

THE STRATEGIC ROLE OF PURCHASING MANAGEMENT IN THE KNOWLEDGE BASED SOCIETY

Lecturer PhD Corina POP SITAR
Fellow of Romanian Academy, Iasi Branch
Email: sitarcorina@yahoo.com

Abstract:

We are now at the beginning of a new era, the industrial society has become a service society and is on the way to become an information and knowledge society. Because of the fearful competition on the marketplace, organizations are giving more attention to the value concept. Purchasing is the function that has a tremendous impact on these efforts to create value in the organizations. Many of the researchers see purchasing as a strategic contributor to the added value of the organizations. But only a few articles discuss the possible value added by purchasing. With this article we want to fill this gap and review the strategic concepts of value added by purchasing management. Furthermore, this article presents the main value added by purchasing along its evolution stages. Finally, we draw conclusions and we elaborate some guidelines for managers.

Keywords: knowledge based society, purchasing management, value added, management decision

Peter Druker used for the first time the term "knowledge society" in 1969 but it was better defined by Mansell & When (1998) and Stehr (1994). We can find the keys to knowledge society following the steps of what we call the information society, heading towards a much more collaborative global world of knowledge sharing: a globalization of knowledge.

Nowadays, in the knowledge society, purchasing management has become one of the most important tool for improving the profitability of organizations. This reputation was earned because of the important contributions that purchasing management has on organizations:

- the major impact on costs reduction
- the major impact on improving quality.

Until reaching the current stage of development and receiving recognition from managers, purchasing function has through several stages.

Our paper starts with the presentation of the evolution of purchasing. Next, we present the strategic role of purchasing management in organization. Based on a literature review we synthesized the main value added by purchasing management to organizations. At the end of the paper we present the impact of the new developments on purchasing management and we draw conclusions.

The evolution of purchasing management

Till 1970, purchasing managers was perceived only as ordering products and purchasing was bordered in the purchasing department. The purchasing function was not perceived as a strategic function of the organization and the employers of the purchasing department were not seen as potential employers, but on the contrary, it was thought that they would end up working there forever.

Nowadays, purchasing costs have become an important part of the total costs of organizations and purchasing function is becoming a strategic function for organizations. Also, purchasing management is receiving more attention and recognition from the media, companies and researchers.

Interest in purchasing management goes in waves. Although purchasing was always considered an important function in organizations, very little has been done to formalize its role before the nineteenth century. The greatest interest in developing purchasing occurred in the United States after 1850, a time when American railroads were booming. Thus in 1866 was formed the first purchasing department within Pennsylvania Rail Road Company.

In 1887 appears the first book on purchasing management. The book deals with purchasing issues that present interest even today, such as: the need for centralized purchasing department, lack of attention to staff selection for the position of purchasing agents, etc. By the end of the 1800s, purchasing began to be reported as a separate function of organization which requires specialized expertise.

In 1905 appears a new purchasing book which is not related to the railway system as the previous one. After this moment, the number of publications on purchasing is significantly increases. In 1915 was founded the first association of purchasing in the United States as NAPM (National Association of Purchasing Management). At the same time appeared the first purchasing magazines.

The next period is called by Henderson (1975) "purchasing myopia" because the importance and recognition of the purchasing function is considerably reduced. Only after the second half of the 20th century the importance of the purchasing function is globally recognized.

The oil crisis from 1973 determined managers to pay more attention to suppliers and purchasing was no longer considered just an administrative function. In 1980, the competition on the car manufacturers was fierce and the Japanese producers have managed to get significant market shares. In addition, companies face serious census in the early 1980s. Management used then purchasing function to ensure procurement of best raw materials, goods and services. In the last years, researchers have studied issues related to the increasing strategic importance of the purchasing function.

Thus, purchasing management has passed through several stages over time (see figure 1). In the first stage, purchasing management was focused only on the supply of raw materials necessary to carry out the production process and purchasing was considered only an administrative function.

In the next stage, purchasing is receiving a commercial orientation due to the achievement of short-term profit by negotiating prices and selecting the suppliers which offered the lowest prices.

