STRATEGIC APPROACH TO PURCHASING MANAGEMENT IN SMALL & MEDIUM SIZE ENTERPRISES

Focus on Supplier Selection and Supplier Development Functions

Maria Zazulina

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Master’s Thesis in Logistics and Innovation Management
Abstract

Historically small and medium size enterprises have been playing a major role in western economies for years. The importance of SME for developed economies is obvious from statistic data. In instance, according to European Commission annual report on SMEs in 2008, in European Union there were over 20 million enterprises where about 99.8 % of them were small and medium size enterprises. Taking into account importance of SME for economy, it becomes necessary to pay careful attention to academic studies of management practices in small to medium size enterprises.

In our days, strategic purchasing is one of the foremost discussed topics of business development. Carr A. (2002) states that since the mid of 80th, strategic role of purchasing has continuously been in the focus of attention in academic and trade journals. However, despite of growth popularity of strategic approach to purchasing management, there is low amount of analysis on hybrid theme of purchasing management in SMEs.

Thus, realizing the importance of small to medium size enterprises for national economies and understanding strategic purchasing management as the competitive advantage of the business, the purpose of current master thesis project is to analyze implementation of strategic purchasing and its supplier selection and supplier development functions in SME.

In order to accomplish the research purpose, the analysis includes the profound literature on the studied topic; moreover additional effort is put to research the achievements of previous studies on purchasing management in SMEs. Finally, the empirical study of strategic purchasing in small to medium enterprises is performed through interviews with 5 (Five) top managers of small firms operating in Russia. Obtained primary data results are compared with secondary data, so that, cross regional comparison on implementation of strategic purchasing in SMEs of Russia, Denmark and United Kingdom was performed.

During the research, the following conclusions were obtained. Cross regional comparison indicates similar level of implementation strategic purchasing, supplier selection, and supplier development functions in SMEs of studied countries. Different share of SMEs in economies of these countries does not impact on strategic purchasing practices. Small and medium size firms show partial implementation of strategic purchasing principles.

Supplier selection in small to medium size enterprises is performed mostly in traditional way. No methods on rationalization of supply choice are held. Meanwhile, supplier development programmes are practiced broadly by SME. Small to medium size enterprises tend to undertake “indirect” supplier development programmes. Therefore, SMEs’ purchasing management consists of both traditional and strategic elements in their practices. Furthermore, such elements of strategic purchasing as top management involvement, cooperation with other functions in organization management, close collaborative and long term relations with few number of key suppliers, do not take additional resources from SME, and vice versa, they benefit to complement short internal resource by external in more efficient way, current research concludes that strategic approach to purchasing management is suitable approach to purchasing management in small to medium size enterprises.
Acknowledgements

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At last but not at least I would like to thank all interviews' respondents who found time to go through interview questions and give light on the studied topic.

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Maria Zazulina
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List of abbreviations

AHP Analytical hierarchy process
CEO Chief executive officer
DEA Data envelopment alternative
EU European Union
ISM Interpretive structural modeling approach
JIT Just-in-time
RFQ Request for quotes
SCM Supply chain management
SME Small to medium size enterprises
TCO Total cost ownership
TCS Transactional cost analysis
TQM Total quality management
UK United Kingdom
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1. Introduction

Interest to research and develop management of purchasing has been rapidly growing since the end of 20th century. Profound researches and analysis of purchasing function were developed; national and international purchasing associations were established in order to contribute and improve management of purchasing. Finally, the term “strategic purchasing” was introduced and got conceptual development in the academic literature.

In our days, strategic purchasing is one of the foremost discussed topics of business development. The change in the role of purchasing and perception of supplier source itself, was triggered by political, economical and technological factors of change, on one hand, and, was influenced by the development of such business concepts as supply chain management, just-time, lean manufacturing, and total quality management, on the another.

Purchasing function in organization can be performed in traditional or in strategic way. Recently, due to the triggers of external and internal environments, strategic approach to purchasing management in the organization is considered to be more beneficial than traditional. It is needless to say that the first practitioners of strategic purchasing were large enterprises, which were first noticing benefits from maintaining partnership supplier relations with fewer suppliers and with closer collaboration with them. Strategic supplier selection and supplier development became one of the most important tools of efficient strategic purchasing performance in the organization. Meanwhile there is no agreement on suitability of strategic purchasing to small and medium size enterprises. A number of authors (Quayle M., 2000; Zheng et al., 2004) question suitability, arguing that SME’s limitation in resources is an obstacle toward the use of strategic purchasing management. Another group of authors states that strategic approach will help small to medium size businesses to overcome resource limitation and complement limited internal resources by external one (Dollinger and Kolchin, 1986; Park and Krishnan, 2001; Gadde and Hakansson, 2001).

Meanwhile, there is low amount of analysis of purchasing management in small to medium size enterprises (Quayle M., 2000; Christensen, 2003; Ellegaard, 2006; Pressey et al., 2009). “A review of the purchasing and small company literatures demonstrates limited interest in this hybrid theme and few cross-literature synergies” (Ellegaard, 2006, p. 272). Meanwhile the studies of purchasing management in SMEs appear to be considerable contribution into academic studies. Importance of this topic is supported by the statistical data on share of SME in private sector economy of many developed countries. In instance, in European Union according to European Commission annual report in 2008 there were over 20 million enterprises where about 43 000 were large scale enterprises. Consequently, the 99.8 % of EU enterprises were SMEs. Besides, the figures over the period 2002-2008 indicate that the number of SMEs in the EU has grown faster than the number of large enterprises. The number of SMEs increased by 2.4 million and the number of large enterprises by 2 000 enterprises (European Commission, Annual report, 2009). Besides, significant amount of SMEs have high share of employment than large scale enterprises. As described by Birley and Westhead (1990), historically the small size enterprises have been playing a major role in western economies for years. Realizing the importance of small to medium size enterprises, SME’s purchasing management should receive careful attention in academic studies.

