Category Management
in the Retail and Manufacturing Industry

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Preface

In the last fifty years modern economies have experienced four different ways of buying: 'procurement' up to the '60s, 'purchasing' from 1961 to the end of the '80s, 'supply management' from the '90s and 'category management' from the beginning of the new century. This evolving sequence of different practices or ways to manage the buying process has been accompanied by a specific terminology adopted by most countries. In the US and UK, for example, they used to talk in terms of 'procurement' and 'purchasing', in Italy 'acquisti' and 'approvvigionamenti', in France 'achats' and 'approvvisionnements' and in Spain 'compras' and 'abastecimemiento'.

What do 'procurement' and 'purchasing[1]' mean or better which is the difference between the two?

Procurement is intended to be the management of the buying process without any critical analysis of the main requirements of the goods or services to be bought[2] and without a comprehensive analysis of the supply market. Procurement was generally regarded as a clerical, reactive position; a cost-centre. In many cases it was a formalisation of choices and decisions made by other people or functions[3].

Purchasing is regarded as a buying process that begins with the critical analysis of the technical and qualitative requirements, quantity and delivery dates required, and includes an accurate evaluation of the opportunities offered by the supply markets. This clearly means that buyers or category managers have to assess the demand to check, for example, that the technical requirements are not too demanding or sophisticated and that the quantities are neither excessive nor too small. This also means that the user has not to indicate, directly or indirectly, the product manufactured by a specific Company, but has simply to define the characteristics or the expected performances of the goods to be bought, without entering into construction details that could restrict the scouting possibility of the buyer and his negotiation leverage.

The revolution in the buying process comes with the evolution of purchasing into supply management. From commercial transactions exclusively focused on price, purchasing becomes management of long-term integrated relationship aimed at increasing the overall efficiency and effectiveness of the supply chain. With the adoption of the supply management, purchasing has become a strategic, proactive process that contributes to profitability, corporate growth and competitive advantage as much as, or more than other business functions[4].

Among the many definitions of the supply management the following provides a precise insight of this business model: 'wide cross-functional and cross-enterprise process to achieve continuous incremental portions of added-value'. Buyer and supplier work together sharing risks and benefits of the relationship and of all the improvements they

[1] Even within the International Federation of Purchasing and Supply Management (IFPSM) there is not an agreement on the definition of procurement and purchasing. Some say that procurement represents the evolution of purchasing, others say the opposite. Irrespective of which one has come first the concept of progressive evolution is clearly confirmed
[2] Today we should say without any demand management investigation
[3] Mainly by core engineering or manufacturing
[4] High Performance through Procurement: Accenture research and insights into procurement performance mastery

achieve[5]. Within the best practices or sub-models of supply management, category management represents today the most advanced, mature and profitable way to buy or to exchange goods and services along the pipeline of the supply chain.

Category management is a supply management model in which the total range of goods and services purchased is broken down into discrete groups, known as categories, and buyer and supplier work together to reduce their cost drivers and to improve the product itself. Thanks to the category management, goods and services exchanged become more attractive and more profitable. Procurement and purchasing are focused on price – reduction of the negotiating margin incorporated in the supplier's proposals - category management is a three-five year process that reduces the overall cost of products and services, by streamlining all its TCO factors. Through the negotiation, Companies can achieve a 3%-5% reduction, through category management, costs can be reduced of 10%-15%. The rationale behind category management is rather simple. Each Company generates inefficiency[6] and all products and processes can be improved. Working together buyer and supplier can progressively reduce the cost of products and services exchanged making them more attractive, more performing and reliable, and less expensive.

In line with what has been done by the most advanced corporations around the world, Finmeccanica Procurement Community[7] and Finmeccanica Group Services[8] have implemented a structure of centrally led category management, capable to coordinate and integrate the major Company's operating decisions. With the intent to assure adequate level of visibility, control, and reporting for the value-added initiatives, each Company of the Group has adopted a formal and systematic operating model fully supported by the ERP system. To foster the overall competitiveness of the Group Companies, FGS central category managers often support the local ones in the preparation and management of common commodity plans: a set of initiatives focused on the short-medium and long term, capable to bring value added to the Companies involved. The success of the initiative is favoured by the monthly publication of internal and external KPIs that measure the performances achieved versus the expected targets.

Taking into account the complexity of the processes and products made by the Group Companies[9] and the advanced technologies they incorporate, the activity of demand management plays a primary role. Consequently, buyers and category managers work side-by-side with core and industrial engineering, since the design phase of new products, to ensure that optimal solutions both from the economic and technical viewpoint are taken. Furthermore they operate with their colleagues of the operations to assess and propose make-or-buy decisions and to favour outsourcing solutions at both national and international level. Each activity is carried on within a structured plan including costs and benefits, timeframe and risk evaluation.

[5] Purchasing Partnership

[6] Wastes, scraps or rejections, redundancies, activities without added-value, etc.

[7] One out of the seven professional communities related to the key functions operating into all Finmeccanica Group Companies (over 70,000 people worldwide)

[8] Finmeccanica Group Services (FGS) is the shared services Company for Finmeccanica Group, with a specific mission to develop and supply services and solutions regarding non 'business critical' processes able to generate value for the Corporate and for the Group Companies in Italy and abroad. FGS oversees processes related to the following areas: non-core purchasing (mainly indirect and services); ICT governance; energy management; global services and industrial logistics. FGS provides the Corporate with services in the field of ICT, procurement, facility management and administrative support

[9] Finmeccanica Companies enjoy leadership in defence, aerospace, communication systems and transports

Being the operating mission of the Group Companies focused on the integration of systems and parts designed and manufactured by partners and suppliers, each category manager, supported by specialists of quality assurance and industrial engineering, has to find out, propose and develop qualified and innovative partners available to share the risk connected with the launch of new products[10]. To increase the overall efficiency of the Group Companies and concentrate time and attention of their resources on strategic activities, hundreds of agreements arranged with suppliers located in Europe and USA will be soon loaded into a central e-catalogue allowing the self-service of the internal users with a substantial saving of time, money and resources.

All this implies the availability of highly qualified and motivated people. In its effort to transform its procurement community from a transaction-oriented function to a strategic master organisation, capable to contribute to the corporate growth and competitiveness, FGS and the Human Resources of Finmeccanica have been working together to define, support and develop all the roles existing in the community, defining competences and skills for each of them[11]. Each member of the community is now performing a self assessment to benchmark the existing and the expected competences. The gap between the two will be carefully analysed and will form the basis for specific training and education programmes. Education is a pillar in all development projects of Finmeccanica, and this is the reason why ADACI, FGS and the Group Companies, lead by the Human Resources of the Corporate, have designed and arranged the first Advanced Course in Purchasing & Supply Management, a programme of five modules lasting three days each, consistent with the American and English certification syllabi. This course represents a key milestone of the project to consolidate a development platform for the high potential resources involved in its purchasing and supply management community. Thanks to this initiative the Group has a high professional tool that allows a benchmark with the best national and international practices. Its validity has been officially recognised by the English Chartered Institute for Purchasing & Supply that has stated its content is equivalent to that of the first four levels of their Ladder Certification Scheme endorsed by the British governmental authorities.

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[10] The non recurring costs required for the development and qualification of the system or part of the finished product are spread over the production units on a pro-quota basis at vendor risk. If the new product launched by the buying Company will be successful the partner will recover the money spent

[11] The second case study reported in this book: 'The System of Professional Families of Finmeccanica Group describes at paragraph 3 the Competency Management System referred to the Procurement Community

Introduction

In the last decade the Category Management strategies have entered into the best practices of the successful manufacturing corporations and represent one of the topics of the education programmes of most Institutes of Purchasing and Supply Management[1]. To provide purchasers and supply managers with a comprehensive picture of this business model the Research and Development Centre of ADACI, supported by experts of the IFPSM has prepared this study. To better understand and appreciate the various aspects and application process of the model, the first part of the study refers to the Category Management of the retail industry where it has been first developed.

The Category Management

To sum up, Category Management in the retail industry is a retailer and producer combined strategy to make the selling point more attractive, profitable and aligned with the consumer's need. In the manufacturing industry instead, it is a buyer and supplier integrated strategy to improve products and to make the supply chain more efficient, effective and competitive. Even if the latter derives from the model adopted by the retailers its implementation process is rather different.

One of the reasons Category Management often fails to get properly understood and known is the lack of a single coherent definition[2] thus leading to some ambiguity even among industry professionals. The most frequent definitions reported in the specialised literature are:

• Category Management is a process that involves managing product categories as business units and customising them - on a store by store basis - to satisfy customer needs (Nielsen[3]).

• The strategic management of product groups through trade partnership which aims to maximise sales and profit by satisfying customer and shopper needs (Institute of Grocery Distribution).

• Marketing strategy in which a full line of products - instead of the individual products or brands - is managed as a strategic business unit (Business Dictionary). It is based on the concept that consumer buying patterns and market trends can be better analysed if focused on the entire product category.

• The strategic management of product groups through trade partnerships, which aims to maximise sales and profits by meeting consumer and shopper needs (IGD[4]).

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[1] The last international conference on the subject has been held in Estonia on September 23rd 2008 and next will be held in Croatia on April 2nd 2009

[2] Most of the existing definitions tend to be either out-of-date, or heavily buzzword-laden or incoherent

[3] The Nielsen definition, published in 1992, was a little ahead of its time in that customising product offering on a store by store basis is logistically difficult and is now not considered a necessary part of Category Management. It is a concept now referred to as micromarketing. Nevertheless, most grocery retailers segment stores at least by size, and select product assortments accordingly. WalMart's store is one of the few examples of where product offering is tailored right down to the specific store

[4] IGD, one of the major international organisations specialising in retail, sustainable distribution and demand planning

• Category Management is a procurement approach in which the total range of goods and services purchased by an organisation is broken down into discrete groups of similar or related goods and services. These groups are known as categories, and each of them is run like a mini business (Melinda Johnson, Deputy Director of Commercial Group, UK).

• Category Management means strategic planning or the ability to drive a formal process in collaboration with key business owners for all primary spend areas (Accenture).

Category Management can be summed up as:

1. A retailing process in which all likeminded products in a retailer's total portfolio are lumped together into product groups called "categories".

2. Each category is run like a "mini-business" managed by both the retailer and suppliers, with its own category turnover and profitability targets.

3. A collaborative instead of adversarial relationship between retailer and supplier characterised by openness and sharing of information.

Category Management aims to provide the shopper and the consumer with what they want, where they want, when they want it[5]. Products are grouped together into categories to reflect customer needs based on how the product is used, consumed and purchased. IDG says that Category Management is a continual, long term business philosophy, often approached through a series of short term projects involving a close working partnership and the sharing of information by retailers and suppliers. Category Management promotes cross-functional working between companies and will generally involve people from buying, finance, supply chain, trade marketing, space planning, store operations, sales, product development, and of course category management.

A Brief History of Category Management

Category Management started in North America in the '80s. In 1992, AC Nielsen began publishing information on products and consumers and the Category Management process began slowly to gain momentum across Europe, Australia and Canada. At first, it was limited to grocery retailing, but as the advantage became evident, it spread into other retailing sectors. Two important factors contributed to its evolving:

1. The growing dominance of certain retailers such as WalMart and Carrefour. Before then, retailers were focused more on growth through keen price negotiating and building and acquisition of stores. Likewise, suppliers would not have seen a return on investment working with a lot of small and differently organised retailers. With fewer but larger clients, the concept was workable and challenging.

2. The explosion in information technology which meant that the sales data collected from barcode-scanning tills could be more efficiently analysed for trends and information. The increasing power of desktop PC's and the evolution of the internet have further accelerated the trend.

[5] From the Cat-Man Plus, an experienced specialist in Trading Marketing and Category Management Services

At the end of the ‘90s Category Management has been adopted also by the manufacturing industry which has customised the model to its specific environment[6]. Category Management involves a shift in the relationship between purchaser and supplier to one of collaboration, exchange of information and data and joint business planning.

In the retail industry, it highlights the strategy of the selling-point targeted to satisfy at the same time consumers, retailer and producer. In manufacturing, it optimises efficiency and effectiveness of the supply chain with tangible benefits for all the players[7]. It is based on the assumption that the segmentation of the purchasing or selling portfolio in homogeneous categories[8], allows from one side, the customer satisfaction and from the other, the optimisation of research & development, demand management, sourcing, supplier development and cost strategies.

Rationale for Category Management

Category management optimises the product range to maximise the return from the category and to increase the profit[9]. One key reason for the introduction of Category Management was the retailer’s desire to add value to its business and not only to the supplier’s own. Shelves were often the battleground between competing brands and products with little gain for the retailers. A retailer with several suppliers could find that they were all bringing along products which were more or less the same and its sales were just diluted among all the different variants without any significant increase of the revenue. Precious time and energy were spent to fight on price negotiations instead of increasing the potential and attractiveness of the categories through mutual efforts and investments. Last but not least, resource-hungry retail buyers found that they could leverage an advantage from getting their suppliers to carry out data-analysis and research and they could also capitalise on their experience and expertise. In return, suppliers were glad to collaborate as this way to work was providing them influence and an opportunity to demonstrate their commercial expertise. The introduction of Category Management was based on the assumption that all actions undertaken, such as promotions, new products and point of sale advertising should have been beneficial to both the retailer and the shopper.

The rationale of the Category Management in the manufacturing industry is represented by the higher added value procurement and supply management can bring to the company if strategies and tactics are customised to the specific characteristics of goods and services bought and related to the location and peculiarities of the relevant supply markets. Furthermore Category Management ensures a greater alignment between spend management and corporate objectives. Most procurement organisations have always been structured by category or commodity but nobody in the past used to make accurate spend-analyses and to prepare and implement cross-functional and cross-enterprise multi-action plans capable to bring continuous incremental cost reductions and product improvements.

[6] Consumers are replaced by internal and external customers and stakeholders

[7] Even if in the retail industry it is presented as a tool to make the selling point more attractive to consumers, its real aim is to improve the efficiency of the supply chains. IGD says in fact: “In an increasingly competitive food and grocery market, improving the efficiency of your supply chain is one of few remaining ways to cut costs and add value to your key customers”

[8] In the retail industry categories are products and services grouped together to reflect consumer usage or purchase behaviour; in the manufacturing are products and services grouped together to reflect homogeneity in terms of materials, technologies and processes incorporated

[9] Cosmic Solutions UK says that the increase in profit can be in the order of 2%-5%

Relationships with vendors were often adversarial, the concept of the interdependency of the supply chain players was not so evident and the idea to capitalise from the common experience and knowledge to the mutual benefit was premature.

Definition of Category

In the retail industry categories[10] represent finished products and are based on the needs and preferences of the consumer; in the manufacturing industry they refer to groups of homogeneous materials, components, equipment, systems and services necessary to build the end product. Each category includes a wide range of goods grouped into sub-categories or commodities, segments and sub-segments and generates different volumes of expenses. The relevant spending analysis represents the starting point of the Category Management process.

Category Manager

Most manufacturers expect a category manager (CatMan[11]) professional to be an 'expert' in all fields, a 'liaison' among departments, and the focus of a strategy that works for the company. Retailers demand for their own CatMan professionals this same level of expertise, and expect sophisticated strategies and tactics for every category, whole aisle, whole store, private label[12], and for every store location. The category manager of the retail industry is a marketing specialist who selects and purchases the products sold, defining on a case by case basis, the relevant quantities and quality. He is a multi-skilled or multi-talented manager that assessing the preferences of consumers identifies goods and markets to be considered and manages promotion campaigns, contracts and purchasing partnerships. A key component of the professional Category Management is the data analysis. Such data may come from specialised data providers such as AC Nielsen or directly from the retailer or may be collected by a task force contracted by the suppliers themselves. In any case it is the job of a good category manager to turn data into action-plans. He or She is expected to work a lot in the area of field marketing, merchandising, point of sale displays and stock checking.

In the manufacturing industry category managers purchase or coordinate the purchase of goods and services selected by other functions and are accountable for the appropriate flow of materials to the manufacturing and final assembly sites. If the products sold are eligible for repair, the category managers are also expected to manage customer support activities. In the retail the category managers use data, information and advice supplied by other functions, but are the ultimate decision makers accountable for the success or failure of the selling-point. They maintain strong links with category captains and producers, working side by side with them to ensure the selling point are both attractive and profitable.

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[10] The Nielsen definition of a category, used as the basic definition across the industry is that the product should meet a similar consumer need, and that the product should be inter-related or substitutable. The Nielsen definition also includes a proviso that products placed in the same category should be logistically manageable in store; there may be issues in having room-temperature and chilled product together in the same category even though the initial two conditions are met

[11] Abbreviation used by the Category Management Association

[12] Products sold are divided in brands and private labels. The latter category includes products specifically tailored for the retailer or products that do not show any specific brand or mark

The category manager of the manufacturing industry, instead, is a first among peers and coordinates cross-functional and cross-enterprise teams involved in the management of the buying processes. Through a constant dialogue with marketing and engineering the category manager participates in the definition of the goods and services to be purchased, but does not represent the focal-point of the decision-process. The category manager's competencies and responsibilities, compared with those of a counterpart in the retail industry, are less extended and risky, but would nevertheless be expected to consider and pilot the consensus of several stakeholders who can use the veto power in special circumstances.