In the third stage, purchasing had a logistic orientation which aimed at obtaining the smallest total cost of purchasing through the optimization of the purchasing process. Nowadays, purchasing management has a strategic orientation and contributes to the achievement of long term benefits.

In table 1 you can observe some of the differences between the purchasing as an administrative function and as a strategic function. It has been changed also the way managers look at the purchasing function. This is visible through the hierarchical position occupied by the purchasing function in the structure of organizations. Thus, if the purchasing is seen only as an administrative function, it does not occupy an important place, only a low position in the organizational structure.

If is viewed as a commercial function, purchasing is reporting directly to the top management. If purchasing is part of the logistics, it is integrated with the other functions in the organization.

As purchasing becomes a strategic function, it is represented in top management of the organization.

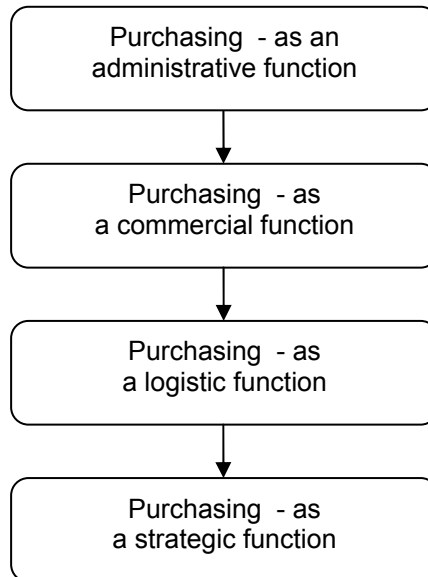


Figure 1. The evolution stages of purchasing

Table 1

The main differences between the purchasing as an administrative function and as a strategic function

	Purchasing (as an administrative function)	Purchasing (as a strategic function)
<i>Strategy</i>	Departmental plan	Business plan
<i>Decizion</i>	Fragmented decisions	Decisions based on total cost analysis
<i>Systems</i>	Simple IT system	Advanced and integrated IT system
<i>Employees</i>	Without special education	Higher commercial and technical education

The strategic role of purchasing management in organizations

In the value chain developed by Porter (1990) purchasing is placed within the supporting activities of organizations and is closely integrated with the human resources management, finance, planning and technological development activities (see figure 2).

Porter's concept on value chain can be described by the following:

- within an industry, more organizations can produce similar or identical goods and services;
- an organization can gain a competitive advantage over other organizations adopting one of the following strategies: product differentiation or cost reduction;
- the activities of an organization can be divided into five direct activities (logistics of inputs, processing, logistics of outputs, marketing and sales, after sales service) and four supporting activities (organization infrastructure, human resource management, technological development, purchasing management);
- each of these activities can help to create competitive advantage through the production, sale and distribution of products or services that meet or surpass the expectations of buyers compared with the products on the market.

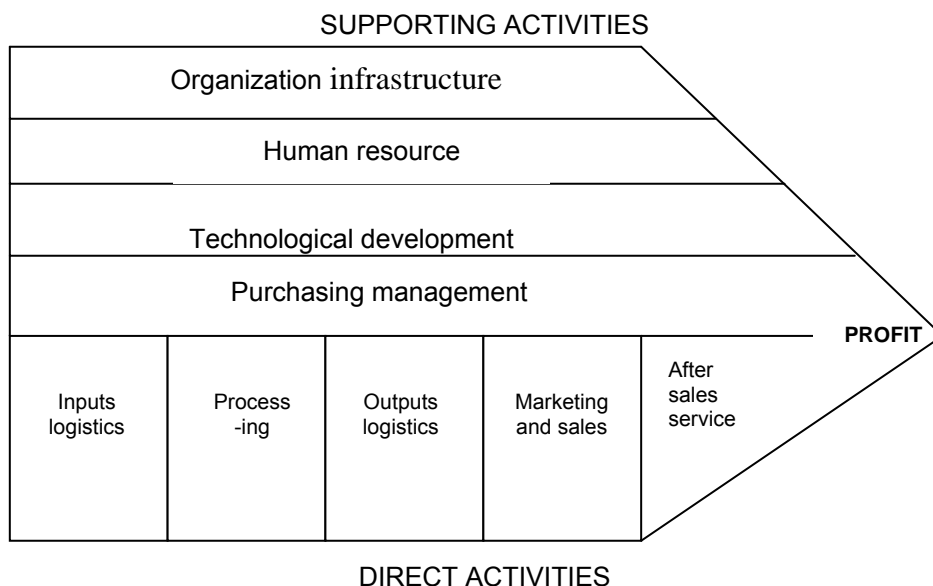


Figure 2. The value chain

Source: Porter, M., *The competitive advantage of nations*, Mac Millan Pres Ltd., 1990