Furthermore, numerous authors define purchasing as function of obtaining competitive advantage in a firm (Heide J., 1995; Humphreys P. et al., 1997; Laios L. and Moschuris S. 2001; Sanchez-Rodriguez C., 2009). Carr (2002) states that strategic purchasing function can benefit firm to develop competitive advantage in the following ways:
- to decrease the product/service input costs;
- to perform right (according to corporate goals of organization) choice of supply source
- to establish close relationship with suppliers in order to improve the rate of quality of ordered materials and its delivery.

Considering the role of strategic purchasing as a resource which benefits to obtain competitive advantage at the market, strategic approach to purchasing management considers being useful for large scale, small and medium size enterprises.

Characteristics of traditional and strategic purchasing approaches differ in such issues as: reactive vs. proactive, short term vs. long term, non integrative vs. integrative, neglecting of purchasing function by tope management vs. top management involvement in purchasing issues.

Previously performed researches have reported that purchasing management in SME is mainly performed in the traditional way: the evaluation supplier criteria are based on price/cost and quality criteria, supplier selection process is done in reactive, ad hoc way, and supplier development due to SMEs’ lack of resources and power is thought to be of little importance (Quayle, 2000). Meanwhile, another group of researchers of purchasing practices in SME state that purchasing practices across SME significantly differs from entity to entity (Ellegaard C., 2006; Pressey et al., 2009). Morrissey and Pittaway (2004) studding purchasing management in small to medium size firms concluded that from purchasing point of view SMEs can not be considered as homogeneous group as purchasing practices within SMEs varies greatly.

Thus, realizing the importance of small to medium size enterprises for the development of national economies and understanding strategic purchasing management as the competitive advantage resource of the business, the purpose of current master thesis project is to analyze implementation degree of strategic purchasing and its supplier selection and supplier development functions in small and medium size enterprises.

This study is conducted to address the following research questions:

**Research question 1:** How strategic approach to purchasing management differs from traditional approach?

**Research question 2:** How supplier selection and supplier development functions are performed within strategic purchasing management?

**Research question 3:** How strategic purchasing and its functions perceived and followed in small to medium size enterprises?

**Research question 4:** Is there difference on perception and implementation of strategic purchasing and its functions among small and medium size enterprises in different countries, with different share of private sector development?

In order to reach the purpose of the project and fully discover research questions, the analysis includes the profound literature on the topic of strategic purchasing management, supplier selection and supplier development functions, besides, special effort is put to research the achievements of previous studies on purchasing management in SMEs. Finally, the empirical study of strategic purchasing in small to medium enterprises is performed, and the results are compared with the previous researches on the topic in cross regional way.

2. **Methodology**

The theoretical constructs are grounded on extant literature review, which mainly include the articles on the topic published within 1980 and 2010, in such academic journals as: European Journal of Purchasing and Supply Management, International Journal of Purchasing and Material Management, Journal of Small Business Management, Journal of Supply Chain Management, etc. Besides, e-library of International Purchasing and Supply Education and Research
Association was employed. Necessity to regard the publications on strategic purchasing management in period of 1980 to 2010 is determined with need to analyze strategic purchasing concept from the moment its formation till the latest researches.

Empirical studies are base both on primary and secondary data. Primary data are obtained through in-depth interviews with 5 (Five) small enterprises operating in Russian market. In-depth interview is semi structured and conducted with companies’ owners, CEOs, or purchasing concerned managers. Due to the range of specific characteristics of Russian market, such as unstable economic situation (in instance, economical crisis of 1991, 1998, 2008), frequently changing legal regulations (tax policy within 2000-2008), high percentage of small enterprises is reported to be in the “shadow economy” (i.e. not registered, keep no official books and pay no taxes (Barre, 2005), the following requirements on sample of interviewed companies were put:

- Full registration of SME;
- Calculation of SME on base of Russian Federal Law about small to medium size enterprises (2007);
- Companies’ life span at the market not less then 10 years.

Secondary data is obtained from previous researches on the topic. As the result of literature review, 4 (Four) suitable studies for the purpose of current research were discovered. These researches are Quyale M. (2002) survey of 400 (Four hundred) small firms in Suffolk region, in United Kingdom (UK); Pressey et al. (2009) survey of 97 (Ninety Seven) small to medium size enterprises in UK; Overby J. and Servais P. (2005) international purchase activity of 139 (One Hundred Thirty Nine) small to medium firms in Denmark; Ellegaard C. (2006) interview of 16 (Sixteen) small firms’ owners in Denmark. Due to the selected researches, in current research the experience of SME’s purchasing management in United Kingdom and Denmark is taken into study. Moreover, according to statistics data, United Kingdom and Denmark are the countries of developed private sector of economy with extremely high percentage of small to medium size enterprises, United Kingdom has 99.9 per cent (2008) and Denmark has 99.7 per cent (2005) of SMEs in private sector.

The results of primary and secondary data are compared, so that, cross regional comparison on SMEs’ implementation of strategic purchasing in countries with high and low percentage of SME in private sector is performed. Moreover, SWOT analysis on obtained results of primary, secondary data and their comparison is conducted, and suggest categorization of strengths, weaknesses, opportunities and threats of implementation strategic purchasing management and its supplier selection and development functions in small to medium size enterprises.

2.1. Validity and reliability of the research

Discussing reliability of the research, it is necessary to outline that current study is constructed on qualitative methods of research as, literature analysis on the topic, in-depth interview method, cross research results comparison, and SWOT analysis. These methods have assisted in accomplishing the purpose of the research and guaranteed the validity and reliability of the study.

