intermediary networks to significantly boost the percentage of new products and services coming from outside.



Extended open innovation

One of the innovation domains with the highest level of return is when companies redesign business processes by borrowing and adapting parts of the process from other industries. For example, E.ON UK was creating a responsible procurement capability and rather than design it themselves they extensively leveraged the programs of other companies such as Shell, IKEA, PMI, HP, and Hilti¹¹. The new program was created using product design processes and was immediately put into operation.

With the success of the pilot, this program was then rolled out to Scandinavia and subsequently won a (Chartered Institute of Purchasing and Supply) CIPS award and a Procurement Leaders award.

Given that these different innovation domains and associated enterprise capabilities offer a highly effective and efficient way to conduct innovation, companies would be advised to take note. Use the innovation maturity rating table below to judge the sense of urgency for your company.

Question To what extent...	Score (1 to 5)*
<i>... is your innovation budget focused on areas outside traditional internal research?</i>	
<i>... does Procurement play a major role in Innovation?</i>	
<i>... do you have a formal process (including KPIs) to leverage existing suppliers to develop new products and services?</i>	
<i>... do you have a formal process (including KPIs) to leverage existing suppliers to redesign business processes?</i>	
<i>... do you have a formal process (including KPIs) to leverage the Cloud to develop new products and services?</i>	
<i>.... do you have a formal process (including KPIs) to leverage the Cloud to redesign business processes?</i>	
Total	

* 5 = to a great extent, 4 = to some extent, 3 = to a moderate extent, 2 = limited extent, 1 = no extent
(If you score more than 18 then your company should consider taking action)

Conclusion

In summary, business cycles are a fact of life. The current cyclical downturn presents creative firms with significant opportunities, linked to emerging mega-trends. We advise firms to consider building enterprise capabilities in two areas; sourcing contract portfolios and extended innovation ■

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