Purchasing is interacting and is close related with the other eight activities and has an enormous potential to enhance competitiveness of the organization. Purchasing contribution is

not limited to reduce costs and may include also the followings:

- identify the goods or services whose acquisition is problematic for the organization in order to assure the continuity of production;

- assisting in taking strategic decisions for the organization;
- building long-term relationships with suppliers;
- improving administrative procedures of the purchasing process through adopting new IT technologies;
- improving the skills of the employees from the purchasing department through training courses.

The supposed increased importance of the purchasing function is most notably reflected in the growing share of turnover organizations spend on paying their suppliers for delivering all kinds of products and services.

Plaiaș (2006) reported for the Romanian economy that the average of the purchasing value for goods and services from the company turnover is 62%. He also demonstrated that the savings made in the purchasing process of goods and services can contribute directly to the organization profit. So, if the price paid for the goods and services purchased can be reduced without being affected the quantity, quality and delivery conditions, then the savings contribute to profit growth.

Leenders and Schiele (1999) take a broader view of the values added by the purchasing department and classify them into four main categories:

- values added to the organization (for e.g. improved performance, controlled costs, etc.)
- values added to the purchasing process (for e.g. purchasing process facilitation, and more defensible supplier evaluation, etc.)
- values added to the specifier (for e.g. better understanding of their needs, having available an extra resource to rely on, having access to information about the market place and the service, etc.)
- values added to the supplier (for e.g. helped them understand what was needed and how they could improve themselves, etc.)

Based on the literature review we have selected main categories of values added by purchasing and we classified them along with the evolution stages of purchasing (see table 2).

Table 2

The main value added by purchasing along the evolution stages

<i>Purchasing – an administrative function</i>	<i>Purchasing – a commercial function</i>	<i>Purchasing – a logistic function</i>	<i>Purchasing – a strategic function</i>
-assure the continuity of supply	- savings -price reduction -improved efficiency of the purchasing process	-savings -cost reduction -shorter lead time -cross unit coordination -reduction of internal cost	-closer and more cooperative relations with the suppliers -improved information systems -early

Porter (1990)	Fearon and Bales (1993)	operation -improved purchasing efficiency -improved lines of communication -reduced total system costs Butler (1995) Dobler and Burt (1996) Lamming et al (1997) Lysons (1996) Plaias (2006)	involvement in the new product development -improved competence of the purchasing staff -satisfaction of the end customer Leenders and Schiele (1999) Axelsson, B. and Wynstra, F. (2002) Weele (2010)
---------------	-------------------------	--	---

As you can notice when purchasing is an administrative function the main value added was to assure the continuity of supply. As purchasing becomes a commercial function it can provide more value added such as: savings, price reduction and improved efficiency of the purchasing process. In the next evolution stage purchasing is able to provide new value added: shorter lead time, cross unit coordination, reduction of internal cost of operation, improved lines of communication and reduced total system costs. In addition to these value added purchasing as a strategic function can provide also: closer and more cooperative relations with the suppliers, improved information systems, early involvement in the new product development, improved competence of the purchasing staff and satisfaction of the end customer.

Cousins and Lamming (1997) consider that the evolution of purchasing to a strategic function of the organization has been driven by improvements in information technology, globalization of businesses and the need for organizations to become truly lean in order to remain competitive.

The impact of new developments on purchasing management

The new developments from the international business place have a strong impact on purchasing management. We mention some of the new discoveries that affect purchasing management:

- the globalization of trade
- the continuously changing of consumer requirements

- the increased number of secondary activities outsourced
- the new organizational forms of companies
- the Internet and the emerge of E-procurement.