Starting with purpose and research questions, hybrid topic of study was inspected and verified by the literature review within its study areas. Besides, actuality of the theme was evaluated through overview of statistics data on SMEs development, and conceptual development of strategic purchasing approach.

Literature review of this paper was conducted through public database, such as Emeralinsight and Sciencedirect, or journal publications.
Furthermore, in-depth interviews were conducted personally with companies’ owners, CEOs, or purchasing concerned managers. Interviews discover such issues as attitude to purchasing in the company, purchasing practices, role of suppliers, relations with key suppliers, supplier selection process and supplier development programmes in small to medium size firms. Structures of conducted interviews submitted to the basic block questions indicated in Appendix 1. To ensure representativeness of interviews’ sample, interviewed companies meet the requirements of: full official firms’ registration, calculation of SME on base of Russian Federal law about small to medium size enterprises (2007), companies’ life span at the market not less then 10 years.

As the result of selected research methods, theoretical and empirical parts of the study compliment each other providing both academic and empirical insight of the research topic.

Discussing validity terms of the research, it is worth emphasizing that validity is used to set up the right operational assessment for a researched concept (Yin R.K., 1994). In this sense, it seems necessary to regard both internal and external sides of validity in given research.

Internal validity of current research is based on sample of interviewed companies. Research’s sample have met the following criteria: (1) Company – respondents represent different industries, providing different types of goods and services; (2) they are similar in their scale of business units, representing small and medium size enterprises; (3) they have at least 10 year term performance at the market, showing experience and vital capacity of business. Chosen company respondents present five following industrial sectors: trading, printing house/manufacturing and service provider, agriculture and trading business, pharmaceutical producer and medical service provider, manufacturer of façade materials (additional information can be founded in Appendix 1). Head count of interviewed companies’ is within 10 to 60 employees per enterprise, which make them similar in sense of internal structure, amount of human resources and firms’ turnover. Their life span at the market equals or exceeds 10 year term, guarantees that these companies have broad business experience, have overcome recent economical crisis and purposed on stable business development in the future. In these terms, discovered similarities in companies’ organization of purchasing management, allows deducting the findings over other small and medium size enterprises of different industrial sectors. Therefore, sample of interviews’ participants ensure internal validity of the research.

Regarding external validity of the research it is necessary to indicate a number of study limitations. In order to narrow down and control the results of current study, it should be taken into account that primary data collection was performed in Saint-Petersburg market and does not involve other regions of Russia; besides, due to the frames of research topic, industry structure of private sectors of compared countries is not included in the interpret the result; finally limited knowledge of secondary data does not allow make broader conclusions on studied topic and give more light to cross regional study of the phenomenon.

3. Theoretical framework

The current study derives from the concept of strategic purchasing in organization. Strategic purchasing is determined to be efficient approach to purchasing management, and gaining competitive advantage function of business. Despite of the fact, that there is no agreement among researchers on suitability of strategic purchasing approach to small and medium size enterprises, the author of the research follows the “optimistic” point of view of those researchers who argue that small- to medium-sized enterprises would particularly benefit from effective purchasing as strategic approach gives an opportunity to SMEs to complement their limited resources by external resources in more efficient way.
Besides, supplier selection functions of strategic purchasing is consider to be the most important function of purchasing management in organization, while supplier development function of strategic approach is considered to be function of designing close relations with suppliers, on the one hand, and obtaining necessary suppliers’ performance and capability improvements, on the another. Ellram and Carr (1994) conclude that purchasing plays a key role in corporate strategic success through its main function which are supplier selection and supplier development, these strategies support the firm’s long-term strategy and competitive positioning at the market.

In order to research implementation of strategic approach to management of purchasing in small to medium size enterprises, the following independent variables are selected:

- purchasing role and function in a firm (cooperation with other functions in organization management, top management involvement in purchasing issues, etc)
- characteristics of relations with suppliers (amount of suppliers, closeness with key suppliers, duration of relations with key suppliers, supplier development program)
- scope of formal written procedures (regular evaluation of purchasing performance, auditing of suppliers, application of rationalizing methods of supplier selection, purchasing planning)
3.1. Literature review on strategic purchasing and its functions in organization

This chapter is purposed to provide the overview of strategic purchasing role and its supplier selection and supplier development functions in the organization. Through literature review the following aspects of strategic purchasing are regarded:

1. The process of formation strategic purchasing approach and its differences from traditional approach to purchasing.
2. Strategic supplier selection process, its stages, methods and selection criteria.
3. Concept of supplier development, its definition, strategies and approaches to relations with suppliers.

3.1.1. Formation of strategic role of purchasing and its function in organization

Interest to research and develop management of purchasing has been rapidly growing since the end of 20th century. Profound researches and analysis of purchasing function in the organization were arranged; national and international purchasing associations such as International Purchasing and Supply Education and Research Association, Association of purchasing and Supply Chain Management, International marine purchasing association, American purchasing Society and many others, were established in order to contribute and develop management of purchasing. Besides, the term “strategic purchasing” was introduced and got conceptual development in the academic literature. Carr A. (2002) states that since the mid-80th, strategic role of purchasing has continuously been in the focus of attention both in academic journals and in popular press. Aguilar (1992) states about the changing role of purchasing that main interest of purchasing strategies should be that are planned, implemented, and controlled in order to achieve the long-term goals of the firm.

Why purchasing has become one of the foremost investigating aspects of business? Which driving forces caused the change of approach to purchasing role and function in organization? The literature review discovers the scope of external and internal factors of business development which exerted significant influence on purchasing function in organization.