Category Captain and Sales Database

Often, a retailer invites one among the most capable suppliers to be the category captain. The category captain is usually the first point of contact for advice and information and is designated to lead the strategic direction of the category though other suppliers may also be invited to comment. He is expected to have the closest and most regular contact with the retailer and to invest time, effort, and often financial investment into the strategic development of the category. The category captain may receive additional data from the retailer on the performance of the category and could gain more influential voice with the retailer. He must be careful never to abuse of his position or breach any antitrust laws through price fixing or blocking competitors. The category captain is not always the supplier with the largest turnover, although that is quite common. Suppliers capable to demonstrate particularly strong expertise in Category Management are given the job. Traditionally the position was given to a brand supplier but in recent times the role has also gone to capable label suppliers. In order to do the job effectively, the supplier may be granted access to the internal sales database such as WalMart's Retail Link.

Retail Link is the proprietary information-sharing database of WalMart (Asda in the UK). Since 1996 it has been accessible via internet. Suppliers are expected to be conversant with it as it represents the main vehicle for category monitoring and discussions, and all their weekly reports run through it. The website itself is extremely comprehensive, and the computer which runs the Retail Link is reputed to be the second biggest in the world after the Pentagon. Since 2001, WalMart has withdrawn its co-operation with other market-data suppliers such as Nielsen and IRI and this has created a problem to people wishing to look at total category overview.

In the manufacturing industry the role of category captain does not exist or better it is not appointed officially. Nevertheless buyers and category managers of most companies have one or two preferred suppliers for each category and use them as a basis for various analysis, research and benchmark activities. They usually represent the most reliable and innovative organisations and their advice is often required and appreciated each time the buying company has to launch new products or implement business improvements. Suppliers that run digital manufacturing tools both in the design and production phases are, for example, preferred to those using traditional methodologies. The same applies for those who regularly measure their performances and implement projects to improve efficiency, effectiveness and customer service. The key-supplier account managers maintain with them current relationships:

- to check that ongoing businesses run without any asymmetry, problem and risk;

- to monitor progresses and targets achieved through the implementation of continuous improvement projects;

- to monitor new projects or programmes launched by competitors.

In term of supply management database the best manufacturing organisations have adopted company portals with SRM applications to manage paperless supplier qualification and buying processes, to monitor work-in-progress and to analyse data, reports, and KPIs. The traditional face-to-face and verbal communications between buyers and suppliers have been replaced by digital messages and periodical e-reporting.

Prerequisites of Category Management

At the basic level or at the beginning, all that is needed is willingness, enthusiasm and some knowledge. However as the application of category management grows, one has to be sure that the right level of investment is put in place (data collection and treatment, SRM with main suppliers, tracking of all products shipped and inventory management) together with the right culture, and the availability of adequate and specialised resources. Unfortunately, over the past five years retailers and manufacturers have been struggling to recruit an adequately skilled workforce for the day by day business need. In particular they have lamented the lack of store managers' financial and budgetary skills, brand and category managers with a strategic vision and supply chain individuals focused on speed, efficiency and sustainable targets.

In the manufacturing industry the recipe is not much different but the number of resources required and cultural impact are higher. In this sector in fact category management is a cross-functional activity involving core and industrial engineering, quality, manufacturing, organisation and supply management and each function is expected to have its own experts. Furthermore the best practices of most suppliers do not include modern supply management models, they are less familiar with the measurement of performances, periodical reporting, visibility and analysis of data, and collaboration approaches. This clearly means that the main investment could be represented by the implementation of change management plans.

How to develop a Category Manager

Inside the Purchasing and Supply Management function there are several roles[13] but one of the most important is the Category Manager. To perform this role in fact they must:

- know the product they buy,
- know the relevant supply markets and their evolution,
- be familiar with strategy, organisation and business models,

[13] A survey made by CIPS (UK) has evidenced the existence of over 100 titles and roles. In most cases they were synonyms. The most frequent are: buyer, category manager, procurement marketing, procurement engineering, procurement planning, procurement governance, supply management and vendor management. Each role can be played at different levels in accordance with the degree of competence, expertise and skills available and required. They are: junior, expert, senior and master. Some are accessible at junior level, others, such as category manager and procurement marketing, can only be played at senior and master level. Some have their ceiling at senior level. A senior buyer for example can only become a category manager as the role of buyer is not expected to be played at master level.

• have a strong leadership, flexibility, adaptability and communication skills,
• be proactive, decision maker and open to change management,
• be capable to prepare and manage continuous improvement plans,
• measure the performances achieved and promptly introduce corrective actions,
• have a multidiscipline background and preparation.

A category manager is like an entrepreneur who manages a small business, a sort of driving force in the suppliers' business[14]. Category managers enjoy boardroom awareness and, consequently boardroom support. Prior experience to enable this role to be performed could be a senior buyer, junior product manager or engineer. Among the key competences of the role the extensive knowledge of the products bought represents a must. A category manager is expected to know their cost drivers, technologies and processes involved, distinctive characteristics, expected performances, end-user requirements and potential alternatives. In addition he must be familiar with cost-analysis techniques, calculation and benchmark of hourly rates. As most category managers are former buyers, companies should ensure that their development path includes a stage in the departments where the products they buy are designed, produced and repaired. In many cases this could mean they have to spend a few weeks at the site of partners and suppliers. Effective professional training costs money, but it represents the only way to build capable buyers and category managers and the return on this investment is usually made within a maximum of two years.

A comparison made by Accenture between the workforce skills of top and low performers shows that supply chain masters devote a smaller percentage of people to perform basic transactions and have almost 50% of their workforce concentrated on strategic sourcing and category management.

Workforce Skills	Masters	Low Performers
Management	11%	13%
Strategic Sourcing and Category Management	46%	20%
Transaction Management	43%	67%

The future of Category Management[15]

After some initial problems and doubts, it seems that Category Management is here to stay and is going to increasingly become the way of doing business and those who cannot do it, do so at their peril. After 20 years of applications, Category Management is becoming highly "information technology and mathematics oriented". Social science in understanding the psychology of shopper behaviour is also becoming part of the required knowledge. In a few words it is here to stay but it is becoming a very rich and diverse job function indeed. The Category Management Association says: 'we expect this field to

[14] Category Managers represent one of the two enablers of the procurement mastery. The other is the technology. From High Performance through Procurement; Accenture research and insights into procurement performance mastery 2008
[15] IDG – Category Management Definition

continue to evolve indefinitely, as the demand and expectation of consumers evolve for shopper decision-making information, clear and intuitive shelf display, logical cross-category product groupings, and channel coherence. The CatMan community must address these issues regularly, as a group, and in collaboration with trade partners. There will be never a 'final' solution; this field must evolve with the shopping behaviours of the consumers, and requires manufacturers and retailers to work together to satisfy those demands.

Category Management Association[16]

Early in 2003 an informal newsletter began circulating as an anonymous discussion group exchanging ideas and advice. An interview with Progressive Grocer prompted the formation of a formal organisation in November 2004. Since that time, the Association has blossomed by simple word-of-mouth into a member-driven resource for sharing information and advice. The Resource Directories continue to expand by category and channel. Each of these directories has a matching Discussion Group, some of which are very active and some sit empty until someone starts a thread. International Chapters have been added by request, along with university resources, professional coursework listings, new discussion group areas, and a new "Virtual Convention Centre" to allow members to hold small meetings as well as large webcasts. The Association seeks to serve the needs of its members and guests, creating "buckets" for information to be amassed, and creating a "place" for interaction among peers.

The mission statement of the association is: "Advancing Professional Standards in Category Management" and the message given to its members: 'Your participation is crucial to refinement of this evolving discipline', clearly indicates that Category Management is a business model that changes together with the behaviour of the consumers. The association underlines that Category Management includes different roles and responsibilities[17], spans many departments, and is characterised by an unprecedented depth and breadth of knowledge expected of CatMan practitioners. One of the most important initiatives undertaken by the association is the Category Management Standards & Certification Committee, which is made up of leading manufacturers, retailers, and universities. This group of volunteers is crafting the certification guidelines for the range of skills expected of today's CatMan professional[18]. The public discussions of the CatMan community include all things category managers are expected to know such as: 'Managing vendors within Category Management', 'Value of Category Management efforts', 'Product changes and AC Nielsen scanner data', 'Category Management resources', 'How many people needed for CatMan efforts', 'Key Performance Indicators', 'IT Technology within Category Management', 'The use of store-level-data: flexibility, speed and repeatability'. Members Only Discussion Groups include: Category Discussions, Channel Discussions, Private Discussions, Retail-Centric Discussions and Specialised Topic Discussions.

[16] From the website of the Category Management Association
[17] A broad definition of category management could include shoppers insights, consumers insights, merchandising, trade promotions, and in-store execution
[18] The Certification Committee includes: Abbot Nutrition, Coca-Cola Enterprises, Colgate, Del Monte Foods, DePaul University, Dr. Pepper Snapple Group, EJ Gallo, Hormel Foods, Johnson & Johnson, Johnson Control, Inc., Kellogg, Swedish Match, Unilever, University of Pittsburgh and Western Michigan University

With regard to the importance of IT technology within Category Management the position of the association is clearly summarised in the following sentences: 'As category management evolves, companies are looking for ways to become more productive in managing the vast amounts of data. Technology is the catalyst for this and category management has the opportunity to use more IT systems to achieve this goal. Many companies have the right people and the right tools but have not gone to the next level bringing it all together through IT database structures and defined processes.' CatMan masters are technology leaders; they use processing power to increase efficiency, make better or faster decisions, leverage and focus internal skills, and connect with suppliers and third parties.

Category Management in Italy

In Italy, Category Management has been adopted only by a few retailers and manufacturing organisations. The reasons attributed to such delay are partially due to the lack of homogeneity existing between producers and retail industry. In addition, the different ICT applications adopted by the big players associated with the need to make important investments to allow the expected integration, discourages the less motivated organisations. Last but not least, there is a certain reluctance to share the same information with different operators.

The adoption of the Category Management model within the procurement function of the manufacturing industry defines the transition from old to new management style; from a function that is presently capable of providing added value during the negotiation phase only, to a function that, subject to the adoption of integrated relationships with partners and suppliers and the implementation of comprehensive commodity plans, is capable of ensuring incremental added value during various phases of the supply relationship.

Category Management in the Retail Industry

In the retail industry Category Management refers to the way the various categories of products are managed to maximise the satisfaction of consumer, retailer and producer. It identifies a sophisticated process that allows selling points and producers to improve their selling performances and profitability and the consumers to make an easy benchmark and to spend less money and time in a store. Retailers and suppliers work together in collaboration to grow the total category, maximising sales and profits of all parties. Some companies have perfected the art of applying category management tactics. They can create a new range or a new merchandising plan at the touch of a bottom. However, the key to long-term sustainable growth is to create category strategies which clearly identify which shopper behaviour must be influenced. Once the retailer and supplier are working to the same strategy, all tactics, such as range, merchandising, promotions and new product development, can be aligned to achieve the strategy. According to IDG's latest research, companies are using Category Management more strategically than three years ago. In the UK, 35% of companies use the full "8-step" approach.

Category managers need a highly developed understanding of all elements that impact their category, such as shopper behaviour and consumer usage. In the current retail environment where retailer differentiation is key, they must also have in-depth understanding of the retailer's short and long-term goals. Meeting shopper and consumer needs is at the heart of Category Management, so it is critical that category managers keep abreast of all shoppers and consumers research. They must also consider political, economic, social, technological and environmental issues and gauge their relevance and potential impact on the category and retailers. One rising mega-trend is the increase in our aging population. In 2004, 16% of the UK population was over 65 year old. According to Eurostat this is anticipated to rise to 27% in 2050. This live-stage growth will give old shoppers increased spending power, making them a group whose needs must be met. Such information will imply new product development, packing size and design, store location and display. Going forward, successful companies will need to have structured process for capturing data and driving insight. Without this, response times will be slow and competitors will claw market share. Category Management teams must be set up for success, not failure. Working strategically and recognising that category functions are the key driver of change represents the starting point to achieve it.

Category Management allows the implementation of merchandising strategies that optimise the overall targets by category. Thanks to this process retailers and producers have a tool that aligns them with the purchasing approach of consumers who look for the type of merchandise first, and for the specific brand as a next step[19]. Producers and retailers are expected to work together:

- to share commercial strategies and tactics,
- to select the best mix of products to display,
- to define their most convenient positioning on the shelf, and
- to share market surveys and KPIs on business plans.

Category Management eliminates slow-moving products, reduces useless redundancies and the number of out-of-stock situations and exploits the return on advertisement investments. By displaying side by side basic and complementary products category management favours cross-selling. Category Management treats each category as an independent unit of business with specific roles and profitability targets. The comparison between expected and effective profit generated by each category, allows the selling point to review every second week the product mix and positioning on the shelf. Category management integrates the activities of producers and retailers increasing the efficiency of the entire supply and distribution chain. Ninety-four retailers interviewed by IGD in 2005, 2007 and 2008 on the benefits brought to their business by Category Management, have provided the following answers:

2005
1. Improves sales / turnover
2. Enhances market share
3. Reduces costs and improves profitability
4. Improves trading relationship and favours understanding of supply markets
5. Improves consumers understanding.

2007
1. Improves sales / turnover

[19] Factors considered by shoppers when they buy wine: occasion (special or daily use), colour (red or white), country of origin (Italy, France or S. Africa), grape variety (Barbera, Sauvignon or Shiraz), age (1-2 year old or 3-4 year old), price (€ 4-6 or € 6-9). The shelf layout has to correspond with the shopper decision tree: category (wine), sub-category (red, white, rosé, champagne/spumante), segment (Italy, France, S. Africa, Argentina), sub-segment (Barbera, Sauvignon, Shiraz, Malbec)

2. Improves trading relationship and favours understanding of supply markets
3. Enhances market share
4. Reduces costs and improves profitability
5. Improves customer loyalty.

2008
1. Improves sales / turnover
2. Improves trading relationship and favours understanding of supply markets
3. Improves consumer understanding
4. Enhances market share
5. Improves customer loyalty
6. Develops staff with best practice procurement skills
7. Allows a better management of supply risks
8. Identifies optimum cost/performance trade-off.

The Category Management Process in the Retail Industry

The industry standard model for Category Management is the 8-step process developed by the Partnering Group:

1. Define the category (determining the products that make up the category and its segmentation);

2. Define the role of the category within the retailer (purpose of the category in the retailers portfolio);

3. Assess the current performance of category (spend analysis, number of suppliers involved, existing improvement plans);

4. Set objectives and targets for the category (selection of most challenging initiatives to reduce costs and improve products and processes);

5. Devise an overall strategy (collaboration, customised research & initiatives, and in-store service strategy);

6. Devise specific tactics (determining optimal products[20], placements, promotions, pricing and supply tactics);

7. Implementation of the plan (strategies and tactics);

8. The eighth step is one of review which takes us back to step 1.

The 8-step process, whilst being very comprehensive and thorough has been criticised for being rather too unwieldy and time consuming in today's fast moving sales environment. In one survey only 9% of supplier companies stated they used the full 8-step process. The current industry trend is for supplier companies to use the standard process as a basis to develop their own more streamlined process, tailored to their own particular products. Market Research Company Nielsen has a similar process based on only 5 steps:

[20] Ranging and merchandising

1. Reviewing the Category
2. Targeting Consumers
3. Planning Merchandising
4. Implementing Strategy
5. Evaluating results.

THE 8-STEP MODEL

Category Definition

During this phase the retailer, supported by producers, identifies and classifies categories with regard to their importance for both the consumer and the selling point.

<table>
<tr><td colspan="2" rowspan="2">Category Definition</td><td colspan="2">Importance for the Consumer</td></tr>
<tr><td>Low</td><td>High</td></tr>
<tr><td rowspan="2">Importance for the selling point</td><td>Low</td><td>occasional/seasonal</td><td>Emotional</td></tr>
<tr><td>High</td><td>Routine</td><td>Destination</td></tr>
</table>

The so called 'destination categories' are those that characterise the basic offer of the selling point. The 'occasional categories' identify complementary products (i.e. batteries for electrical devices) or products promoted in specific circumstances or seasons. The 'emotional categories' have a low impact on the revenue but qualify the image of the selling point (i.e. African handicraft in a gift-shop or recycled products in a consumable store). Finally, the 'routine categories' that meet the ordinary or day-by-day needs of the customers and play a significant role in the revenue of the selling point. During this phase the retailer defines the entire range of the categories to be sold in the various stores taking into account that needs and preferences of consumers vary in relation with season, latitude, average income and culture.

Category Role

The "Category Role" establishes the purpose and goals of a category with reference to the type of consumer targeted by the retailer. It includes the choice of the proposed quality standards, brands, prices and service levels. It can be the reason for which people are expected to prefer a store instead of another.

Category Assessment and Targets Definition

The "Category Assessment" implies an analysis of the category by sub-categories, segments, brands and SKUs[21], based on the consumer, retailer and producer point of view. The category "wine", for example, could include four sub-categories (red, white, rosé,

[21] SKU: Stock Keeping Unit

champagne), various segments corresponding to the country of origin (Italy, France, S. Africa, Argentina, etc.), and a number of sub-segments (Barbera, Sauvignon, Shiraz, Malbec, Christal, Dom Perignon, Prosecco, etc.). The category assessment requires the understanding of the shopper and specifically the shoppers profile by category, sub-category and segment. During this phase retailers have to consider the following questions:

- Who is the customer and what does he need?
- What are the merchandising tactics?
- How much space can be assured to each category?
- What is the right brand/own label mix to propose?
- How much choice (width and depth) should be offered?
- What pricing/quality ratio has to be considered?
- Are there any operational constraints the retailer needs to consider?