The globalization of trade

Globalization of trade and increasing international competition are considered to be consequences of the following factors: cross-cultural mixing, improving transport possibilities, revolutionary discoveries in the field of IT, etc. An important consequence of these findings is not only the increased potential of clients, but also the increase of potential suppliers.

The continuously changing of consumer requirements

Due to the increasing diversity of products, consumers become more sophisticated and their needs are changing continuously. This translates into a continuous pressure for organizations to create competitive products. As a result, organizations will transfer the pressure faced by consumers to their suppliers. Therefore, choosing the best supplier is becoming increasingly important, but also more difficult because more factors have to be taken into account.

The increased number of secondary activities outsourced

The increased number of secondary activities outsourced involves: more decisions, criteria, alternatives and actors. There are numerous books and articles presenting organizations that tend to focus more on core activities and subcontract (outsource) secondary activities. Also, secondary activities that were until recently made by the organization began to be outsourced (sub-contracted) from suppliers who provide such activities.

We mention some of the reasons for subcontracting secondary activities:

- reduce the need for investment capital;
- reduce costs by obtaining discounts from suppliers;
- accelerating the creation and development of new products;
- access to the inventions and innovations of the suppliers;
- focus resources on core activities that are more important for the organization.

Some researchers (van Weel and Rozermeijer, 1996) consider that sub-contracting will take extreme forms in the future. In addition, this will happen also for government organizations (public transport, utilities, etc.). This will affect the purchasing decisions. First, total purchasing costs will increase in organizations. Second, the growth of sub-contracted activities will involve a higher frequency of purchasing decisions.

The new organizational forms of companies

New organizational forms of companies lead to more people that are involved in the purchasing decision and also require a more rapid process of decision making.

An important change in the structure of organizations is the transition to smaller organizations with few hierarchical levels (Carter and Narasimhan, 1996). New organizational forms are necessary to adequately respond and benefit from new discoveries that have been discussed previously. In the new organizational forms, the purchase decisions will not be taken by one person, but by a team and the number of people involved in the purchasing process will increase. The new organizational forms will require a very fast exchange of information so that the decisions to be made in shortest time possible.

The Internet and the emergence of E-procurement

The emergence of the information society is based on the spectacular growth of Internet and other IT technologies. Internet is expected to continue to change society and business and, of course, will have an important impact on purchasing management. Although there are some technical barriers and some doubts about the security of transactions made on the Internet (e.g. online payments), it serves to achieve various objectives of purchasing specialists (market research, formulating specifications, seeking information about suppliers, etc.).

The advent of E-procurement and other information technologies enlarges more and more the kinds of values that purchasing department can add to the company, because:

- the purchasing department transfers the operational activities to the users and concentrates on strategic and value adding activities;
- they streamline the entire purchasing process and eliminate all non-value adding activities;
- they offer the possibility of a tighter control over the entire process;
- they offer powerful databases which hold all supplier details and end-users profiles, track all activities and enable the provision of comprehensive and flexible management reporting;
- etc.

Most of the purchasing researchers see E-procurement as a

strategic contributor to the added value of the organizations. The main value added by E-procurement reported by several researchers (Croom and Brandon-Jones, 2007; Arbin, 2002) is reduced costs through various ways, including the followings: improved internal efficiency, cut supplier costs, reduce order error rate, minimized 'maverick' buying, etc

The main value added by E-procurement reported by several researchers (Monczka et al, 2009 ; Arbin, 2002) is reduced costs through various ways, including the followings: improved internal efficiency, cut supplier costs, reduce order error rate, minimized 'maverick' buying, etc. For organizations is most important to concentrate when implementing E-procurement on achieving these value added.

Davila et al. (2003) not only mentioned the value added of implementing E-procurement but also ranked them. According to their research, the first six value added of E-procurement arranged in rank order were:

- purchasing transaction costs;
- purchasing order fulfillment time;
- increased number of suppliers;
- purchasing cycle time;
- price paid for goods decrease and headcount to support purchase transactions.

Based on a literature review we tried to summarize the main value added by E-procurement (see table 3).