Leenders M. (1994) states that globalization, customer satisfaction, empowerment, total quality management, total cost of ownership and cycle time reduction, flexibility and the learning organization concept have changed the responsibilities of the players in the organization of the company. Boer L. et al. (2001) describing the current state of purchasing function, states that “several developments further complicate purchasing decision making. Globalization of trade and the Internet enlarge a purchaser's choice set. Changing customer preferences require a broader and faster supplier selection” (Boer L. et al., 2001, p.75). Kaufman L. (1999) providing the historical analysis of purchasing development, agues that in 80th with increasing of competition among actors, the firms started to systematically search for new fields in which they could create and sustain advantages over their competitors. Appearance of such concepts as just in time (JIT) and total quality management (TQM) speeded up the process of purchasing activity development. Giunipero and Pearcy (2000) points out the range of factors which influenced the enhancing of purchasing role in the organization and stipulated its functions development. They name such factors as globalization, technological progress, increasing of customer demand, outsource practices, integration of management along supply chain.

On the base of performed literature analysis the factors triggered the changing of purchasing role in the organization can be categorized into factors of internal and external environments. The internal triggers are the triggers which have derived from academic development of business science, the elaboration such management concepts as Just-in-Time (JIT), Total Quality
Management (TQM) and Supply Chain Management (SCM). These concepts have led manufacturers to integrate processes along supply chain, to increase collaboration with suppliers, and to work jointly on such issues as quality versus price, broad of assortment, lead time reduction of purchasing goods, etc.

The external triggers changed the role of purchasing in the organization can be found in political, economical, and technological environments, so called PEST triggers of changes. Such events as formation of European Union joint policy and economy, crash of communist block and involvement of its countries into world economy; establishing the trade block agreements, in instance, such as North American Free Trade Agreement (NAFTA), Association of Southeast Asian Nations (ASEAN); and last but not the least, formation of World Trade Organization, purposed to supervise and liberalize international trade, serving as forum for trade negotiations and agreements, led to intensive political and economical globalization radically changed business practices of all over the world.

Political globalization has impacted on legal conditions of business operation. It caused the reduction of trading barriers between the states, and increasing international dialogue on establishing new trade agreements between regions.

Economical globalization has brought into close cooperation the industrially high and low developed regions of the world, leading to enhanced outsourcing and grown customer demand on quality, price and assortment of the offered goods, and consequently, reduced the product life cycle.

Furthermore, the tendencies of political and economical globalization were technically supported by triggers of technological environment. Considerable technological progress has facilitated increased communication between business actors, and provided the tools to ease the business operations (for example, internet bank, electronic data exchange, etc.)

Thus, the intensive political and economical globalization with its global opportunities for business development, on the one hand, and its severe rules of meeting customer demands, on the another, it has created the task for producers to seek for opportunities to meet customer demand with least spends. Due to these controversial conditions firms applied their attention to purchasing function in organization. Monczka et al. (1998) states, that seeking for reduction of input costs, manufacturers turning their attention to purchasing for a number of reasons:

- price competitiveness
- reliability,
- cost concerns,
- speed of new product introductions

In addition to increased interest to purchasing operations, technological innovations have supported this tendency by providing such inventions as electronic bank transfer (EFT), electronic data interchange (EDI), and finally establishing e-purchasing.

Indicated external and internal triggers of changes created the necessity for purchasing to broaden its role and functions in the organization. New approach to purchasing was defined as strategic purchasing management.

What is called to be “strategic purchasing” and how it differs from traditional approach to purchasing? Traditional approach of purchasing requires simple comparison of price lists on purchase materials and/or service offered by suppliers. Carr (2002) describes traditional approach to purchasing, characterizes the task of purchasing within the approach as reactive, clerical task, focused on short term issues, and not supported by top managers of organization.

Strategic approach to purchasing management imposes broad range of functions and responsibilities on purchasing concerned employees, on the one hand, and requires top managers’ admission of strategic role of purchasing in organization, on another. The literature review indicates considerable number of analytical studies on strategic approach to purchasing management in the organization. Aguilar (1992) states that the focus of purchasing strategies is
to plan, implement, and control, in order to achieve the long-term goals of the firm. Carr and Pearson (1999) define that foremost, strategic purchasing approach requires the alignment of purchasing goals with the corporative goals. And secondly, it requires proactive management of suppliers and their regular evaluation. Furthermore, the adoption of strategic purchasing entails new purchasing activities, which were not crucial within traditional approach to purchasing management, but play key role in strategic approach. Such activities are formal written purchasing plan purposed at long term perspective, review and adjust of the plan to match the corporative strategic goals, close collaboration between involved purchasing employees and managers of other functions to produce purchasing plan, plan determination of firm’s strategic suppliers and development close collaboration with them. Sanchez-Rodriguez C. (2009) on the base of literature analysis states that foremost strategic purchasing function is characterized by having direct communication links with top management, besides strategic purchasing focus both on short term and long-term purchasing decisions, which involve such issues as product design process, cost and value analysis, involvement in corporate planning process. Pressey A. (2009) framing the tenets of buying firm and supplier relations, states that principles of strategic purchasing might include negotiating exclusive agreements for particular components with strategic suppliers, or establishing joint project on new product or process development.