At the completion of the assessment phase, category managers have to define the category targets to be achieved in a predefined period or in the following fiscal year, in line with the recommendations of the top management. It is superfluous to say that the following two phases: category strategy and tactics have to be tailored accordingly.

Category Strategy and Tactics

The “Category Strategy” implies the definition of the Business Plan to be implemented for each category. Among the various topics it includes:

- marketing activities to be developed to ascertain sub-categories, segments and sub-segments to replace or to be added to the existing range;
- merchandising activities/tactics to be implemented;
- pricing policy;
- penetration targets and degree of customer’s loyalty expected;
- plan to retain current market-shares;
- cash-flow, turnover and profitability targets,
- promotion plans.

The category business plan has to promote:

- improved on-shelf availability and/or reduced costs;
- improved supply chain inventory efficiency;
- improved in-store labour and assets utilisation;
- simplified in-store operations.

The main factors the retailer has to consider during this phase are:

- expected consumer behaviour (Shop more often? Spend more per purchase? Buy a different product? Try something new? Become more loyal? Buy more profitable products?);
- possibility to influence the consumer’s behaviour;

• possibility to increase the penetration degree of categories and segments;

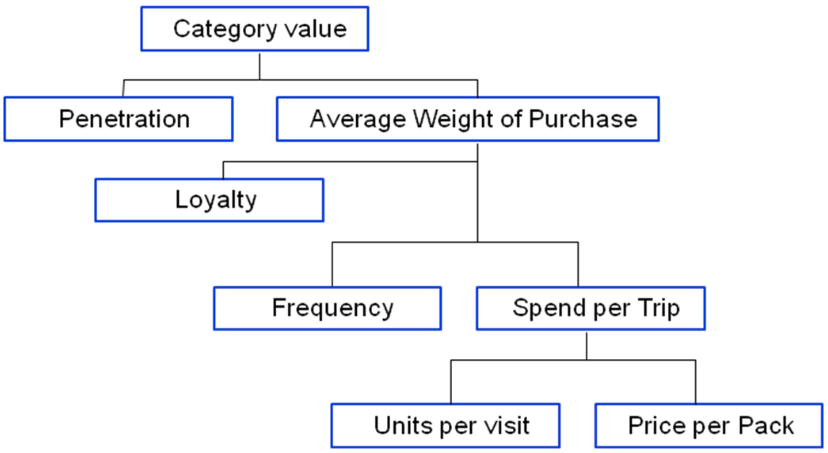
• possibility to minimise out-of-stock situations;

• possibility to simplify/automate the management of selling points.

Promotions are part of the key retailer's strategies. The question is to find out the most effective to attract customers and to change their shopping behaviour. Each retailer should consider how shoppers react to the retailer's brands and categories promotions. What happens after a promotion campaign? Stock pile? Cannibalisation? Category expansion? The lack of understanding of the retailer's strategies and promotions could make shoppers to buy on deal and this will erode the average profitability.

Strategy could mean focus on penetration, weight of purchase, protecting market share, profitability, consumer interest, cash-flow/turnover/sales, and retailer image. Penetration could mean to draw the consumer traffic to the store and to increase the number of category purchases. Protecting market share could signify an appeal to consumers to gain or maintain market share from rival. Profitability could mean to increase the category gross margin percent and/or gross profit dollars. Management of the consumer interest could mean to communicate a sense of opportunity to the consumer in order to increase unplanned or impulse purchases.

The category Strategy is also based upon category value levers:



The following check list is useful to ensure that the chosen strategies will be effective:

• Has the strategy been identified from insight and is there documented proof of the opportunity?

• Is the strategy selective? Does it focus on the big opportunity?

• Is the strategy highly relevant to and appropriate for the category?

• Is the strategy fully aligned with the retailer's strategy?

• Is the strategy aligned with the supplier's strategy?

• Does the strategy have the potential to result in significant financial benefit for both category partners?

• Can the strategy offer the retailer competitive advantage?

Category Tactics

The store layout is part of the tactics and it is expected to consider how to make the shopping easier and to invite the shopper to purchase from multiple categories. Colour coding is used to help recognise segments or groups of products and to enable quick and easy recognition of segments in an aisle. Product placement has:

- to be aligned with the logic that inspires consumer's choices (cost/quality mix - occasion-based merchandising such as lunchtime, snaking, evening in, etc.);
- to carefully evaluate the location of key and non-key brands;
- to minimise costs, time to prepare the shelves and the shopping time of clients;
- to consider the elasticity of sales in respect of the space occupied.

In defining the layout of the various products retailers should consider the following remarks:

- when shopping people naturally look 15 to 30 degrees downwards;
- clients ignore anything above shoulder level;
- the vision cone is 5-7 m in front of the shopper;
- an excess of product alternatives generates confusion and waste of time.

Plan Implementation and Review

The implementation plan is another critical component of the category management, and has to:

- define roles and responsibilities,
- define the timing of the tasks to be carried out (commencement and completion),
- define who should be informed of each task,
- define a clear communication plan.

For the implementation of new or complex plans retailers should use trials or buddy stores and in case of success extend the same to the entire chain. The implementation plan has to be pro-actively monitored in order to:

- identify potential problems,
- accurately evaluate the impact of promotions/initiatives,
- evaluate the results of all the main activities.

In the event the outcome of the plan is not in line with the expectations and profit and revenue are lower than those planned, the category manager has to evaluate the situation to understand the reasons for such discrepancy and to carefully review category targets, strategy and tactics. The revised plan has to be re-submitted to the top management and after its approval has to be duly implemented. Strategies and tactics can go wrong due to inability to stay on plan, poor implementation, poor post-promotion evaluation, and lack of analysis.

Category Scorecards

The adoption of the "Category Scorecard" establishes the degree of achievement of the implementation plan. Their use is compulsory as they give retailer and producers a precise feed-back of the market appreciation of the plan and represent the basis for any type of corrective actions. The scorecard can measure:

- customer service level
- daily/weekly category turnover
- turnover growth
- gross margin
- compliance with new plan
- market share
- share of category
- stock in days
- stock value
- producer service level
- lead-times.

A balanced scorecard is used by category managers to measure performance against targets, which are cascaded down to the working team. Best performers benchmark with competitors, track competitors' activities, and compare performance.

Remarks on the 8-Steps Model

The process described above has been tailored for the retail industry, but it can be adopted also by the manufacturing organisations with some differences and caveat. The category definition step, for example, is much simpler as it has nothing to do with consumer's preferences, behaviour and needs. It is a simple break down of the purchasing portfolio into homogeneous groups of products characterised by similar technological content or manufacturing processes. The rationale behind the subdivision is exclusively linked to internal organisation purposes and varies from company to company. The range management could correspond to the subdivision of the category into the various supply markets. Category assessment, category strategy and category tactics have clearly to be adapted to the specific products, volumes and goals of the company considered and depend on the type of data and information available and on the number of specialists or category managers that can do the job. Strategy and tactics are also influenced by the overall culture of the players of the supply chain. The same apply to the implementation phase and measurement of the performances achieved.

What it is usually missing in the manufacturing industry is the systematic and formal preparation of category or commodity plans strictly related with:

- the development and strategic plans of the company;
- budget expenditure for materials and services;

- saving targets;
- overall improvement plans promoted by the board.

Furthermore working teams are not used to make public the results achieved, reducing as a consequence the stimulus to prepare and launch plans to recover efficiency, especially with regard to the minor cost components. Category management programmes last usually from four to six years, depending on the complexity of the category and products considered. This means that in such period most supplier development and continuous improvement initiatives can be successfully completed or brought to an end. During the first phases category managers are expected to tackle the cost components that can assure high savings or improvements, in the following phases the working team focuses its attention on minor costs or low value-added initiatives. The break-even lies with improvements whose ROI occurs only after 4-5 years.

Purchase Order Factory and Supply Management

Category Management[2] in the manufacturing industry is a business model that breaks down the purchasing portfolio in several categories of homogeneous goods & services and applies, for each of them, strategies and tactics related to:

- peculiar characteristics of goods and services of the category;
- relevant strategic degree[3];
- its impact on the elasticity of the demand of the finished product[4];
- its incidence on the cost and profitability of the end product;
- volumes managed;
- type[5] and location of relevant supply markets;
- associated technical and commercial risks[6].

With reference to the annual spending per category and to the factors described above, category management requires the definition and implementation of category or commodity plans[7], eliminates maverick buying[8] and assures incremental reductions of the cost of goods and services during various phases of the supply process[9]. The adoption of category management models shadows the traditional way of purchasing - simple transformation of the purchase requisition into a purchase order - and opens the era of the modern and effective supply management focused on cross-functional and cross-enterprise activities to increase the efficiency and effectiveness of the supply chain. Supply management means a long-term collaborative relationship aimed at improving products, services, management systems, and competitiveness of the organisations.

From an administrative function, whose added value was limited to the negotiation phase, purchasers have moved or should move to a proactive multi-role function that generates value in various phases of the supply process. The expression ‘should move’ indicates that

[1] Supply excellence: International Purchasing Office, August 2008

[2] Category management and commodity management are not synonymous. The term category in fact can include more than one commodity. In addition category management goes beyond commodity management as it allows a better understanding of the dynamics of the supply chain and their impact on the buying company. Some authors use the term commodity to indicate standard consumable goods and the term category for customised or not consumable goods and services

[3] Company related factor associated to several parameters such as: extent of replaceability, relevant competitive edge, technical content and gross margin. What is considered strategic for a company can be not strategic for another

[4] Some components or parts of a finished product can improve its characteristics or performances, making it more attractive to customers and increasing as a consequence its market demand

[5] Degree of competitiveness of supply markets. It is useful to know that in most cases they are oligopolistic and that the customisation of products makes them exclusive generating a sort of monopoly

[6] Obsolescence, embargoes, fixed import-export quotas, environmental laws, disclosure of proprietary information

[7] The consolidation of all category plans generates the overall procurement plan of the company

[8] Maverick buying: purchases made by the user outside any procurement plan and without any recording in the company’s ERP

[9] In some cases the supply process consists of the following phases: design, manufacturing and qualification of the prototypes, preproduction, productionalisation, production and product support

many purchasing departments are still “purchase order factories” and that the supply management model has not a wide application, at least for the moment. If we go a little further and talk about “collaboration management” the disclosed or undisclosed disagreement and doubts of purchasers are tangible. This is due to the fact that the term collaboration is seen as a sort of weakness by traditional buyers who continue to think that suppliers have only to be squeezed. In their opinion buyers must dominate suppliers and the concept of parity that surrounds collaboration management is not consistent with the principles of supremacy.

Taking into account that supply management is still not appreciated and implemented by a number of purchasers and that category management is a business model or a subsystem of the same, before describing the peculiarities of the latter it is useful to underline the following concepts.

1° The habit to issue purchase orders is not useless or dishonourable by itself. It has always been done and it will continue to be done even if in a different manner or with different tools. The negative side of the “purchase order factory” is the lack of a structured plan and an embedded operating model for the management of the 60%-70% of the costs of the enterprise that goes beyond the simple and classic negotiation.

2° Suppliers can be squeezed only within the limits they have predefined; beyond such limits there is no deal. Sales people are generally better skilled, educated and trained than buyers and the docility and fair play they show during the negotiation process is often a tactic that cannot be interpreted as weakness.

3° Irrespective of their geographical location and management capabilities, all organisations and enterprises generate inefficiency and wastes that supply management tries to eliminate by reducing the duration of processes and costs and decreasing, as a consequence, the selling price of goods and services. Buyer and supplier[10] are expected to collaborate and adopt lean management[11] tools to recover efficiency and effectiveness and to increase the overall competitiveness of the supply chain.

4° The “purchase order factory” reduces prices through negotiation, supply management goes further and cuts the cost drivers of goods and services ensuring a greater added value[12].

5° Supply management goes beyond the boundaries of purchasing[13] and includes operations, core and industrial engineering, and quality assurance[14]. Capable and

[10] The integration between buyer and supplier occurs each time an enterprise designs and produces important components of the end products of the buying company. Such relationship becomes partnership when the supplier shares at risk the nonrecurring costs associated with the supply and runs continuous improvement plans to the benefit of the competitiveness of the entire supply chain and industry

[11] Lean management: business model originated in Japan whose target is the elimination of all types of waste, bureaucracy, non added-value activities, and redundancies. From a practical viewpoint lean management means to make more things in a better way and in less time

[12] Through the negotiation process quotations submitted by suppliers can be reduced by 3%-6%. Supplier development and continuous improvement can reduce the cost drivers of many supplies by 10%-20% generating the ground for further consistent price reductions

[13] In occasion of the World Congress of the IFPSM arranged in Beijing in 2005, Arian Van Weele, an eminent Dutch academician, said that “procurement is too important to be left to the procurement” anticipating the concept that supply management is a cross-functional process or a process composed by sequential steps managed by different functions

respected category managers[15] lead the cross-functional and cross-enterprise team that manages the various improvement tasks. In build-to-print activities industrial engineering usually takes the lead.

6° The role of category managers significantly differs from that of purchasers. They coordinate and manage a wide range of intra-company and inter-company activities and not only simple commercial transactions. They cull out the more secretive cost saving opportunities-places where suppliers have made up margin they lost in initial sourcing rounds. They undertake more demand management and standardisation activities, and they make spend data more easily relatable to process to improve other than suppliers and top-level spend categories. Consequently, they must have a multi-discipline preparation, capability to read and interpret data, and sufficient expertise to prepare and manage action plans. In addition, they are expected to lead cross-functional teams and to mediate different positions or viewpoints. To foster their competence and skills, companies have to prepare and manage customised education and training-on-the-job plans.

7° Supply management specialists must be familiar with organisation and manufacturing processes of their partner companies and first level suppliers. Some purchasing managers indicate that implementation of supply management concepts is underway but the buyers have never visited the facilities of their vendors and do not have a comprehensive knowledge of their overall organisation. This prevents the achievement of sound value-added targets and shows a lack of understanding in supply management and the focus on cost reduction.

8° The adoption of supply management models requires the preparation of good and consistently executed commodity plans[16] or processes to manage supplies ensuring the companies continuous incremental added value. Systematic and embedded best processes become more important in the transition from intermediate to high cost savings levels. There is in fact a clear relationship between embedded capabilities, granular spend visibility and performance. Well structured and consistent commodity plans represent the only way to foster the competitiveness of the organisation and have to be made also if not specifically required by the top management. In addition they challenge and improve skills and expertise of people involved.

These concepts represent the basis of the modern purchasing and supply management and are endorsed by all the Institutes and Associations of the International Federation of Purchasing and Supply Management. Organisations that don’t share and implement such principles risk losing their competitiveness. Companies must continuously evolve and the capability to cope with frequent change management programmes represents a fundamental pre-requisite for all executives, category managers included.

[14] Best enterprises are run by processes. Each of them crosses various organisational units or departments and prevails over their specific interests. The traditional relatively autonomous and poorly collaborative company’s functions have to eliminate barriers and rivalries to share or co-manage processes following lean management principles.

[15] Not all senior buyers can become category managers; it depends on their skills, expertise and capability to understand and coordinate the different interests and viewpoint of cross-functional and cross-enterprise working teams.

[16] Some call them commodity plans. All together they form the procurement plan of the purchasing and supply management function or a structured document summarising its strategies and tactics.

Category Management

Category Management in the manufacturing industry is a business model that moving from the analysis of the annual spending by category, postulates the definition and implementation of short, medium and long-term initiatives to improve the products contained in the category and to increase efficiency and effectiveness of the relevant supply chain. Each category is run like a mini business. Through the granular analysis of the detailed spend, transactional and pricing data, and the continuous monitoring of the supply markets, category experts drive incremental unit-cost reductions through additional sourcing, appropriate specification changes, substitution, and better demand management. Category management means:

- Adoption of a well-defined classification and categorisation taxonomy;
- Use of electronic tools, so classification and categorisation occurs automatically at point of purchase or shortly thereafter;
- Structured database to ensure that spend data is easily relatable not just to suppliers or spend categories but also to things like budget, cost centre, procure-to-pay process, supplier performance, supplier risk profiles, and so forth;
- Use of full or semi-automated tools (minimal human intervention for exceptions) to continually clean data and to update variables such as unit price, lot size, currencies, descriptions, and so forth;
- Price management (slice and dice spend data, monitoring of cost drivers, category indices, price trends, hourly rates and analytics on price variation);
- Supply market monitoring and reporting (continuous analysis of supply markets and benchmarks to identify opportunities);
- Build total cost model encompassing all potential cost levers for spend category;
- Ask suppliers to unbundle goods or services to gain deeper insight into cost levers;
- Ask suppliers to help build/validate category total cost model;
- Ensure suppliers are fully trained in use of sourcing technologies;
- Document and actively market procurement success stories and benefits (frame them in terms that appeal to spend stakeholders);
- Rethink traditional business models for specific spend categories;
- Rank potential initiatives allocating resources according to value delivery potential;
- Forecast value delivery/ROI expected from specific initiatives;
- Use senior-level management to sponsor/champion work;

- Populate teams with best mix of procurement, cross-functional, and category expertise (co-locate procurement team members with spend stakeholders);

- Use expert facilitators to accelerate slow-moving strategic sourcing programmes;

- Ask budget stakeholders to validate specifications and to forecast their demand;

- Promote cost reduction (through product, process and business improvements, substitutions, better compliance, or additional sourcing);

- Use policies and technology tools to lock down spend;

- Tie personal and business-level performance goals to strategic procurement initiatives;

- Track and measure internal and external performances;

- Outsource strategic sourcing where category expertise is lacking or unwanted.