Table 3**The main value added by E-procurement**

The main added value added by E-procurement	Mentioned in literature by:
<p><i>Operational value added</i></p> <ul style="list-style-type: none"> • Costs savings • Time savings • Improved efficiency of the purchasing process • Reduced operating and inventory costs 	<p>Subramanian and Shaw (2002)</p> <p>Knudsen (2003)</p> <p>Weele (2010)</p> <p>Egber and Tookey (2004)</p>
<p><i>Strategic value added</i></p> <ul style="list-style-type: none"> • Greater management influence and control over purchasing process • Increased purchasing power of the purchasing specialists • Improved commercial relationships with suppliers • Increased profit margin • Gaining competitive advantage 	<p>Knudsen (2003)</p> <p>Kalakota et al. (2004)</p> <p>Hawking et al. (2004)</p> <p>McIntosh and Sloan (2001)</p> <p>Wong and Sloan (2003)</p>

We choose to classify the main value added by E-procurement according to their strategic importance into:

- operational value added
- strategic value added.

The implementation of E-procurement can also bring a series of disadvantages but it is very important

for organization to concentrate on achieving these value added when implementing E-procurement.

Conclusions

We consider that the changes appeared in purchasing management were determined by several causes. In some cases the purchasing

responsibilities were transferred to the other departments and operational activities of purchasing are executed by the departments in which there is a need for a specific good or service.

Also, the purchasing function not only handles the ordering, negotiation and contracting phases of goods and services required, but also the development of close collaborative relationships with suppliers and the support systems to enable direct ordering of goods and services to their users from suppliers. As a result of transferring some of the responsibilities to users, the purchasing department has more time to focus on strategic issues, on developing close relations and cooperation with the suppliers, on the involvement in the creation process of new products and on integration purchasing strategy with strategy of the organization. Therefore, the role of purchasing has changed from a purely administrative function to one of strategic importance to the organization.

Another cause is the trend of organizations to decentralize and purchasing department becomes closer and can communicate easily with customers and suppliers unit.

We have to mention also that nowadays the purchasing activities are spread throughout the entire organization and technological developments (Internet, online product catalogs, E-procurement) enable internal customers to order themselves the goods and services they need.

Managers have to take into consideration all these changes and they have

to treat purchasing as a strategic function of the organizations. Only in this way purchasing will be able to provide more value added to the organizations. Managers have to adopt special measures in order to support and encourage value-based purchasing.

We suggest managers to identify the main value that can be added by the

purchasing department and to determine the best purchasing strategies in order to achieve all these value added. Also, they need to develop a performance measurement system which emphasizes quality and customer satisfaction and to focus individual purchasers on customers' needs and identify value-adding processes. Managers have to educate not only the employers from the purchasing department but also the people from the other departments from the organization who buy special goods and services and they should evaluate periodically the results and take corrective actions when necessary.

As the information society evolves through the knowledge society, the need to understand E-procurement practices becomes more important. Managers have to look at E-procurement as a strategic contributor to the added value of the organizations. E-procurement can offer many benefits to the organizations but in the same time there are also barriers of the implementation of E-procurement. The implementation process can be a difficult task for managers and therefore they have to plan it very carefully.

A large number of E-procurement applications are available on the market and it could be hard for managers to know what application to choose and implement. Before adopting E-procurement, managers have to analyze carefully what are the main value added by E-procurement and what is the impact of implementing a form of E-procurement over the company. They have to take into consideration also the main barriers of the implementation process of E-procurement.

Only after a careful analyze of all these issues managers have to take a decision regarding the adoption and implementation of an E-procurement form.

„ACKNOWLEDGEMENT: This paper was made within “The Knowledge Based Society Project: research, debates, perspectives” supported by the Sectoral Operational Programme Human Resources Development (SOP HRD), financed from the European Social Fund and by the Romanian Government under the contract number POSDRU ID 56815.”