Above stated literature review is summarized into comparison table which demonstrates that purchasing traditional and strategic approaches differ between each other radically on the following issues:

**Table 1.1. Comparison of traditional and strategic approaches to purchasing management in organization**

<table>
<thead>
<tr>
<th>Traditional</th>
<th>Strategic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reactive</td>
<td>Proactive</td>
</tr>
<tr>
<td>Clerical task</td>
<td>Planned</td>
</tr>
<tr>
<td>Focus on short term issues</td>
<td>Consistency of purchasing plan and corporate plan in the organization</td>
</tr>
<tr>
<td>Non integrative</td>
<td>Long term purchasing decision</td>
</tr>
<tr>
<td>Top manager consider it as non value added function</td>
<td>Cooperation with other functions in organization management</td>
</tr>
<tr>
<td></td>
<td>Close cooperation with top management in a firm</td>
</tr>
<tr>
<td></td>
<td>Focus on strategic suppliers and relationship with them</td>
</tr>
<tr>
<td></td>
<td>Evaluation of purchasing performance</td>
</tr>
</tbody>
</table>

*Source: The author.*

Furthermore, several authors have analyzed purchasing decision process and categorized it into mainly 4 (Four) stages, however, the stages and the range of its related purchasing activities varies on traditional and strategic approaches. Woodside and Samuel (1981) describing purchasing as non strategic decision process, defines the following its stages: (1) developing and analyzing requirements, (2) preparing request for quotes (RFQs) and analyzing quotations, (3) committee-supplier negotiations, and (4) post-negotiation evaluation and reporting. Meanwhile Lambros L. and Moschuris S. (2001) considering purchasing as value added function of the organization, name following purchasing phases and associated tasks: (1) Initiation. Preparation of purchase requisitions, design of specifications, price and lead-time estimations, purchasing planning. (2) Search. Screening of potential suppliers, revision of approved supplier lists, supplier surveys.
(3) Selection. Selection of pricing methods, setting of source selection criteria, application of competitive bidding, evaluation of suppliers, placing of purchase orders.
(4) Completion. Order expediting, contract administration, receiving and inspection, warehousing and auditing, issuing to users.

Analyzing the areas which purchasing management involved in within traditional approach, Burt (1989) states that purchasing function in organization is largely responsible for three main areas of purchasing goods: (1) determining the characteristics of purchased materials, components, and services, (2) selecting suppliers capable of providing the required items at the requisite levels of quality and price, and (3) managing the transaction so that the goods or services are delivered in a timely manner.

Meanwhile, following the strategic purchasing studies, Lysons and Gillingham (2003) report that strategic purchasing is involved into four key areas of business organization and the following tasks are associated with them:

1. Network structure management.
   The tasks is to determine the external network structure of the company, including make or buy decisions, supplier selection, global sourcing and performing the methods of rationalization of supply base.
2. Negotiation and contracting.
   The task is to negotiate the cost/prices of purchase items and drafting of contracts with suppliers.
3. Supplier performance management.
   This area consist of suppliers measuring, evaluating and benchmarking tasks.
4. Product or process development.
   Purchasing task is to maintain close collaboration with firm’s key suppliers and involve suppliers into product/process developing.

On above stated review evidently that traditional and strategic purchasing differs in the range of areas it involved in. In contrast to traditional approach, strategic management of purchasing put effort on supplier selection phase and post purchase evaluation of performance, oriented at long term purchasing decisions and as well as long term relations with selected suppliers. Besides, it can be concluded that there is difference on purchasing practices between traditional and strategic approaches. The variation of purchasing practices is shown at the comparison table under the relevant approach:
Table 1.2. Comparison of purchasing practices within traditional and strategic approaches

<table>
<thead>
<tr>
<th>Traditional Purchasing</th>
<th>Strategic Purchasing</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Developing and analyzing requirements to purchase item,</td>
<td><strong>Pre-purchase phase</strong> –</td>
</tr>
<tr>
<td>2. Analyzing RFQ</td>
<td>1. Make or buy decisions,</td>
</tr>
<tr>
<td>3. Negotiations with supplier,</td>
<td>2. Preparation of purchase requisitions</td>
</tr>
<tr>
<td>4. Post-negotiation evaluation and reporting</td>
<td><strong>Supplier selection phase</strong> -</td>
</tr>
<tr>
<td></td>
<td>3. Screening of potential suppliers, setting of source selection criteria, revision of approved supplier lists,</td>
</tr>
<tr>
<td></td>
<td>4. Supplier surveys, evaluation of suppliers</td>
</tr>
<tr>
<td></td>
<td><strong>Operation phase</strong> –</td>
</tr>
<tr>
<td></td>
<td>5. Negotiating the cost/prices of purchase items and drafting of contracts with suppliers.</td>
</tr>
<tr>
<td></td>
<td>6. Placing the order, order expediting, contract administration, receiving and inspection, warehousing and auditing, issuing to users</td>
</tr>
<tr>
<td></td>
<td><strong>Post-purchase phase</strong> -</td>
</tr>
<tr>
<td></td>
<td>6. Suppliers measuring, evaluating and benchmarking tasks.</td>
</tr>
<tr>
<td></td>
<td>7. Maintain close collaboration with firm’s key suppliers.</td>
</tr>
<tr>
<td></td>
<td>8. Involve of suppliers into product/process developing</td>
</tr>
<tr>
<td></td>
<td>9. Regular rationalization of supply base.</td>
</tr>
</tbody>
</table>

*Source: The author.*

At table of comparison is obvious that strategic approach requires much more procedures and operations than traditional purchasing. The grown number of purchasing practices causes the question about suitability of strategic purchasing to different size enterprises.

Pressey A. (2009) argues that many large organizations including Siemens Medical Systems, Honda of America, Ford Motors and Dun and Bradstreet have benefited from strategically managing the purchasing function and their relationships with key supply partners. Meanwhile, there is no high degree agreement on strategic purchasing eligibility in small to medium size enterprises. The stated comparison of strategic purchasing practices in the organization shows the necessity of human, financial and knowledge resources to conduct strategic purchasing management in organization.

Results of literature analysis on suitability of strategic purchasing to small to medium size enterprises, indicates that analytics support opposite points of view on this issue. The authors who express doubts on suitability of strategic purchasing small to medium size business discuss the SME limitation in resources necessary for strategic purchasing practices (Quayle M., 2000; Zheng et al., 2004), while those authors who support implementation of strategic purchasing management in SME, argues that strategic approach will help small to medium size businesses to overcome resource limitation and complemented limited internal resources by external (Dollinger and Kolchin, 1986; Park and Krishnan, 2001; Gadde and Hakansson, 2001).