The supply sourcing strategy is created by applying the Category Management process which is simple, proven, and it works. Category Management is a continuous process and requires enterprises to assess their purchasing category expertise and any strategy for determining the underlying cost structures and market dynamics for each specific category.

Aberdeen research has shown that companies that do not understand the dynamics of the markets and type of goods they are purchasing suffer from sub-optimal contracts, costs and risks. If enterprises do not have this level of expertise for a certain service category, they must decide if they want to dedicate the resources to develop it internally or to outsource the activity to service providers[17]. Recent Aberdeen survey research shows that more than 40% of companies today outsource some portion of their purchasing activities.

Category teams will need to know about and apply a number of technical tools, but category management can also be thought of as a change management process, a new way to work implying:

- review of roles, relationships and organisation's processes;
- management style focused on analytic and systematic approach to problems, motivation, target sharing and continuous improvement;
- use of industry best practices;
- attention to costs and processes;
- a governance system extended to partners and first level suppliers;

[17] The cost of the purchasing function is equivalent to 0.9%-1.3% of its annual amount of expenditure for materials and services, depending on the type of industry and extent of outsourcing of manufacturing processes and services. Service providers charge their customers the cost of materials paid plus 12%-16% to cover costs and profit. It is therefore convenient to outsource the buying process to a service provider each time the bigger quantities it buys allow unit prices lower than those paid by the outsourcer by not less than 11%-15%. If the provider keeps inventory at risk its cost increases by 5%-10%. These figures exclude transport costs

- an efficient performance measurement process;
- capability to review the initial targets as necessary;
- first-level ICT applications, CRM and SRM included.

Like any change process, it requires stakeholder commitment, good communications and the right resources. Key to its success and application is that it requires teams to work across organisational, departmental and functional boundaries, and processes that overcome the specific interests or internal targets of the single functions. This can be very demanding and requires lots of energy, communication, managerial support and sponsorship[18].

Category Management Process in the Manufacturing Industry

The Category Management process in the manufacturing industry is usually structured in six phases[19] and is managed by a team lead by the category manager and composed by the main stakeholders. Taking into account the criticality and strategic importance of the process, the best companies usually appoint one or more dedicated committees[20] that meet every month, or when convenient, to check if new initiatives have to be undertaken and to monitor the status of those already approved and launched. Permanent members of such committees usually are: category manager, procurement marketing, core engineering, industrial engineering, quality assurance and sales representatives. New ideas or suggestions can come from all employees and have to be brought to the attention of the secretary of the category management committee involved.

To the benefit of companies that are not organised by categories, we describe hereunder the principles that should inspire the adoption of the company materials classification[21].

Classification of Materials & Services

The material classification to be adopted has to be exclusively referred to the nature of the materials and services to be bought, and not to their use or to the type of product they will be incorporated into. It has to be hierarchical (up to 6 levels), in order to start from level one or from the macro-category of reference and to progressively arrive to materials or parts that do not imply any lower level. For example: raw materials (1st level), metallic and non metallic materials (2nd level), forging, casting and laminated materials (3rd level), aluminum alloy or steel (4th level). Composition and structure of the materials classification depends on the complexity of the finished products produced and sold by the company. The basic categories or macro-categories for direct and indirect materials are usually in the order of 12-18, while the total number of codes inclusive of sub-categories or commodities, segments and sub-segments can be in the order of two-three hundreds.

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[18] Sponsorship: commitment and support of a respected and powerful company's executive

[19] We could also say 1 plus 6 to include the category definition that once arranged lasts for years and becomes a constant or a fixed factor that defines the type of products or materials considered and does not influence the category management process

[20] To confirm the importance attributed to the category management projects, some corporations also appoint a dedicated Steering Committee composed by high-level managers to supervise the activities of the category management committees

[21] The material classification of the manufacturing industry corresponds to the category definition in the retail

Each alphanumeric code is loaded into the bill of materials and is automatically written both on the purchase requisitions and purchase orders.

a. Spend Analysis

The spend analysis or what is globally spent for each category - first and second level codes at least - represents the starting point of each category management plan. It is a difficult exercise to figure out how much a company should be spending in a particular category, but top-level performers clearly see the practice as worthwhile[22]. The spend data have to be captured from multiple points such as ERP, AP[23] and purchasing-cards, and have to be cleaned, aggregated and classified. The spend analysis by category has to be related to the budget for materials and services, and to the historical expenditures. Each spend category has to be classified by:

- importance,
- repetitiveness,
- degree of innovation,
- technology and process maturity,
- risk of obsolescence,
- vendor location,
- logistics implications and constraints,
- market competitiveness, and so forth.

Top performers match spend categories to well-engineered standard procure-to-pay process considering each of the above factors together with their mutual dependencies. In addition they have a dedicated sourcing analyst pool that provides support during the sourcing and category management process. For a category spend classified as low value, low risk, high competition, the associated procure-to-pay process has to be simple with no approval workflow. For a category classified as high value, high risk, low competition, the associated procure-to-pay process could be single source, long-term agreement with director-level or committee approval workflow.

b. Identification of Initiatives to be Implemented

Category managers and procurement leaders pay a great deal of attention to the cost structure of each of their key categories and to the total cost of ownership (TCO) understanding and making critical decisions based, not just on price, but on all the costs associated with the business. High performers, in addition, are likely to rethink or re-engineer business models for the major spend categories. The lead-time required to reach full maturity in spend and to maximise efficiency and effectiveness is in the order of four-six years.

The first step of the process consist in the identification of the initiatives to be carried on or processes to be improved[24] by the category specialist or other stakeholders and the establishment of informal contacts to evaluate the level of interest on the matter. This

[22] Zycus: the path of procurement excellence
[23] Accounts Payable
[24] Among the various activities it should also contain the flow-down of the company's business development strategies

stage is likely to include a preliminary technical feasibility and the development of a high level business case in order to find a strong internal sponsor. In case of purchasing partnerships the action plan could include the review of business models and cross-enterprise processes. The first phase or the first commodity plan is usually focused on high added-value initiatives, whose ROI can be obtained in 6-12 months. After their completion the attention of category managers go to less remunerative initiatives both in term of possible cost reduction and in term of product and service improvement. These additional initiatives are usually undertaken in the medium and long term.

Among the various possibilities, one can consider one or more of the following tasks:

- sourcing activities: research of an alternative or second source locally or in low-cost countries or in areas where finished products are sold (category managers have to conduct deep-dive market analyses prior to executing sourcing events and routinely identify risk exposures for strategic sourcing. They have to identify the suppliers who can meet their needs, to see how they rank in terms of innovation and competitiveness and how they stand financially. In some cases they are expected to estimate the industry capacity worldwide and to learn about capacity expansion. They have to look at the supply conditions of the market considered, at the history of pricing and price volatility. They have to know how suppliers price their products and possibly something about suppliers' profitability);

- product design: adoption of innovative solutions,
  increased availability of options and customisations,
  standardisation of materials and technical solutions,
  reduction of useless sophistications and technical risks,
  adoption of cad-cam and digital manufacturing tools,
  optimisation of configuration management system,
  improvement of style, appearance and attractiveness,
  improvement of quality, reliability, duration and performances,
  improvement of safety and maintainability,
  improvement of packaging,
  adoption of user-friendly operation and maintenance manuals;

- manufacturing processes: optimisation of manufacturing lay-out,
  adoption of automatic and precise machine tools,
  adoption of economic batch-size;
  reduction of set-up times and overall lead-times,
  adoption of simple and easy-to-use and test-tools,
  reduction of scraps and rejections,
  improvement of flexibility;

- business models: definition of a strategic company business plan,
  definition of a multi-annual business plan,
  set-up of central database linked to spend categories, budget,
  cost centres, procure-to-pay, supplier performances, etc
  optimisation of the overall planning systems,
  outsourcing of the non-core activities,

adoption of reliable planning and budgeting tools,
establishment of long-term agreements with suppliers,
delivery of quarterly long term forecast to vendors,
adoption of effective and efficient buying processes:
- paperless processes and open orders,
- delegation of call-off[25] to internal users,
- e-catalogues,

measurement of the overall internal and external performances,
adoption of supplier development and continuous improvement tools (TQM, Lean Management, TCO, Six Sigma);

• logistics: improvement of warehousing and inventory management techniques,
optimisation of packaging and transport systems (RFID),
improvement/automation of receiving and acceptance test processes;

• product support activities:
improvement of customer assistance (adoption of an efficient and proactive call-centre to interface customers, adoption of a 24hours service centre, etc.),
improvement of analysis and management of client feed-back,
reduction of repair turn-around-times,
assure safety stock,
adopt exchange systems.

c. Preparation of the Preliminary Plan

Each time the category manager or other stakeholders envisage the possibility to improve some products or to provide value-added to their organisation, the competent category management committee should meet to analyse the proposed idea and to check if there is the ground for a new initiative. In case of positive answer the category manager should prepare a preliminary plan inclusive of:

• description of the initiatives to be undertaken in the short or medium or long term;
• technical feasibility analysis for each of them;
• functions and external organisations to be involved;
• rough estimate of benefits and/or value-added achievable through each initiative;
• rough estimate of costs associated with each initiative;
• rough estimate of the required resources;
• provisional timescale.

The plan so prepared should be submitted to the potential sponsor and to the competent management for a preliminary analysis and possible approval.

[25] Call-off: the issue of purchase orders against long-term or framework or service-level agreements

d. Preparation of Final Plan

After the approval of the preliminary plan the team leader or the category manager has to prepare its final version. Any single activity has to be analysed in all its components to facilitate the preparation of a business plan that has to be accurate, realistic, inclusive of resources, capabilities, tasks allocation, timeframe and monitoring system, analysis of results achieved and possible periodical review of the project.

The average structure of a category or commodity plan looks like the following:

- description of the initiatives to be undertaken;
- functions and external organisations to be involved (supplier, facilitator);
- expected cost reduction and/or value-added (non-monetary benefits) achievable through each initiative;
- list of planned costs associated with each initiative;
- estimate of the required resources (number of hours each specialist has to spend every month);
- detailed timescale or GANTT;
- risk assessment and evaluation;
- performance measurement system.

High performers distinguish by taking systematic approaches to manage the performance pipeline, meaning they draw precise plans and methodologies defining how they will reach their goals and ensure that each individual involved understands clearly how he is expected to contribute to the total goal. Sometimes they use experts or facilitators to challenge teams. In case of complex projects involving several functions, the category management committee could appoint the team-leader expected to coordinate the execution of the tasks listed in the plan[26].

e. Project Approval, Launch and Execution, Measurement of Performances Achieved

Duly approved by the competent management, the final plan has to be presented to the working team and stakeholders by the sponsor and category manager. Launching the initiative in a manner which will ensure desired outcomes and will be sustainable is critical to success. The presentation should underline:

- category or sub-category involved,
- activities to be developed,
- targets and terms of reference (shared by the entire team),
- implementation process and timescale,
- governance (composition of team, external supporter, team leader and action owners, location and frequency of meetings to check work-in-progress),
- communication and reporting system.

[26] It is the case of projects mainly focused on design and/or process improvements requiring competences and capabilities different from those of the average category manager

Each initiative will be progressed by a core team and will involve wider stakeholder groups as appropriate. For top projects it could be worthwhile to appoint a senior-level board or steering committee to oversee teams' work and progress (galvanized buy-in at a critical level of corporate management).

f. Analysis and Diffusion of the Outcome

A precise tracking system of the performances achieved and the arrangement of periodical meetings will facilitate checking the status of the initiatives. Some companies use IT dashboard to monitor progress and performance deliveries against identified opportunities and goals. Possible problems, difficulties or unexpected outcomes are brought to the attention of the team-leader who on a case-by-case basis will take the necessary decisions.

The major internal and external performances have to be periodically measured with the recourse to KPIs or balanced scorecards. Each time the gap between the actual and expected performances is significant, the category manager supported by the working group has to analyse the reasons of the discrepancy and review as necessary the original plan.

At the completion of the project the results achieved have to be adequately publicised. A well embedded practice among high performers is to run debriefings on all category plan initiatives, capturing, codifying and publishing lessons learned so the entire organisation can learn and improve over time.

Category Management and Change Management

Taking into account guidelines and concepts illustrated in the paragraphs above, it appears evident that category management implies a different way of working, and different organisation structures. It represents a radical change in the management culture that also involves partners and suppliers. Like any other huge change, it has to be carefully planned, managed and facilitated. The cultural gap existing between the companies that have adopted the model and those who are still focused on the issue of purchase orders and do not have any structured plan to improve the overall efficiency of the supply chain, is enormous. It is therefore incorrect to ask people to move to the category management model without assessing their capability to make such transition and without having designed and arranged a customised training activity.

Furthermore it is necessary to re-engineer the organisation of the company taking into account that the preparation and implementation of the category or commodity plans imply the availability of professionals almost full-time focused on the preparation and realisation of the relevant initiatives. The adoption of the category management brings tangible benefits but often requires the recruiting of qualified professionals.

In his change management model, Kurt Lewin describes change as a three-stage process:

• the first stage, ‘unfreezing’ involves the overcoming inertia and the dismantling of the existing ‘mindset’. Defense mechanisms have to by bypassed.

• in the second stage the change occurs. This is typically a period of confusion and transition. People are aware that the old ways are being challenged but they do not have a clear picture on how to replace them yet.

• the third and final stage is called, ‘re-freezing’. The new mindset is crystallising and one’s comfort level is returning to previous levels.

Considering the difficulties and problems illustrated by Kurt Lewin in his change management model, the need to manage with care and attention the transition both internally and inside the partners and supplier organisation appears evident. Furthermore, it is suggested to support and facilitate the launch and implementation of the first commodity plans with external resources.

To complete the analysis of the category management process we report hereunder an interesting article published by ISM[27], and the summary of a survey on the matter made by A.T. Kearney.

[27] Institute for Supply Management (USA). Together with the Chartered Institute of Purchasing and Supply (UK) it represents one of the pillars of the IFPSM

Five Best Practices for Category Management

In today's global economy, understanding spend and the dynamics of the supply chain will separate top organisations from the pack.

By Justin Falgione, Patrick Furey, Rachel Rutkoski and Bob Zieger – Inside Supply Management August 2008
Comments and integration by Giovanni Atti

Category Management

Category management is an evolving methodology that drives sourcing strategy in progressive organisations today. It goes a step beyond commodity management, as it effectively entails an integration of similar commodity-based methodologies to provide a more comprehensive understanding of supply chain dynamics, and their broader impact on the company as a whole. This leads to more holistic and sustainable supply and risk management strategies that are consistent with the long-range objectives of the organisation. There are five best practices an organisation can follow when implementing a category management philosophy:

- spend visibility;
- change management;
- compliance and demand management;
- tracking cost drivers / understanding cost structure;
- globalisation and total cost of ownership[1].

1) Spend Visibility

Understanding where your organisation is spending its money, how suppliers are performing and if procurement and sourcing processes are working are the vital first steps toward gaining control of expenditures and driving down costs. Spend visibility enables analysis of past spend by category, sub-category and segment to determine trends, direction of future planning, prioritise savings opportunities and monitor compliance issues.

Lack of visibility into how much you are spending on products and services means you cannot ensure you're getting the best prices, and you may even be buying items from the same supplier at different price levels. An organisation needs a comprehensive overview of all expenditures to take the necessary action to leverage spending and make informed decisions to drive bottom-line savings. Maximum value from spend visibility is obtained by examining supply management and sourcing processes to identify bottlenecks, and by measuring the performance of supply management professionals and suppliers.

The application of Pareto curve to the category spend helps purchasers to identify priorities while the analysis of the type of goods and services considered extended to the relevant supply markets allows the identification of potential opportunities, risks to be run

[1] Total Cost of Ownership (TCO): knowledge component by component of all the costs related to a project, product or activity. If the focus is on a product it means all the cost related to its entire life

and implementation process alternatives. By type of goods we mean their extent of innovation, complexity, technologies incorporated and existence of patents or protected design and solutions. The supply market analysis instead has to consider their extent of competitiveness[2], the relevant business practices, logistics and law constraints, political and economic risks, cost of labour, currency exchange rates, etc. It is superfluous to underline that the leverage of buyers depends on the quantities treated and the competitiveness of the supply markets. New products or solutions are usually launched by market leaders at non-competitive conditions preventing any price limiting; similar situation applies in case of patents.

Several challenges have traditionally prevented effective visibility into spend, process and performance. These obstacles range from the decision-making process, to aggregating comprehensive data, to cleansing and organising the data in a usable form, to enabling decision makers to formulate a spend-focused analysis.