REFERENCES

- Aberdeen Group (2001), *E-procurement: finally ready for the prime time*, USA, vol. 14(2).
- Arbin, K. (2002), “E-procurement maturity in industry”. *Proceeding of the 11th IPSERA Conference*, University of Twente, Enschede, 21-32.
- Axelsson, B. and Wynstra, F. (2002), *Buying business services*, Chichester: Wiley.
- Bales, W. A. and Fearon, H. E. , (1993) ”CEOs. / Presidents. perceptions and expectations of the purchasing function”, *CAPS Report*, NAPM.
- Boer, L., Harink, J. and Heijboer, G. (2002), “A conceptual model for assessing the impact of electronic procurement”, *European Journal of Purchasing and Supply Management*, vol.8, no.1: 25-33.
- Burt, D. and Dobler, D. W. , (1996), *Purchasing and supply management*, The McGraw-Hill Companies, Inc.
- Butler, R., (1995), “What you measure is what you get: an investigation into measurement of the value added by the purchasing function”, *Proceedings 4th IPSERA Conference*, University of Birmingham, England, 1-14.
- Carter, P.; Monczka, R.M. et al., (1998), “The future of purchasing and supply: a five and ten year forecast”, *CAPS report*, NAPM.
- Carter, J.R. și Narasimhan, R. (1996), *Purchasing and supply management: future directions and trends*, *CAPS Report*.
- Croom, S. and Brandon-Jones, A. (2007), “Impact of E-procurement: experiences from implementation in the UK public sector”, *Journal of Purchasing and Supply management*, 13, 294-303.
- Davila, A. et al.(2003), “ Moving procurement systems to the internet; the adoption and use of E-procurement technology models”, *European Management Journal*, vol. 21, No. 1, 11-23.
- Drucker, P. (1969), *Preparing Tomorrow's Business Leaders Today*, Englewood Cliffs, N.J.: Prentice Hall.
- Dumond, E.J., (1994), “Moving toward value-based purchasing”, *International Journal of Purchasing and Materials Management*, Spring, 3-8.
- Egber, C. and Tookey, J. (2004), “The role of knowledge management in E-procurement initiatives for construction organizations”, *Proceedings of ARCOM 20th Annual Conference*, Heriot Watt University, vol.1: 661-671.
- Ellram, L. M. (1994), “ Strategic purchasing: a history and review of the literature”, *International Journal of Purchasing and Materials Management*, Spring, 10-18.
- Hawking, P. et al. (2004), “E-procurement: is the ugly ducking actually a swan down under?”, *Asia Pacific Journal of Marketing and Logistics*, 16(1): 3-27.

- Kalakota, R. et al. (2001), *E-business 2.0: Roadmap for success*, the 2nd edition Addison-Wesley Publishing Company, New Jersey, USA.
- Lamming, R.; Cousins, P; Frewer, R., (1997), "Competency development for strategic Purchasing", *Proceedings 7th IPSERA Conference*, Italy, T6/1-1 T6/1-17.
- Leenders, M.; Schiele, J.J., (1999), "Meaningful involvement of a public sector purchasing department: the case of consulting services", *Proceedings 9th IPSERA Conference*, London, Ontario, Canada, 672-683.
- Mansell, Robin and Wehn, Uta.(1998), *Knowledge Societies: Information Technology for Sustainable Development*, New York: Oxford University Press
- McIntosh G. & Sloan, B. (2001), "The potential impact of electronic procurement and global sourcing within the UK construction industry", *Proceedings of ARCOM 17th Annual conference*, University of Salford, .231-239.
- Monczka, R.M., et al. (2009), *Purchasing & Supply Chain management*, Cengage Learning, South Western.
- Plăiaș, I., (2006), *Marketingul achizițiilor*, Editura Risoprint, Cluj-Napoca.
- Porter, M. A. , (1985), *Competitive advantage*, The Free Press, New York.
- Porter, M. A. (1995), *Competitive advantage*, The Free Press, New York.
- Porter, M. A. , (1990), *Competitive advantage of Nations*, The Mac Millan Press Ltd., London
- Stehr, Nico (1994), *Knowledge Societies* , London: Sage.
- Subramanian, C. & Shaw, M. J. (2002), " A study of the value and impact of B2B e-commerce: The case of Web-based procurement", *International Journal of Electronic Commerce*, 6(4): 19-40.
- Weele, A.J.van și Rozemeijer, F (1996)., *Revolution in purchasing*, Philips Electronics, Eindhoven, 1996.
- Weele, A. van. (2010), *Purchasing Supply Chain management*, 5th revised edition, Cengage Learning, London.