Discussing eligibility of strategic purchasing to enterprise size, it is necessary to remember the role strategic purchasing performs in organization. Numerous authors define purchasing as function of obtaining competitive advantage in a firm (Heide J., 1995; Humphreys P. et al., 1997; Laios L. and Moschuris S. 2001; Sanchez-Rodriguez, 2009). Business dictionary
defines “competitive advantage” as “superiority gained by a firm when it can provide the same value as its competitors but at a lower price, or can charge higher prices by providing greater value through differentiation”. Porter (1985) states that competitive advantage is the value that a firm creates for its customers through cost leadership and/or meaningful differentiation. Thus, stable competitive advantage and the functions providing it, is main interest of any business. Carr (2002) states that strategic purchasing function can benefit firm to develop competitive advantage in the following ways:

- to decrease the product/service input costs;
- to perform right (according to corporate goals of organization) choice of supply source
- to establish close relationship with suppliers in order to improve the rate of quality of ordered materials and its delivery.

Considering the role of strategic purchasing as a resource which benefits to obtain competitive advantage at the market, strategic approach to purchasing management considers being useful for large scale, small and medium size enterprises.

**Findings of the paragraph:**

This paragraph was purposed to analyze development of strategic purchasing function in the organization. Along the analysis the following conclusions were made:

- Purchasing function in organization can be performed in traditional or in strategic way. Recently, due to the triggers of external and internal environments, strategic approach to purchasing management in the organization is considered to be more beneficial than traditional.
- Characteristics of traditional and strategic purchasing approaches differ in such issues as: reactive vs. proactive, short term vs. long term, non integrative vs. integrative, attitude of top manager to purchasing as non value added function vs. top managers’ attitude as to advantage gaining resource.
- Strategic and traditional approaches differ in scope of purchasing practices and tasks related to each of the approaches. Strategic purchasing approach outnumber traditional one in number of tasks and procedures.
- Considering the role of strategic purchasing as a resource which benefits to obtain competitive advantage at the market, strategic approach to purchasing management considers being useful for large scale, small and medium size enterprises.
3.1.2. Supplier Selection as the function of strategic purchasing in organization

As it was described above, purchasing has recently got enlargement of its role in the organization; strategic approach to purchasing management was formed; purchasing function in organization was complemented with new tasks and practices. Despite of these changes, still the main task of purchasing management is to select right suppliers. Monczka et al. (1998) argues that selection of suppliers is one of purchasing most basic, yet most important tasks.

Being the most important phase of strategic purchasing, supplier selection process has got additional managerial task. In the contrast to traditional approach to purchasing management, where supplier selection was performed on base of supply price comparisons, strategic supplier selection has the range of methods to figure out criteria of selection, methods to rationalizing final choice of selection, and measuring supplier performance. This paragraph is devoted to analyze strategic supplier selection process, its stages, methods and selection criteria.

Importance of supply selection function of purchasing management is broadly recognized in literature on the topic. Ellram and Carr (1994) conclude that purchasing plays a key role in corporate strategic success through its main function which are supplier selection and supplier development, these strategies support the firm’s long-term strategy and competitive positioning at the market. Florez-Lopez R. (2007) states that “supplier selection is one of the most strategic components of the purchasing function of the firm, being applied to improve the entity's competitiveness and to increase customer satisfaction” (p. 1169). Joseph Sarkis (2002) defines supplier selection as the selection of strategic partners, and one of the critical challenges faced by purchasing managers. Boer L. et al. (2001) states that as organizations become more dependent on suppliers as direct and indirect consequences of poor decision making become more severe.

In spite of the overall understanding of supplier’s role for efficient purchasing management, historically supplier selection process was focused on comparison of suppliers’ price lists of offered goods and/or services. Ellram L. (1995) states that traditional approaches to supplier selection and ongoing evaluation include selecting and retaining a supplier based on price alone. Florez-Lopez R. (2007) states that the focus of supplier selection criteria has been on internal logistic measures, like price, lead-time, on time performance, damage, and responsiveness; thus, many authors identify four broad categories in supplier selection: price, delivery, quality, and service. Sarkar A. (2006) argues that most of the practitioners focus only on such factors as cost, quality and service, while neglecting other important factors like technological and financial capabilities, quality systems, etc. While Sarkar A. (2006) points out that cost, quality and service are categories of the short term criteria and they can not be useful in identification of the suppliers with long term capabilities. With formation of strategic approach to purchasing management, and need to combine purchasing planning and corporative goals, supplier selection has become significant process toward accomplishing company’s goals.

In conditions of strategic purchasing practitioners faced the question which criteria of supplier selection should be taken into account in order to benefit efficient purchasing and improve overall company’s performance? According to literature analysis performed by William Ho et al. (2009), on the base of publication issued between 2000 to 2008 on applied evaluation criteria to supplier selection process, the most popular criterion of supplier selection is quality, the second popular is delivery, and the third one is price/cost. These three usual criteria of supplier selection followed by others which are “manufacturing capability, service, management, technology, research and development, finance, flexibility, reputation, relationship, risk, safety and environment” (William Ho et al. 2009, p. 21).
Literature finding identify that such approaches as value-creation and total cost ownership concepts impacted on supplier selection process suggesting, additional apart price/cost, evaluation criteria for selection of supplier. Total cost of ownership (TCO) approach on supplier selection process, suggests broad range of criteria to consider. Ellram L. (1995) defines total cost of ownership as a “purchasing tool and philosophy which is aimed at understanding the true cost of buying a particular good or service from a particular supplier” (p.4). Ellram L. (1995) states that in addition to the comparison of the price paid for the purchase item, TCO involves into consideration such elements of purchasing costs as “order placement, research and qualification of suppliers, transportation, receiving, inspection, rejection, replacement, downtime caused by failure, disposal costs and so on” (Ellram. L., 1995, p.4). The authors state that total cost of ownership tries to quantify the costs associated with the purchasing process. TCO approach determines the costs associated with purchasing activities through out whole company's value chain before, during and after the purchase. Being a complex analysis TCO includes into consideration plenty of quantitative data (cost of purchase item, transportation cost, etc.), quasi-quantitative data (personal cost, past experience, etc.) and qualitative issues as the relationship between the buying company and considered supplier.