If an organisation is able to overcome these challenges, then the three most important benefits of implementing a spend visibility approach to procurement data are to:

- accelerate savings through better-informed decisions;
- rationalise supplier relationships for improved savings and service;
- reduce maverick spending through effective monitoring.

Spend visibility can be performed in several ways, and organisations need to examine what solution is a best fit for them. It can be performed manually, although this approach is usually very labour-intensive and employs the use of generic software such as spreadsheets to help sort and analyse data. On the opposite site of the spectrum, utilising specialised software can help automate the process. The important thing is to discover all spend that may be under supply management control.

2) Change Management

So you have examined your spend and prepared a plan. Now you have to communicate that plan, motivate your organisation and get everyone on board quickly to get things done. Change management is one of the most critical elements in executing any spend management programme, and a centralised category management team is critical to driving this programme successfully throughout your organisation. The bottom line is that people are reluctant to change, but to effectively drive change and ensure the success of any spend management programme, category managers must follow the following guidelines.

Early involvement

It is critical to involve all stakeholders in the decision/planning process to ensure that your entire supply management teams feel they that have had input into the development of the sourcing programme.

[2] Supply markets can be competitive, monopolistic and oligopolistic. The customisation of products makes them exclusive or almost unique reproducing a sort of monopolistic environment

Establish goals and educate

Any plan that involves change must have clearly defined overall goals. It is far better to use messaging like: ‘We need to drive at least 5% savings in this category to allow the corporation to meet our earnings targets”, than it is to state: “Here is the plan that management says we need to execute”. Education is also key, so that your staff understands all of the tools and processes that will be used to drive your spend management programme.

Develop a detailed plan and monitor progress

A carefully crafted category plan with detailed time lines and clearly defined responsibilities is a must for driving change in your organisation. Once this plan is in place, it is equally as important to monitor progress and report status up through management levels.

Support from the top down

Executive support is vital to each of the aforementioned guidelines – from encouraging early involvement and education to monitoring the progress of the plan. Your staff will be more motivated if the message of change comes from the top, and if accountability ultimately feeds up to all levels of the organisation.

3) Compliance and Demand Management

It is critical to incorporate compliance and demand management into any category management initiative, as these strategies may represent the best opportunity for near-term savings. This near-term savings opportunity is based on the fact it does not require a supplier change or contract renegotiation, but in many cases may require the development of existing tools (either buyer-or-supplier-provided), policy or specification changes, or simply education of the employee base.

While the impact of these strategies is more obvious in categories such as travel, mobile telephones, office supplies, temporary labour and others, there are very few categories where these strategies do not have an immediate and lasting impact on cost if developed and implemented correctly.

Regardless of the category, it is important to identify who within your organisation is currently managing demand and/or compliance for a category (for example, a maintenance supervisor for industrial supplies; human resources for contingent labour) and assess whether they have the expertise and information they need to perform this function appropriately. Such management can play a role in providing both expertise and information, as well as potentially taking ownership or sharing responsibility for managing demand and compliance. The following information will facilitate proper assessment of compliance and demand management potential:

- an understanding of who is placing orders, what is triggering orders and how they are being placed;
- an assessment of cost drivers, unit cost and volumes;
- what specifications are being utilised and why.

The three key elements to any demand management/compliance programme are as follows.

Executive Sponsorship

Communication from top levels and ”practicing what they preach” are absolutely critical to change the types of purchases and the quantities of those purchases.

Education/change management

Educating employees regarding how they can impact cost reduction, standardisation and quality improvement, and promoting/rewarding these behaviours is critical. Employee involvement, especially from an early stage, can lead to higher levels of acceptance and understanding.

Technological support

Technology will assist in providing the data required to build the business case, monitor and report progress, and proactively control spending (for example, order blocking in online catalogues). Although strategic sourcing is not a prerequisite for demand management and compliance, it does complement any demand management initiative. This is due to the fact that they manage volumes purchased going forward, and ensure the appropriate products and services are purchased from the awarded supplier(s).

4) Tracking Cost Drivers / Understanding Cost Structure

Cost drivers are critical to understanding the fundamental pricing structure of any sourcing category, from indirect services to direct raw materials. By knowing a supplier’s cost drivers, an organisation acquires valuable insight into targets for negotiation and cost-reduction measures. An organisation cannot manage its costs effectively if it does not know what factors actually influence them.

In supply chain management, this concept goes beyond tracking a supplier’s cost drivers. Understanding the complete picture usually involves knowing what factors drive their supplier’s cost, and so on throughout the supply chain. A comprehensive, category-based approach to sourcing facilitates this macroeconomic perspective and leads to strategic decisions that are often better aligned with an organisation’s objectives.

For indirect services, getting a grasp on cost structure usually means gaining a thorough understanding of labour rates in various industries, geographies and skill sets. Labour (including overhead allocations) is the most pervasive cost in most services-related categories.

Tracking supply and demand conditions, which are influenced by unemployment rates and industry-specific economic factors, is pivotal to developing effective long-term sourcing strategies. As suppliers leverage technology to reduce labour costs (potentially changing the skill profile of the labour required) and utilise lower cost labour resources (both offshore personnel and paraprofessionals), it is imperative to understand how these changes impact their overall cost structure, and carry out price negotiations accordingly.

For direct materials, tracking cost drivers is often more complex, particularly when tracing back to raw materials constituents. It is critical to understand the various cost components and their relative contribution to raw material prices, particularly high volatile components that could have a considerable impact on bottom-line cost.

For example the price of steel forgings is directly dependent on many cost drivers, including scrap prices, iron ore costs, freight costs, duties/tariffs/VAT taxes affecting imports, raw materials surcharges and even inventory of finished materials.

For most chemicals and plastic resins, price movements are dependent on key intermediate precursors, and often how these relate back to crude oil or natural gas. To evaluate supply risk, it is vital to know which competing demand streams may constrain supply of certain chemical intermediates, potentially affecting both availability and price of downstream products.

Other important category management best practices include:

- track the history of volatile cost drivers over time to provide important statistical evidence in support of budgetary planning and risk management initiatives;

- request and evaluate cost breakdowns of quotations from suppliers to compare cost drivers and pricing methodologies among various suppliers;

- talk to key suppliers frequently and maintain a robust network of industry contacts. Understanding rapidly changing market conditions from multiple perspectives provides valuable information for timely sourcing decisions.

These techniques provide an organisation with a clearer view of the bigger picture on cost, and provide a platform for informed strategies sourcing initiatives to mitigate these costs.

5) Globalisation / Total Cost of Ownership

Demand for raw materials in China is pushing up the prices for everything from steel to plastic resins. It is common for calls to customer service departments to be fielded anywhere from India to Argentina. Natural disasters that occur halfway around the world can affect supply chains much closer to home.

Supply management professionals are increasingly part of an international economy, and it is vital to have global category management plans to manage risks in all location worldwide, and ensure that you are driving the lowest total cost of ownership (TCO) for your organisation. These plans should include:

Global Market Analysis

Category managers need to gather information on market pricing and supply market trends in all of the major regions of the world, and track changes actively. With currency fluctuations and rapidly changing raw material pricing, cost advantages of certain regions over other change rapidly.

It is important to track these changes to enable readjustments of supply strategies accordingly. For example, with wage inflation and the strength of the rupee versus the dollar, maybe India is not the automatic solution for call centre outsourcing that it was two or three years ago.

TCO analysis

In the late 1990s, many direct material buyers fell into the trap of sourcing everything in Asia, only to find out later that the savings hitting their bottom lines was not nearly what was expected. When reviewing what has happened, many buyers and category managers neglected to include added shipping costs, inventory costs into the equation when examining their sourcing alternatives. In addition, soft costs such as increased delivery lead-times or technical communications gaps were not identified up front. Clearly it is absolutely critical to analyse the total cost of ownership when making any sourcing plans.

The outcome of an Accenture research into procurement performance mastery shows that top performers are ever mindful of a product, category or stock keeping unit's total cost of ownership. For every purchased item, masters know the acquisition costs, the integration costs and the potential cost of obsolescence or failure.

Risk mitigation strategies

Any sourcing strategy has risks, and these risks increase tenfold (ten times as much) when dealing with a global economy. What will happen to your supply chain in the event of natural disaster halfway around the world? What will you do if there is sudden (unexpected) political instability in a part of the world that is absolutely critical to your supply chain? What happens if the dock workers at a major port of entry into your home country suddenly go on strike? Don't underestimate the importance of considering these types of risk factors as you develop your overall category plans as well as the appropriate backup plans for safety stock to cope with unplanned downtime.

Development of a global category team

Monitoring your supplier's performance, analysing market trends and risks, and understanding TCO factors is difficult when your suppliers are not located down the street and are spread all over the globe.

Companies that successfully source internationally commonly have local category support staff in their major supply regions to assist with supplier qualification, local market analysis, regional cost and logistics management, and risk mitigation strategies.

In summary, sourcing markets ranging from metal stamping to temporary labour are becoming increasingly complex as the global economy widens. Given the inflationary pressures in growing markets and the difficult economic climate in established regions, a global category management plan and an associated global category management staff are absolutely critical to the success of your procurement organisation. By following the best practices, you can help your company understand your spend, develop a sourcing plan, drive organisational changes, monitor market trends, manage compliance and, ultimately, remain competitive in the world economy.

Survey of A.T. Kearney

In today's hypercompetitive environment, no company is safe and all organisations need to find new ways to create value. CEOs must grow their businesses and, at the same time, deliver superior return on invested capital. A.T. Kearney believes CEOs should look more closely to the category management with close regards to the following questions:

- How marketing, engineering and procurement work together to set-up category strategies?
- How successful has procurement been in reducing costs while simultaneously building collaborative relationships with strategic suppliers?
- How can employees, technology and other critical resources make category management and procurement high value-added activities?

A.T. Kearney has found that excellence in procurement can be key to improving growth both in manufacturing and retail industry. 'Since our initial study in 1992, we have seen leading companies in every industry push their procurement function from a transaction-based business into a strategic weapon (category management) capable of delivering significant competitive advantage.'

'When approached strategically, excellence in procurement is a key lever to create value and competitive advantage for industry.'

'Revenue growth of companies that are leaders in procurement is nearly two times higher than the revenue growth of followers (12.3% vs. 6.4%). The same apply for the EBIT growth (29% vs. 14%).

Four areas separate the leaders from the followers:

- establishment of a category-focused organisation,
- understanding profit at the stock-keeping unit (SKU) level[3],
- using a supplier management strategy, and
- employing technology to improve efficiencies.

A category-focused organisation model is clearly a point of separation between leaders and followers, but only 45% have adopted a category model. Companies that continue to maintain a functional model can do so as the category-focused model is too resource intensive and can have difficulties in justifying the investment in additional resources[4].

The industry considers a category organisation model a best practice because it increases the transparency of all profitability levers across the organisation (cost drivers). To better realise the benefits of a category model, the following steps are recommended:

- Define categories relevant to products and services sold and main indirect materials (rather than a vendor or hierarchical perspective). Two-thirds of leaders and less than

[3] Each component of the finished product has to bring its portion of margin
[4] They do not manage quantities sufficient to afford the cost of category management teams. In these cases it could be convenient to outsource the purchase of non-core categories to service providers

one-third of followers involve their strategic suppliers in their commodities strategies and supply chain and logistics processes. The leaders continually seek to strengthen these partnerships through information sharing, co-advertising and by collaborating on new product design.

• Empower category managers with true profit-and-loss responsibility. They have to translate category or commodity plans into formal and effective sourcing strategies. Companies should use the full arsenal of sourcing strategies to achieve cost leadership. Leaders have generated cost savings but they need to apply more advanced strategic sourcing techniques across a broader spectrum of spend. Only 30% of leaders develop formal sourcing strategies. Most agreements still tend to focus on performance control and penalty clauses rather than on joint-improvement initiatives. Only 26% include a clause regarding year-on-year performance improvement; 11% have an incentive clause encouraging suppliers to exceed their performance targets, and only 5% contain a clause regarding shared savings.

Leading companies demonstrate procurement best practices.

- leaders generate 25% additional cost savings
- leaders develop sourcing strategies differentiated by expenditure category and market dynamics
- leaders pursue collaborative sourcing with their suppliers

…yet there is still progress to be made

- sourcing strategies are still limited to main commodities
- the use of e-sourcing tools is still insufficient
- demand management techniques are not often seen as a source of value
- companies are not aggressively challenging specifications and usage patterns.

Do you really need all that stuff? Leaders not only establish strategic sourcing practices, they try to avoid or to reduce cost using demand management. Demand management involves all the activities associated with managing the volume of a company's external purchases. Through demand management, companies gain a better understanding of the rationale behind their purchases. Unlike traditional sourcing efforts, it targets the quantity and specification of products purchased, not just the price paid.

Strategic sourcing provides a well-defined method for supplier management, effectively controlling the price paid for goods and services. Demand management goes a step further, attacking the other element of the cost equation: consumption. The benefits achieved from demand management depend on how aggressively you apply the levers. On the indirect side especially, demand management represents a significantly untapped opportunity.

Category Management	
Reduced Price strategic-sourcing focus	Reduced Quantities demand-management focus
• rationalise supplier base (improved economy of scale) to ensure that the most appropriate suppliers are supplying at the optimised total cost. • streamline & integrate supply chain to reduce internal and external costs through lean management, supplier development and continuous improvement • hire talented professionals • take advantage of new technologies	• maximise use of existing assets • rationalise specifications • reduce inventory • improve materials planning, incoming inspection, and warehousing • take advantage of new technologies

• Deploy adequate decision-support systems to measure meaningful category performance. As industry networks grow, it is important to build and maintain collaborative relationship with strategic suppliers. Leaders are more aggressive than followers at both segmenting their supply base to identify their top suppliers and developing formal supplier-management and development programmes. Among leaders, 73% have formal supplier-management programmes, compared to just 30% of the followers. Leading organisations also employ more sophisticated performance measurement systems. Leaders also evaluate their supplier's performance in areas that can drive revenue growth, such as product design and innovation, risk and reward opportunities.

• Re-evaluate your hiring strategy. As category management moves from a functional role to a profit-and-loss responsibility, past experience remains important but should not be the sole factor in hiring new people. Category managers need commodity and marketing skills as well as analytic and strategic skills. Getting talented people involved in procurement is important; after all, a buyer is typically negotiating with the supplier's highly trained sales representatives. Sales departments generally attract people with multiple degrees who believe that their career success depends on making those important sales. Excellence in procurement is not just about processes, organisation and technology, but the human element. If you want to embed leading procurement practices in your organisation, you need talented people to implement them.

• Get 'lean'. Streamline execution activities, eliminate all types of waste and, if possible, transfer functional responsibilities to suppliers. A lean approach will offset the cost of any additional resource requirement and enable category teams to stay focused on developing growth strategies.

• Develop strategies at corporate level; execute at factory level. A corporate-level plan should incorporate input from local area experts who understand local stakeholder's needs and preferences.

And technology is not a panacea, either. Best companies invest large sums of money to deliver accurate information. Roughly 60% of leaders have automated their entire procure-to-pay process compared to 20% of followers. In the retail industry 60% of leaders and 15% of followers say they have automated their entire inventory management process. In term of strategic use of technology, we studied the application of data synchronisation and radio frequency identification technologies. In data synchronisation, more than 45% of leaders (75 in retail industry) have implemented or begun piloting product-data synchronisation initiatives with their suppliers.

When discussing RFID technology, most retailers are still evaluating their options. The leaders identify three general areas of application:

• stock-out reduction,

• shrink reduction, and

• improved customer experience.

By tagging pallets and cases, retailers will improve the tracking of goods, thus reducing situations when goods are in stock but unavailable to consumers. RFID can also ensure that replenishment orders are placed only when required. Also goods with expiration dates can be moved more quickly when code dates are near. Shrink reduction refers to reducing theft both in the supply chain and at the point of sale (retail industry). Today, RFID chips still cost about 50 cents each, making it expensive for low-cost products. In the next five years, however the price is expected to drop to 10-15 cents, allowing retailers and manufacturers to reap the true benefits.

Conclusions

Few corporate functions have evolved more dramatically than procurement. As recently as in the 1970s, it was generally regarded as a clerical, reactive position - a cost centre. At many companies, the exact opposite is now true: procurement has become a strategic, proactive process that contributes as much as, or more than, other business functions to profitability, corporate growth and competitive advantage[5]. This has become possible thanks to strategic sourcing applications and the implementation of formal programmes for managing the supply base. Category management represents one of the most effective applications or business models that made such change possible. In fact, 100 percent of procurement masters have implemented a structure of centrally led category management.

Within the wide range of the supply management activities that can be performed in the manufacturing industry, category management represents the business model that ensures the highest levels of efficiency and competitiveness in the supply chain. Moving from the analysis of the cost drivers of a category, segment or individual product, it proposes the definition and implementation of structured plans focused on continuous

[5] From High Performance through Procurement; Accenture research and insights into procurement performance mastery 2008

improvement targets and optimisation of the demand management process. Category management implies an organisation by categories and requires the presence of professionals that going beyond the traditional negotiation process, work across functions' and company's boundaries to reduce wastes, redundancies and costs, and bring continuous incremental portions of added-value to the extended enterprise. To achieve these targets a combination of enthusiasm, intelligence, perseverance and hard work is required. Processes matter a lot, they must be highly standardised, consistently executed, reliable at delivering expected outcomes, and deeply embedded in daily workflows. It is no coincidence that famously successful strategic procurement groups often emerge in companies well known for their Six Sigma applications, where variability in process and process outcome is not well tolerated. Category management is a culture that slowly evolves toward maturity. It is a long-term process to sustaining profitability and improving global competitiveness. Best results come after 3-5 years.