In contrast to total cost of ownership approach emphasizing the purchase associated costs, value creation concept suggests to take into consideration not only quantitative data on costs, but also qualitative criteria such as buyer-supplier relations. Florez-Lopez (2007) offers value-creation concept, where the author identifies two groups of variables that affect the supplier’s capacity to create value for the buyer:
1. Direct value variables, among which there are quantitative criteria of supplier performance: prices, quality mistakes or delivery items.
2. Indirect value criteria, which researcher defines as relational factors, such as: cooperation; commitment of resources; trust; customer orientation; communication; responsiveness, and customized services and products.

Hence, in addition to the traditional approach to purchasing which put main focus on direct value variables (quantitative figures), value creation concept states that the second group of variables is equally important in strategic purchasing approach.

Boer L. et al. (2001) distinguish in supply selection process the following stages: (1) Problem definition, finding out exactly what buying firm wants to achieve from supply (2) defining the criteria of supplier selection, (3) pre-qualifying suitable suppliers, “the process of reducing the set of “all” suppliers to a smaller set of acceptable suppliers” (Boer L. et al., 2001, p.80), (4) final choice of selection. Boer L. et al. (2001) state that due to the complexity of purchasing decision, there are should be the set of certain methods which accommodate to each of the phase of supplier selection process, and assist in decreasing the uncertainty of taken decisions.

Boer L. et al. (2001) suggest that 1st phases, definition of problem and criteria of supplier selection process, should be conducted by interpretive structural modeling approach (ISM). In the base of this model is division of dependent criteria from independent criteria. “The dependent criteria are important to consider in the final choice-phase while the independent criteria are important to consider for screening acceptable suppliers (prior to the final choice)” (Luitzen de Boer et al., 2001, p.80). For the pre-qualifying suitable suppliers at 3rd phase of supplier selection process Boer L. et al. (2001) propose to use categorical method, where each of supplier performance criterions is categorized as “positive”, “negative” or “neutral”, and compared between each other. Another method which can be used for the 3rd phase of selection process is data envelopment alternative (DEA). DEA method aids the buyer to classify the suppliers into two categories: the efficient suppliers and the inefficient suppliers, evaluating possible suppliers on the benefit and cost criterion. The efficiency of supplier is defined through the performance of supplier vs. the cost/price of using this supplier. Rating the suppliers on their performance verse
the costs, demonstrates the ration of supplier among other alternatives. Besides, William Ho et al. (2009) state that data envelopment alternative method can be applied as the method (1) to measure the efficiency of alternative suppliers, (2) to evaluate overall performance of supplier, (3) to measure comparative efficiency of suppliers, (4) to measure overall performance of supplier on base of TCO. According to literature analysis it is stated that DEA is the most popular individual approach to supplier selection (William Ho et al., 2009, p. 21). However, beside data envelopment analysis, Boer et al. (2001) propose two more methods at the supplier’s prequalification phase, it is stated that cluster analysis method can also benefit into selection process. Cluster analysis method allows putting the numerical attribute scores into a number of clusters such that the differences between suppliers within a cluster are minimal and the differences between suppliers from different clusters are maximal, can visually demonstrate the preferable group of suppliers.

The last phase of supplier selection process, the final choice phase, abounds with the number of the methods to make efficient choice. Among these methods are total cost of ownership analysis, which was discussed detailed above; linear weighting models, “Ratings on the criteria are multiplied by their weights and summed in order to obtain a single figure for each supplier” (Boer L. et al., 2001, p.81), mathematical programming model, statistical modal, artificial intelligence based model, which rationalize supplier selection process and make it reasonably reliable. Besides, significant attention in the literature on the topic was paid to analytic hierarchy process (AHP). The method was proposed in 1980 by Saaty T.J. AHP provides the framework to compare multi criteria (rational, qualitative, quantitative aspects) in complex situations (Bhutta K. and Huq F., 2002).

Thus, it is evidently that there is large number of methods to rationalize supplier selection on each phase of the process. The most popular of them are interpretive structural modeling approach , data envelopment alternative, cluster analysis, total cost of ownership analysis, linear weighting models, mathematical programming model, statistical modal, artificial intelligence based model, analytic hierarchy process.

Strategic supplier selection process is connected to the question how many suppliers are suitable for the enterprise and what kind of sourcing strategy is better to undertake for it. Kaufman (1999) states that company continuously striving to decrease the number of their strategic suppliers, and to increase cross-functionally with those which were remained. Kaufman and Leszczyce (2005) put effort to optimize the approach to buyer choice sets of possible suppliers. The researchers define the preferable set of suppliers as number of suppliers which should be considered to source from. Berger et al. (2004) ague that many successful companies are now using long-term partnerships to achieve such benefits as lower prices and shipping costs provided by multiple sourcing, while reducing the supplier base. Kauffman and Lesczyc (2005) emphasize that a prerequisite for developing a strong buyer–supplier relationship is to have a small number of suppliers. Usually supply base of a company is large, but, only a small fraction of its suppliers actually participates in business. Thus, most of the authors of strategic purchasing suggest that company will benefit having fewer suppliers, and maintaining close collaboration with them at long term perspective.