Category management in the retail industry evolves with the shopping behaviour of the consumers, introducing changes that could be beneficial also to the manufacturing organisations. Buyers and category managers of this sector should follow with interest this evolution, ensuring their companies some advanced applications and competitive edge. High performers always compare themselves to other best companies to understand where process refinements may be wanted and learn how some of the most advanced strategic sourcing and procurement management organisations are preparing to meet the challenges of the coming decade.

In many cases purchasing managers do not know how to make their role known and appreciated by the CEO, and are often excluded from the strategic decisions of the company. Category management could represent the key to gain proper recognition at top management level. It is in fact unlikely that a CEO will not pay attention to a structured and reliable plan that could increase the overall efficiency and effectiveness of the supply chain of the organisation he chairs, by increasing at the same time profitability and attractiveness of its products. Purchasing and category managers can gain reputation, prestige, credit and weight if they act professionally managing at the same time strategies and tactics throughout structured long term plans. By adopting category management models they can in fact ensure better value for money, quality improvements, contribution to sustainability, process efficiency, delivery of competitive advantages and have a better risk control.

Companies' Best Practices

The Professional Family System within the Finmeccanica Group

Category Management in IBM: the evolution of IBM Procurement from price negotiator to value creator

Lyfe Cycle Assessment - Epson's choice

The future of the Supply Chain

The future Supply Chain will be more intelligent

THE PROFESSIONAL FAMILY SYSTEM WITHIN THE FINMECCANICA GROUP

1. The Finmeccanica Group and its reference context

In just a few years the Finmeccanica Group has repositioned itself in the world panorama of high technology through a strategy of alliances and acquisitions, obtaining an important share of the market in strategic and other highly competitive sectors. Today the situation is:

- the Group is highly complex, given its many business sectors (from aeronautics to space, from defence to helicopters, from transport to energy), and the growth of its workforce (since 2001 personnel has grown by 78.6% and today the Group numbers more than 73,000 people around the world, with over 40% outside Italy); and the geographical distribution of its companies and production sites (about 400 sites in more than twenty countries all over the world).
- the Group has intellectual assets unrivalled in Italy and Europe: about 20,500 graduates (28% of the workforce) of whom 13,000 are engineers and more than 5,000 are involved in research and development (in 2008 the Group invested about 12% of its earning in R&D).

The characteristics of the high-tech market in which the Group operates require it to be constantly on the leading edge of innovation and to manage multi-year and multi-technological programmes and commissions; this makes it essential to develop a system for managing human resources and their skills regarding new emerging requirements.

1. The Finmeccanica "system" for the professional families: Competency Management System (CMS)

The Finmeccanica system for professional families (Competency Management System) sets out to "develop the process of harmonizing resources and operational mechanisms of the professional families at the Group level […] in order to manage human and economic resources and strategically govern the Group."
(P.F. Guarguaglini, service order, April 25, 2005).

The service order formally establishes the creation of an integrated model for managing and developing the Group's transversal activities in standardised functional environments.

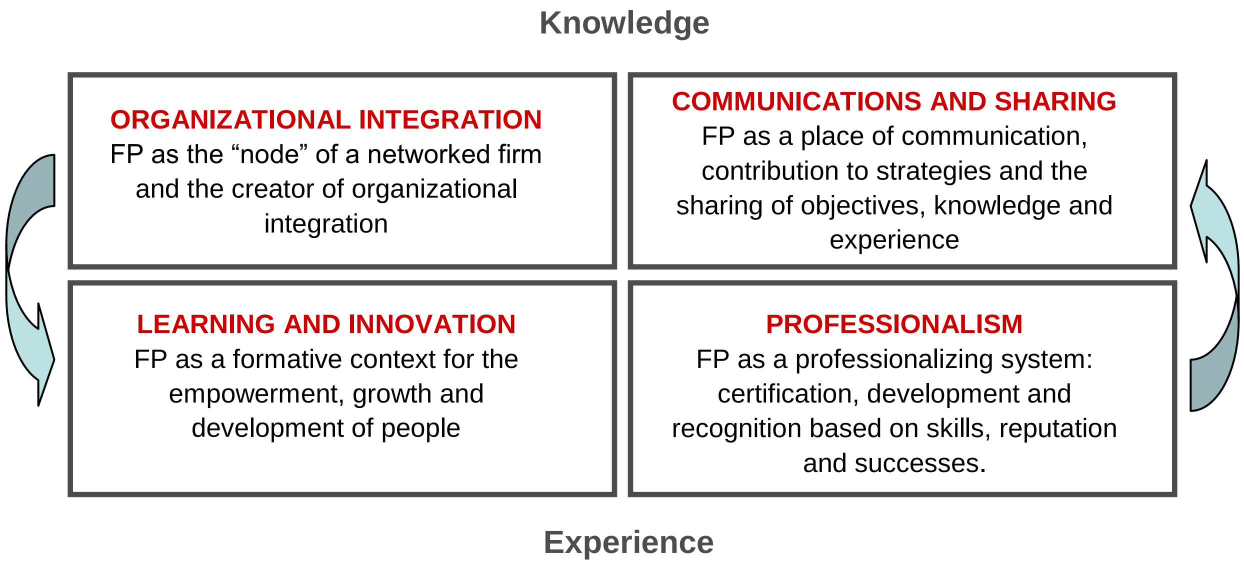
In particular the organizational regulations define the primary responsibilities of the leaders of the professional families, and the responsibilities of the corresponding central/directional departments of the corporate division, as well as the responsibilities shared with the managers of Group companies.

Constructing and developing the professional families requires efficient management on three different levels, characterized by partial overlapping but also by profound differences in terms of planning logic and operational implications for the organizational, professional and technological dimensions of the "virtual community".

The **organizational dimension** refers to the capacity of the professional community to develop “services” capable of responding, and when possible, to anticipate the requirements of the organization, find mechanisms for receiving and accepting the proposals from the professional community, and creating mechanisms of coordination and integration within itself.

The **professional dimension** refers to the fact that the “family” represents the privileged place for increasing one’s skills and remaining connected to the larger community that exists at the Group level, in order to be able to compare one’s self with the outside world. Within the community, the strategic guidelines are translated into operational procedures, elements that constitute the foundation of the profession, thus contributing to the professional identity.

The **“virtual community”** is based on the idea of offering new technologies in information and communications and creating virtual meeting places even for large groups of people who are geographically distant from one another.



The company management system planned by the Group’s central HR department has a modular structure that allows each family, in regard to its specificity and priorities, to activate independently the various instruments placed at its disposal, including:

- **The construction of a professional system**, divided into three phases: a) a “census” of the resources and roles of the professional family in the companies, b) definition of the skills at the Group level that are coherent with the mission of FP and with international standards, c) assessment of the skills possessed by the people and identification of the gaps.
- **The learning paths**: consist of training initiatives intended to fill the gaps in skills, and operational workshops aimed at sharing best practices and identifying the most effective and standardised work methods.
- **The processes of communication and knowledge sharing** regard mainly:
  - the **Web communities on the Group portal**, intended to encourage an increase in company skills and the growth of knowledge;

- **Professional Community Days**, aimed at sustaining and increasing the sense of belonging to the Finmeccanica Group and motivating continual improvement of one's professionalism;
- the **professional communities newsletter** giving visibility to the results achieved by the various professional communities and facilitating exchange and sharing.

Evaluating professionalism: consists of various initiatives intended to foster the processes of management and professional development, with special reference to intra-international and international mobility.

The structure of the competency management system (CMS)

	Objectives	Activities
Professional system	Allowing strategic management of resources and competencies using a single methodology throughout the Group	■ Definition of Families, Roles and Professional Competencies ■ Skill Assessment ■ Gap analysis
Learning paths	Facilitating processes of individual development, innovation, and international comparison	■ Training Programs and Professional Advancement ■ Practical workshops ■ Learning library
Communication & knowledge sharing	Facilitating processes of communication and knowledge sharing	■ Web communities ■ Professional Communities Day ■ Professional Communities Newsletter
Optimizing career development	Allowing mobility, re-conversion and qualification choices and actions in order to align professional requirements with availability	■ Intra- and inter –company mobility ■ Development and re-conversion programs ■ Qualitative and quantitative assessment of professions ■ Assessment and definition of plans of succession

Through integrated use of the various instruments, care it given to both the sense of belonging and the identity it encourages, in order to trigger a virtuous circle of reciprocal reinforcement and avoid two possible risks: building a group that is very integrated but distant from the functioning of the rest of the organization or, in the opposite direction, a group centred only on performance, but lacking in a strong sense of belonging that could determine a lack of motivation and gradual "extinction".

In the last analysis, the competency management system is an important contribution:

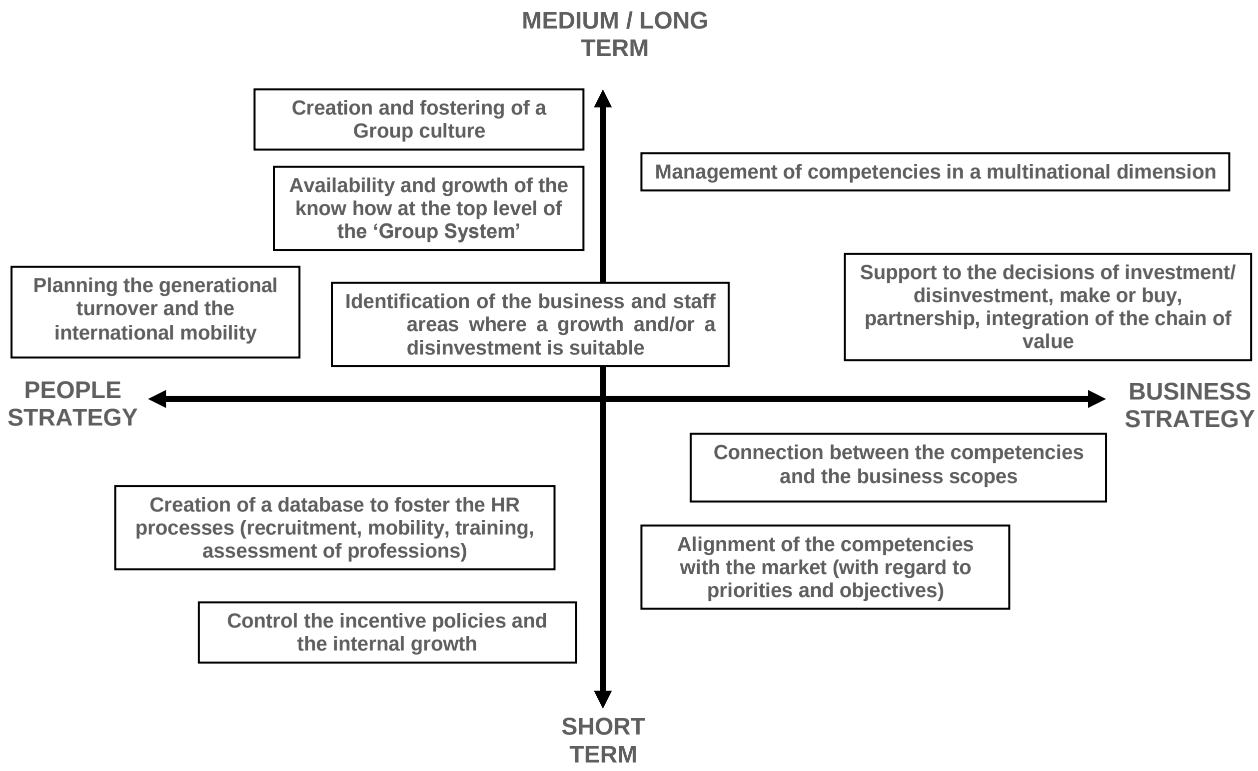
a. **to business strategy** through the possibilities the system provides for:

- "Connecting" the skills of people to the business objectives
- Understanding their alignment with market requirements (regarding priority and objectives)

- Managing skills in a multinational dimension
- Supporting decisions regarding investment/disinvestment; making or buying; creating partnerships; and integrating the value chain;

b. **to people strategy**, through the possibility the system provides to:

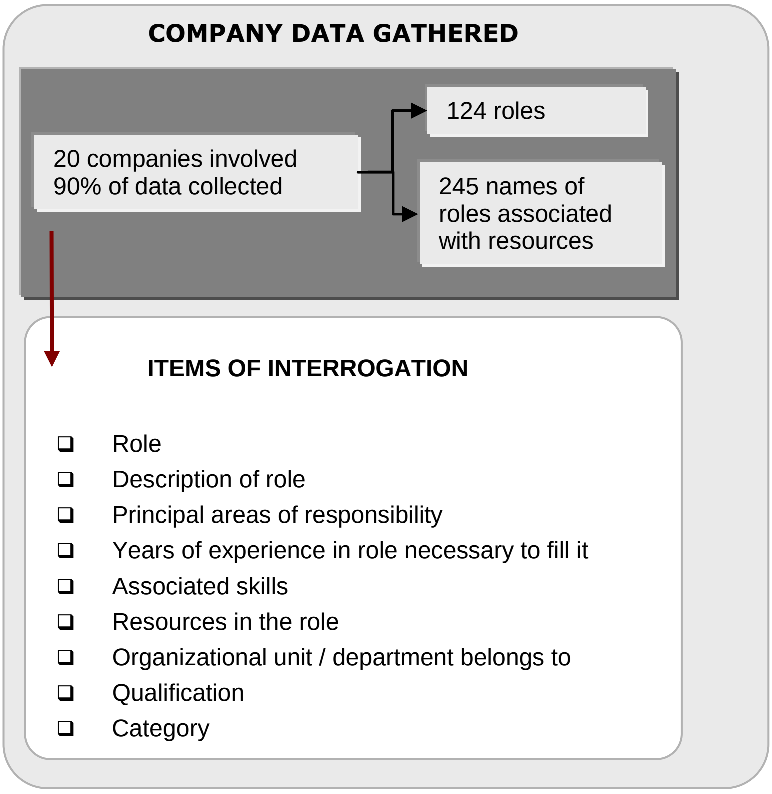
- Understand the areas of business and staff where it can appropriately grow and those which should be maintained or disinvested.
- Programme generational exchange and international mobility.
- Construct a database to nurture the HR processes (selection, mobility, training, sizing).
- Control policies of reward and growth within the structure
- Create and nurture a Group culture
- Make known how a part of the company assets is at the highest point in the “group system”.



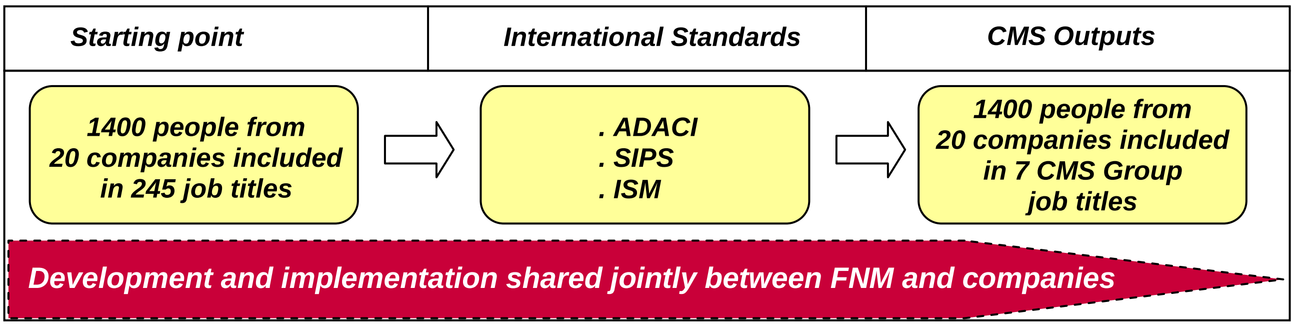
2. The construction of the system for professional family procurement

This activity began with setting up a workgroup composed of those in charge of procurement and HR referents of several companies in the Group, coordinated by Finmeccanica’s central HR department and the central structure entrusted with responsibility for Group governance in the area of acquisitions. The output of each phase was shared with all those responsible for procurement in the Group companies during the professional family meetings.

The workgroup produced a detailed report for each Group company, internationally, regarding roles and associated skills. The output of the report indicated the presence of 124 roles (for an aggregate of activities) and 245 denominations of the same roles for the 1,400 people surveyed:



Analysis of the data was aimed at standardisation - in other words, moving from 245 different denominations of roles to a smaller number of “aggregates” or macro-areas that could “contain” more roles that were homogeneous regarding professional sphere and activities carried out. This process led to the definition of seven professional roles at the Group level that took into account the current situation (as is) and the evolutionary trend of the professional family, in addition to international reference standards, while “transferring” company roles into a Group standard.

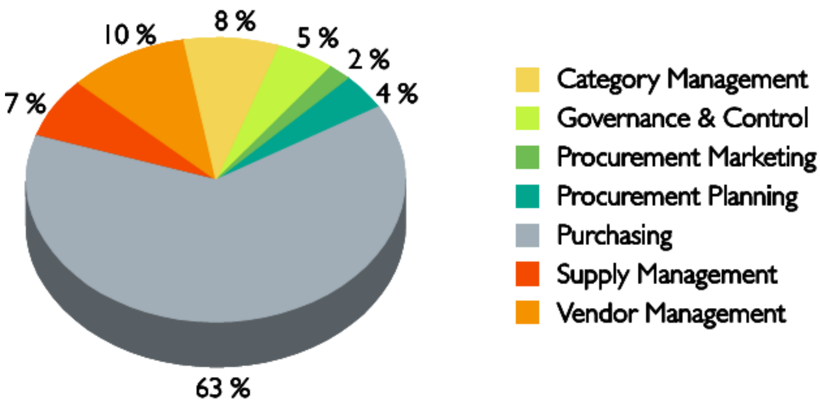


Parallel to the identification of the professional roles, the workgroup established the overall repertory of the technical-specialist knowledge of the professional procurement family. This was later associated in a targeted manner according to possession and depth of knowledge, at the various roles/levels of seniority.

At this point it was possible to proceed with the process of skills assessment, divided into four phases and supported by a dedicated computer platform:

1. Survey of the level of possession, by the components of the professional family, of the technical-specialist knowledge established for the roles defined at the Group level. These self-evaluations were subsequently validated by the supervisor to assign each person with a role and level of seniority in line with the survey results.
2. Skills gap assessment between expected profiles and profiles actually created.
3. Setting up feedback dialogue, between supervisors and their collaborators, aimed at comparing and sharing results, and establishing the most useful support and assessment initiatives.

Distribution of Roles within Finmeccanica Group



Education & Development Directorate
Human Resources

FINMECCANICA

“Category Management in IBM: the evolution of IBM Procurement from price negotiator to value creator”

by Antonio Pelliccia – IBM GBS - Procurement Services

IBM Procurement Profile

IBM Procurement is responsible to manage about $50 billion on a global basis in purchases for clients and internal needs. The managed spend includes expenses for internal and logistic services, costs of direct materials for hardware manufacturing, IT professional services for clients and about $10 billion of managed expenditures for clients that outsourced their indirect procurement activities to IBM.

Our key strategic focus is to deliver value to our Clients through a globally-integrated organisation by procuring superior quality goods and services at competitive prices and fostering mutually beneficial relationships with our Clients and Suppliers.

The organisation, made of more than 9000 procurement professionals, is the result of a deep transformation that has been radically changing the function in the last years.

Through our benchmarking experience IBM saw a wide variety of organizational approaches to procurement. These range from very decentralized approaches to highly centralized management of the procurement function. In our case IBM desired to move to a centralized function to fully leverage our large global spend. IBM did this in essentially two stages - first by putting in place procurement policies and leadership, establishing our strategic sourcing councils and centralizing our indirect procurement. Later after standardizing our procurement processes and deploying our common technology platform, we were able to fully centralize our production procurement organizations. This allowed us to gain further synergy and efficiency across the globe.

The project had impacts in several areas:

- Organisation - Global and geographical category managers supported by local tactical buyers that maintain contact with local markets and central operation buyers that manage administrative activities. This led to an organisation structures able to achieve effectiveness on spending through vertical councils and efficiency in the process.
- Policies and Process - IBM adopted a single policy and process description in every country and in every company including affiliates and joint ventures. This allowed the company to achieve a full control on the procurement process minimizing risks and non-compliance costs.
- Source-to-pay technology platform - By radically changing the technology platform and adopting a single global ERP instance, IBM introduced several applications to support the purchasing process enabling automated purchase orders, on-line contracts, electronic RFx, catalogues and digital invoices. This architecture led to increased efficiency in the process helping buyers to focus on value add activities and supporting the centralization project.

- Skills - In order to support the new and increased Procurement responsibilities, IBM focused on improving organisation’s skills by mapping key competencies and developing ad-hoc classes and training materials to support procurement professional career growth.

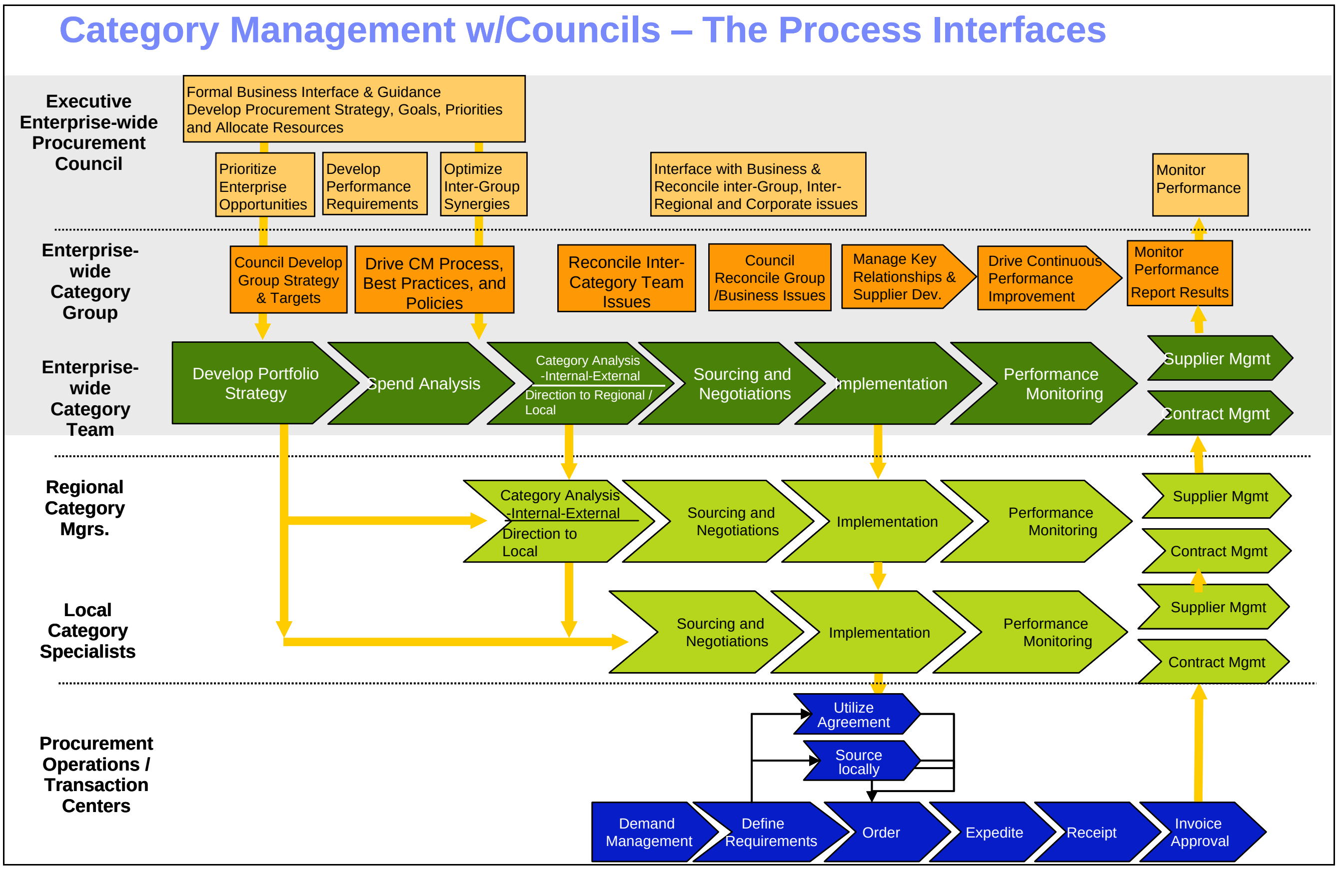
Category Management in IBM Procurement

The introduction of Category Management approach has been a centric step in IBM’s Procurement transformation project.
IBM has defined Category Management as “understanding business requirements & using the supply market to reduce cost, to improve performance, to increase customer satisfaction and to generate revenue”. It is the strategic ‘end to end’ process whereby supply capability is fully aligned to business goals and company requirements.

Category management includes market analysis and business alignment, demand management, total cost management, sourcing, Supplier Relationship Management (SRM) and category planning. Any single element of Category Management cannot be considered in isolation as each element is dependent on and impacts other elements.

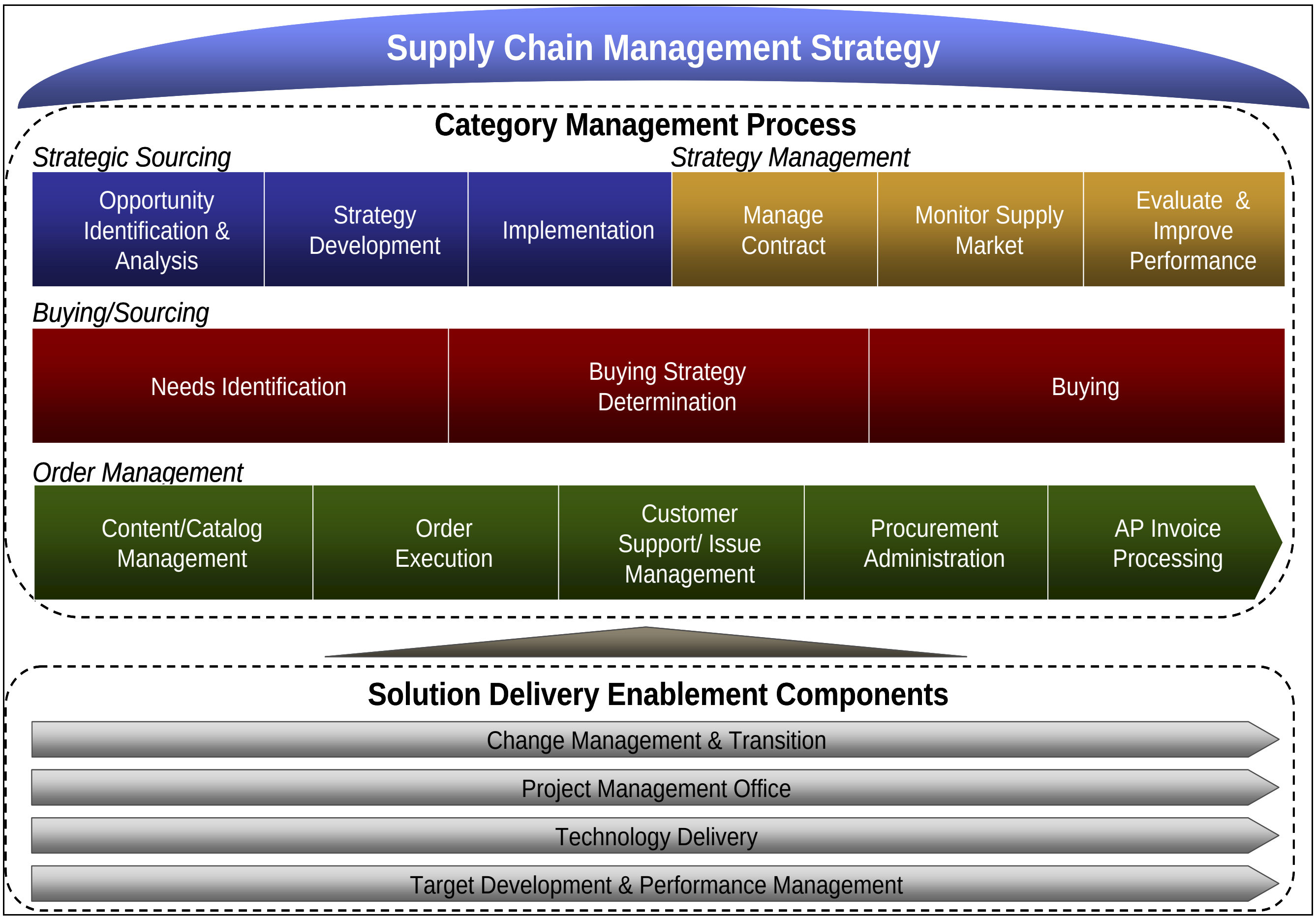
IBM Category Management relies on cross functional teams with internal stakeholders and executive sponsorship (Councils) from the businesses as well as the suppliers themselves. Category Management creates competitive advantage through Total Cost of Ownership (TCO) reduction, and Value Chain integration. Structurally it’s based on:

- Aligning enterprise-wide and business unit spend categories to enable leverage of spend and process;
- Aligning and optimizing processes and organizational approach including sponsorship;
- Aligning and integrating the core competencies of suppliers and the enterprise;
- Exposing Procurement to business leadership in a very demanding manner.



IBM's Category Management Operating Model delivers full value through Strategic Sourcing, Strategy Management, Buying/Sourcing and efficient Order Management. The driving element is represented by the Supply Chain Management (SCM) strategy that outlines key directions and strategic decisions that lead procurement activities.

Then, enabling technology & process components are included in the Category Management process in order to complete and sustain TCO management and sourcing value creation.



This approach to Category Management allows IBM to adopt the proper organisation, processes and technology layers to achieve effectiveness in supply management and efficiency in operational procurement tasks.

In fact, Strategic Sourcing and Strategy Management let Procurement implement key category strategies, qualify potential suppliers, negotiate and select strategic suppliers, manage supplier relationship and measure supplier performance.

Buying/Sourcing activities are critical components to the model and re-enforce category strategies, drive greater compliance/spend under management and help to identify area for improvement, then Order Management activities are focused on providing clear, effective and efficient support to the company employees and suppliers, enabling them to be better informed and educated, improving the overall service.

Strategic Sourcing and TCO management

The sourcing process has evolved over time into Strategic Sourcing, and organizational constructs have changed accordingly.

Back in the 70's, in several companies, it was referred mainly to as Purchasing and in most instances was not influencing product development or consideration of ability to deliver. Business units within corporations designed and developed what they wanted.

There may not have been focus on common suppliers, common parts across the corporation brands. Purchasing could be viewed as some as “placing the order” or processing the paperwork for a supplier to be paid. Purchasing was brought in to finalize terms and conditions with a supplier someone already selected. Purchasing was typically a service area buried within a Division or Business Unit.

In the 80’s, the “comfort zone” was challenged and there was the need for improved pricing, prompt delivery, and higher quality. This was a major turning point in the era of re-engineering where organizations were downsizing and consultants were brought in. Companies needed to be more profitable and have a product competitive advantage. The supply base evolved from local to regional, then global. It was the start of Global or Strategic Sourcing.

In the 90’s the environment continued to be complex. It was recognized that for a strategy to be effective, the stakeholder involvement was required from the executive management to the working level. In addition, Supply Chain Management concepts were introduced in many companies requiring Procurement to change.

Nowadays, Procurement has evolved its role. In many companies, it has a separate organization with a Chief Procurement Officer or Vice President of Procurement. Through this evolution, Procurement has demonstrated the value add they can bring to a corporation. In IBM, the Chief Procurement Officer is reporting to the Senior Vice President of Integrated Supply Chain. IBM Procurement has created a role inside the organization that together with sourcing council managers has the responsibility to influence internal ad external clients bringing inside their strategies and processes supplier market proposition and innovation. In this way, Procurement represents the linkage of company strategies with supply chain capabilities.

The outcome of this evolution is the core of IBM’s Category Management: the IBM’s 7 step Strategic Sourcing process©.

These steps are:

1. Analyse spend, identify key opportunities, complete project plan and confirm category objectives
2. Complete category profile (internal, external) and confirm baseline
3. Develop category sourcing strategy
4. Qualify suppliers
5. Conduct RFx
6. Negotiate agreement
7. Implement, manage and measure performance

During this process, several analysis tools and techniques are used such as:

- Internal consumption model
- Forecasting model
- Market PESTLE model
- Market SWOT model
- Porter’s 5 forces model

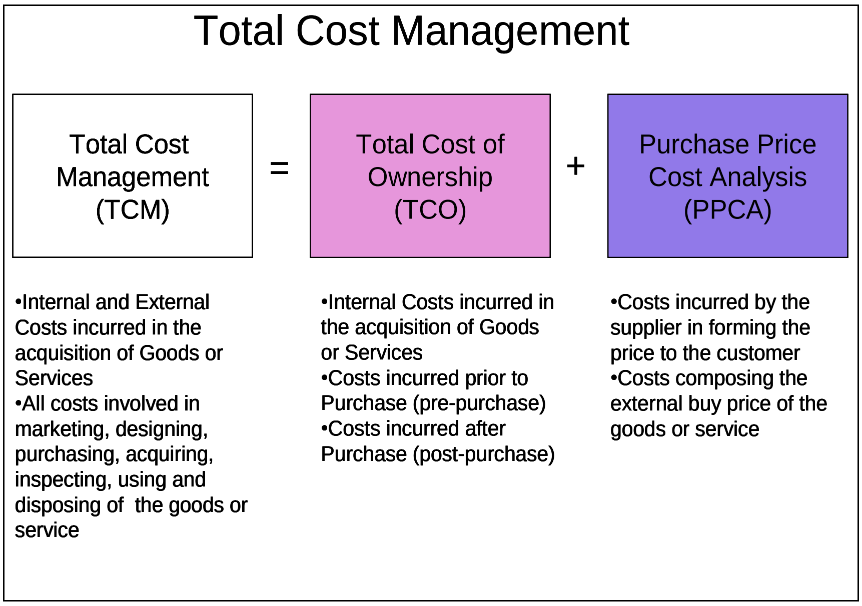
- Kraljic's model
- Supplier / Buyer dominance model

It is fundamental to analyse internal (company) and external (suppliers' market) factors in order to identify the proper sourcing strategy for every category or sub-category according to Kraljic's supply management portfolio. Then, e-sourcing technology and common processes help buyers to qualify suppliers and run RFx events in order to identify the proper supplier that matches company strategies in term of cost, quality and T&C.

Another important factor is to analyse TCO of supply with the aim to negotiate with suppliers the Total Cost of Management (TCM).

Total Cost Management (TCM) can be defined as "a systematic and structured approach which provides a holistic framework to control, reduce and eliminate costs throughout the value chain."

As shown in the diagram below TCM is composed of internal costs, defined as Total Cost of Ownership (TCO), and external costs, defined as Purchase Price Cost Analysis (PPCA). Internal (TCO) costs are all those costs incurred by the buying organisation in acquiring, receiving, using and disposing of the goods or service. External (PPCA) costs are all those costs incurred by the supplying organisation that compose the selling price of the goods or service to the buying organisation.



By managing costs holistically across the whole activity chain the Category team can deliver the following:

1. Reduced Total Costs
2. Release time, resources and cash
3. Faster turnaround of products and services

With this approach, the focus of cost analysis is on 'real' cost, not price. Costs cannot be negotiated lower. They need to be made lower through product, service or process change. This is performed through negotiation of three levers of TCM: traditional procurement levers, internally controlled lever and joint supplier-company controlled lever.

From an organization point of view, IBM developed vertical council structures (global, geographical and local) as outlined in the table below.

<table>
<tr><th>Services & General Councils
(indirect categories)</th><th>Production Councils
(direct categories)</th></tr>
<tr><td>• Business Services
• Sub-Contract Services
• Global Connectivity
• IT Products, Maintenance and Services
• Telecommunications
• Global Software</td><td rowspan="2">• Logistics
• Technical Services Solutions
• Networking and Communications
• Components
• Custom Logic
• Chemicals, Wafers and Raw Materials
• Manufacturing Equip/Capital Equip
• MD Technology
• Panels (Printed Circuit Boards)
• Platform
    o Interconnect/Power & Cooling
    o Mechanicals
• OEM
• ECAT
• Retail Store Systems
• Memory
• Storage Commodity & System Peripherals</td></tr>
<tr><td>• Business Travel
• Marketing Communications
• Facilities Maintenance, Design & Construction
• Facilities Services & Operating Supplies</td></tr>
</table>

Sourcing Council Responsibilities are:

- Cost, quality, supply assurance, client influence, market competitiveness
- Spend category strategy and source selection
- Supplier relationship management and collaboration with end users

Their role extends far beyond simply negotiating with suppliers. One important role is to provide influence and support to end users in the initial decision making process about whether or not to buy externally. IBM councils often bring forward opportunities that they see in the supplier market place and work with stakeholders to gain agreement on a buying decision.

The Council’s responsibility does not end with supplier selection. IBM Councils provide primary leadership in supplier relationship management, procurement contribution measurement and supplier performance evaluation.

In conclusion, Category Management in IBM allows buyers to proactively manage supplier base applying the correct sourcing strategy and to generate value for the company not only by reducing costs with third parties but also by supporting strategic make or buy decisions or driving innovation from suppliers adding to Procurement a client influence role.

Life Cycle Assessment – Epson’s choice

In the light of its great ongoing effort to favour the environment starting from the 1970s, Epson began to study the Life Cycle Assessment of its products in the year 2000; the main objective being to evaluate their impact on global warming during their entire life cycle (Life Cycle Assessment).

This entails the design, planning and production of environmentally friendly materials and products, together with an efficient and rational distribution and use on the part of the client, including their collection and recycling when their usefulness is over.

In addition, we began using LCAs in LIME in 2004. LIME: Life cycle Impact assessment Method based on Endpoint modelling; a technique that enables the social costs (environmental impacts on ecosystems, etc.) of the production, sale, use and disposal of products to be assessed in monetary or other terms. Using Eco-Leaf data as the basis for these evaluations, we apply LCAs in a wide range of areas, including assessments of new products versus old, assessments of carbon dioxide abatement equipment in our device businesses, and assessments of processes improved through the application of industrial inkjet systems.

The following activities will be pursued by the entire Seiko Epson Group in keeping with our Environmental Philosophy:

1. Creating and providing earth-friendly products

2. Transforming all processes to reduce the burden on the environment

3. Recovering and recycling used products

4. Sharing environmental information and contributing to regional and international conservation efforts

5. Continually improving the environmental management System

Environmental programs that bring both ecological and economic benefits

Epson links ecology and economy by identifying indicators of environmental and business efficiency and using these to determine macrolevel direction for its environmental activities. This mindset is important for boosting the motivation of its designers and for promoting environmental activities both within and outside the company.

Epson has established two types of indicators - business indicators and product indicators - and in its calculation logic it uses the quantitative data required for LCA to supply environmental impact figures.

Epson introduced an environmental and economic efficiency indicator in 2006. The indicator is a value found by calculating the business value versus a given environmental impact, and the result is used for qualitative improvements in our environmental management.

$$\text{Environmental \& Economic Efficiency} = \frac{\text{Consolidated net sales}}{\text{Environmental impact (}CO_2\text{ emissions)}}$$

For global warming Epson is aiming for a 50% improvement (a factor of 1.5) in environmental and economic efficiency (as measured by environmental impacts from manufacturing plants and from transport) by the end of FY2010, using fiscal 2004 as a benchmark. In FY2007 our global warming factor was 1.1. Epson will continue to monitor and analyze these trends, and to verify the suitability of management policies from an environmental perspective.

Product life cycle stages

Epson sums up the phases of the products' life cycle in the following activities:

1. Think: Design products with thought toward the entire life cycle

2. Choose: Use environmentally considered materials

3. Create: Create useful products with a minimum of materials and energy

4. Prevent: Unnecessary emissions

5. Deliver: Transport products efficiently

6. Use: Minimize user burden

7. Use wisely: Recycle end-of-life products as a re-source

Think & Production: the *Life Cycle Inventory* (LCI)

The LCI analysis methods used in the device business are a distinctive feature of Epson's LCA activities. Epson proceeded to gather quantitative data showing the environmental impact of its device products, from the first moment in production to the delivery. With the support of JEMAI, Epson took the Architectural Institute of Japan database, which is based on inter-industry relations tables, and created its own version by adding 258 varieties of basic units original to Epson. Together with the existing information this gave a total of 281 varieties of basic unit and enabled the Company to derive data on environmental impact from chemical agents and other substances.

Choose: the green purchasing of production materials

Working with suppliers to control product substance content

In line with its environmental policy, Epson aims at building and supplying products that respond to the precise needs of the environment. When choosing the components and raw materials of our products, Epson opts for those that have the lowest possible impact on the environment.

a) Maintain 100% of green production supplies based on global standards

We buy green production materials (including all components, raw materials, packaging materials, and OEM products used in our products) based on the same standards around the world and have maintained a worldwide green purchasing rate of 100% since the second half of fiscal 2004.

We updated the SEG (Green Purchasing Standard) for Production Materials in April 2008, driving our assurance system across our supply chain, from first-tier suppliers all the way back to raw materials manufacturers. Assuring that harmful controlled substances are not included in our products requires the building and maintenance of a system that reaches beyond Epson to encompass suppliers. We ask our suppliers to provide declarations stating that the materials they deliver to us do not contain banned substances, that banned materials are not used in their manufacturing processes, and that they build and maintain their own assurance systems to ensure compliance with product content restrictions. As part of our trade terms, we also require our suppliers to provide information on the substances being included in and eliminated from each type of material delivered to us.

b) Avoid the presence of dangerous substances

To maintain product quality, Epson maintains a database containing chemical substance data collected from suppliers. A full-time staff of about 800 verifies the systems employed by suppliers at their manufacturing sites in Japan, China and throughout the ASEAN countries. Our staff randomly samples the production materials delivered to us to ensure that materials have not been contaminated through commingling. As of April 2008, we have verified the systems of some 2,000 companies in our supplier base.

In brief: Green production material purchasing flow

Supplier part approval conditions

Supplier agrees to maintain a system that assures compliance with product content restrictions.

> Provide declaration that delivered product does not contain banned substances

> Agree not to use substances banned from manufacturing processes

> Agree to build and maintain a system to assure compliance with product content restrictions

Production material approval conditions

Provide information on substances included in products

> Information on controlled substances included in products

> Information on the elimination of substances to be eliminated from products

Purchasing

Distribution: reducing CO_2 from transportation

Using methods recognized under the Revised Law Concerning the Rational Use of Energy, Epson has been monitoring its shipping volumes, energy usage, and CO_2 emissions while working to thrink its environmental footprint with the aim of reducing emissions by 1% versus the previous year per unit of sales. In FY2007, CO_2 emissions from transport within Japan totaled 13,000 tons, 8.8% lower than in FY2006 per unit of sales. The challenge for FY2008 will be to also cut total CO_2 emissions from transport, including international transport, by 5% more year over year.

We have been gathering logistics data since FY2006. In the interest of greater efficiency, we have partially automated the process based on shipping histories and the like. We will gradually expand the scope of automated data compilation and improve data accuracy.

In FY2006, air transport accounted for about 70% of our total domestic and international CO_2 emissions from transport. Working with our affiliates around the world, Epson is making the modal shift from air to marine transport. Thanks to such efforts, in FY2007 we were able to reduce CO_2 emissions by about 30,000 tons compared to last year.
The shipment to Europe by sea of the supplies coming from the Asiatic factories, that till now have been concentrated on the Netherlands continental warehouse and then redistributed to the various countries' dealers, have been shown to be very expensive because of the great number of national distribution routes. That's why the new deliveries are handled by shipping them directly form the Asian factories to the dealers' countries, organising the purchase of these supplies according to the shipments requiring the longest time period. Thus eliminating useless storage periods in the central warehouse and the successive single shipments that are more costly both economically and environmentally speaking.

In Europe, Epson ships 99% of its goods over land. Therefore, anything that makes truck transportation more efficient lowers our CO_2 output. As a way to solve the CO_2 problem, Epson Europe B.V. (Netherlands) introduced double-decker trucks in Europe in place of conventional trucks. The separate upper and lower decks of these trucks increase loading efficiency, carrying a combined 54 standard pallets of goods, compared to just 33 in a conventional truck.

Having the split deck does mean that full pallets can be no higher than 180 cm, but this has not been a hindrance, since customers were already asking that pallets be no more than 180 cm high and some products do not allow stacking.

Thanks to the double-decker trucks, Epson has been able to shrink its fleet of trucks in Europe by 40% while carrying the same volume. This is one example of an initiative that benefits the environment while simultaneously cutting costs and enhancing customer satisfaction.

Double-decker trucks shrink CO_2 footprint in Europe Beds of a double-decker truck

Boosting efficiency of transportation: a Japanese example

Our logistics company Epson Logistics (Nagano Prefecture), with the cooperation of our business partners, is cutting CO_2 emissions by adopting hybrid vehicles, using digital tachographs (a digital tachograph is a recording tool that automatically stores a vehicle's operation history - speed, time, engine RPMs, number of sudden accelerations, etc. - on a memory card or other storage device) and promoting Eco-Drive or ecofriendly driving habits.

Initiatives such as these saved 45 tons of CO_2 emissions in FY2007.

The smarter Supply Chain of the future

Elio Cutino - Partner, Supply Chain Management, IBM Global Business Services

The world's physical and digital infrastructures are converging. We can now measure any activity or process thanks to cheaper and more reliable sensor technologies. These devices can communicate and cooperate each other directly, without human interaction. We can now connect whole systems, not just supply chains with other supply chains, but with transport systems, financial markets, electricity networks, as well as with natural systems like meteorological conditions or rivers.
Every record from a group of intelligent devices can lead to action and better value. Thanks to this new incorporated intelligence, supply chain management can progress the decision-making support to the delegation of decisions and, finally, to the ability to make predictions. These are the major and widespread changes, which also innovate the way in which the procurement department operates, increasing its interconnection with other business departments and with the worldwide external supply network. This is why we consider important to share these thoughts with the Procurement Department.
In this context we can see a different type of supply chain coming out, one that is smarter and based on three main features:

Technology
Sensors, RFID tickets, measuring instruments, actuators, GPS and other devices and systems, increasingly generate information about the supply chain. In terms of visibility the supply chain will not just be able to 'see' more events, but also to be 'present' when they occur. Less manual monitoring and tracing will be necessary because those information will come from sea and air transport vehicles directly and from products and components themselves. Control panels on the devices give a real time picture of the current state of schedules, commitments, supply sources, stocks and customer requests.

Interconnected
These unprecedented levels of interaction assist this smarter supply chain not only in terms of relations with customers, suppliers and information systems, but also in monitoring products as they pass through the entire chain. Besides creating a holistic vision of the supply chain, such extensive interconnection facilitate large-scale cooperation. The worldwide networks of supply chains will be able to plan and take decisions collectively.

Intelligent
Intelligent systems will assess a myriad of limits and alternatives, enabling decision makers to perform simulations and define the best operational scenario. A smarter supply

chain will be able to acquire information and take a number of decisions autonomously. For example, it should be able to offer or automatically reconfigure a distribution network when there has been an interruption and to acquire the right to use physical assets such as production capacity, distribution structures and means of transport via virtual exchanges such as e-auctions or marketplaces. This intelligence will be used not only to take real time decisions, but also to predict the future. Equipped with sophisticated simulation or modelling capabilities, the smarter supply chain will cross over from the old 'sense-and-respond' to the new 'predict-and-act' system.

Why build a smarter supply chain?

Why are we so convinced that the supply chain needs to become smarter when the basic enabling technologies have been available for some time? Why such a radical change now, when there is so much uncertainty about the future?

Actually, this is the crucial question. Globalisation and the growing interdependence of the supply chain have introduced a higher level of volatility and vulnerability that is difficult to reduce. Uncertainty has become the rule. This new environment requires a different type of supply chain, one that is faster in adapting to changes on demand and to reconfiguring the components of the entire chain. In a few words, it needs to be smarter.

In this context that promotes changes, supply chain managers have to review their strategies and the initiatives pursued by their companies. Which investments make the processes faster and more effective? And which ones enable a step forward, that is to make the supply chain substantially smarter and more 'resilient' in a time of unprecedented instability and risk?

Managers have all the instruments needed to transform and innovate their supply chains. The IBM study: 'The Smarter Supply Chain of the Future' based on more than 400 interviews worldwide conducted in 2008, showed up an even more important dimension : managers are determined to turn the supply chain into a key success factor of the strategic development of their companies; they acknowledge the importance of their role and are enthusiastic about the opportunity of making significant changes.

There is rapid evolution in opinions and currents of thought about the concept of the intelligent supply chain and the commercial opportunities enabled by this type of integrated technologies.

An example of the need of a smarter supply chain: sustainability

The challenges posed by sustainability, such as the management of waste, water and energy, are incresasing concerns that affect almost every aspect of supply chain management, from the type of products offered to the means of production, distribution and disposal at the end of their life cycle. More than half of the managers interviewed have changed the design or packaging of a product to take count of environmental requirements. Their supply chain strategies have included sustainability initiatives and they have set goals for carbon dioxide management as part of their production targets. However, only a small number have extended the sustainability targets to their second and third level suppliers. And only 25% have chosen suppliers for transport, storage and distribution considering emissions or energy consumption as a selection criteria.

There are notable geographical differences in the levels of maturity achieved. In Europe over the last five years, European Union regulations, like the REACH system, the RoHS directive and the emissions trading scheme, have placed strategic attention on

sustainability. In the Asia-Pacific region, suppliers are mainly selected on the basis of sustainability criteria, probably due to the environmental impact of their increasing activities, now directly visible in the air, soil and water.
This increased attention beyond the United States and Canada may be a signal that the companies in these countries were awaiting stronger action and incentives from their own governments. Indeed, geographical differences will soon be eliminated thanks to Japan and Australia's relatively recent environmental regulations and to the growing state and regional initiatives undertaken by the United States and Canada. Companies in the supply chain that do not face up to problems of sustainability are in danger of being left behind by customers who demand greater environmental responsibility and by governments that require respect for such demands.

How to build a smarter supply chain today?

Supply chain involves many areas of activity on a daily basis: from demand to production planning via increasingly sophisticated purchasing approaches and expenditure control.
Certainly in an increasingly competitive market, the logistic and production optimization as well as the purchasing rationalization play an essential role in the achievement of the final result, which is, better products/services at lower prices.
IBM is investing in this since many years, integrating assets (solutions) and skills (people) in order to support a multidisciplinary approach to the supply chain, through specific offerings. The deployment of application solutions that use Business Intelligence tools to process expenditure 'analytics' are, as an example, a proposed method to rationalize the purchasing costs in the procurement area. Only with a massive use of Business Intelligence is possible to identify specific categories and to perform the most suitable actions that really can contain expenditure, while ensuring excellent levels of service.
The use of Business Intelligence, such as 'engines' and mathematical algorithms developed to optimise the management of flows and stocks, is a practical mean of creating a smarter supply chain.