Quayle M. (2002) names six possible sourcing strategies a the company, which are (1) single-sourcing via purchase from one supplier, (2) multiple-sourcing strategy (purchasing from more than one supplier), (3) parallel sourcing strategy, which implies the combination of single and multiple sourcing, (4) backward vertical integration sourcing strategy which entail buying the source itself, (5) “make in-house” strategy, decision to supply the material or service yourself, (6) sole sourcing strategy which is according to author is “result of being forced to buy from one supplier only as a result to such market factors as location, exclusive design rights, customer specifications and quite possibly buyer inertia” (Quayle M., 2002, p. 208)
Each of sourcing strategies has its advantages and disadvantages which are discussed in the literature. According to Larson and Kulchisky (1998) purchaser should prefer sourcing from a single supplier in view that this strategy brings lower total cost to buyer and higher levels of buyer/supplier cooperation. However, other researchers highlight the disadvantages of single sourcing strategy, arguing the dependence on a single supplier increases the supply risk. Smeltzer and Siferd (1998) pointed out that when an organization reduces its supplier base, it relies on fewer suppliers for critical materials, possibly increasing the risk of an interruption of supply. Concerning multiple sourcing, Cruz (1997) states that multiple sourcing usually results in lower prices but requires longer time in negotiation and may delay or disturb production schedules. Since analysis of single and multiple sourcing strategies figures out advantages and disadvantages for both of strategies, the range of methods are elaborated to find out most preferable number of suppliers. Berger et al. (2004) propose a method (“tree approach for the purpose”) to calculate the number of suppliers on the base of supply risk management. The method considers the risks that are associated with a supply to determine the optimal size of supply base for the certain firm. Sarkar A. (2006) performed literature review on the topic, conclude that recently “collaborative sourcing”, (or “partnership sourcing”) term got wide interest in academic discussion. This approach implies long-term collaboration between a buyer and its key supplier, based on trust and cooperation, besides, this approach entails that buying firm support mostly single source strategy. Sarkar A. (2006) names three reasons why companies should keep small supply base:

- Close and workable relationships can only be developed with a limited number of suppliers.
- Small supply base reduces supplier development costs.
- Substantial business can be rewarded to only a limited number of suppliers.

According to literature analysis, supplier selection process in organization should be purposed at reaching fewer strategic suppliers tend to design close cooperation and capable to benefit accomplishing buying firm’s corporative goals. Not quantity of suppliers but the quality of relations with them makes use for the business development.

However, taking into consideration the abundant number companies variations distinguished among each other on types of industry, sizes, core business differentiations, strategies and activities at the market, it is suggested that characteristics of supplier selection process in company depends on internal and external factors, and significantly varies cross business entities. According to the research findings of Kraljic P. (1983), Laios G. and Moschuris S. (2001), and Sarkar A. et al. (2006), supplier selection process and further supplier – buyer relations depend on the type of purchased item and type of enterprise.

Kraljic P. (1983) states that supply strategy depends on two groups of factors: (1) profit impact and (2) supply risk. On the base of these factors Kraljic P. (1983) classified purchase items into: routine items, bottleneck items, leverage and strategic purchasing items. On the base of these purchase item classification Sarkar A. et al. (2006), define entailed characteristics of supplier selection process and possible development of supplier buyer relations for each purchase item category. According to Sarkar A. et al. (2006) purchasing process of routine items characterized with selection among large number of alternative supply sources, with short term supplier relations, narrowing supplier selection function to tactic operation, and delegation of decision making power to lower level managers. In contrast to routine items purchase, purchase of bottleneck items, which usually belong to monopolist supplier markets, is characterized by long term relationship, contingency planning, and delegation of decision making power to higher level of management. However, long term relations are developed mainly because of absence of any other sources of similar purchase item. Meanwhile, purchase of leverage items allows exploits more opportunities of purchasing management. Leverage items are presented by broader range of suppliers, which need to be surveyed and compared prior the final choice. Relationship in this case are usually defined as short term relations and decision making power belong to
medium level managers. Finally, strategic purchase item, according to Sarcar et al. (2006) is the purchase where supplier selection and supplier development processes get the most development. In the purchase of strategic item few supply sources are suitable, hence, medium or long term supplier relationship are usually maintained. Buying-company performs detailed evaluation of suppliers and usually undertakes supplier development efforts. The decision making power in case of strategic item purchase belongs to top level management, and buying firm is crucially interested in design close relationship with suppliers of strategic item.

As it is noticeable from above described classification of purchase item, characteristics of supplier selection process, and buyer - supplier relations varies from reactive routine item to proactive strategic item purchasing. According to Sarcar A. et al. (2006) there is no complex supplier selection process in the purchase of routine items, as well as in the purchase of bottleneck items, meanwhile acquisition of strategic items is characterized with complex supplier selection process.

According to the research conducted by Laios G. and Moschuris S. (2001) results show that characteristics of supplier selection process depend on the type of purchase goods and type of buyer-enterprise. In the course of research Laios G. and Moschuris S. (2001) separated two types of purchased goods, material and capital goods (production and distribution equipment). Material purchase is usually regularly repeatable operation to meet the repeatable needs for conversion, consumption, or distribution. Capital item purchase usually is non-repeatable needs. Capital item purchase is performed once and is accompanied with high spends. The authors states that purchasing decision process for each product type of goods is highly differentiated. While material item purchase is characterized by simple supplier selection process, capital item purchase is done in cross functional cooperation. Cross functional cooperation in buying firm is required in order to select the supplier with the most suitable type of equipment in terms of capability, maintainability, and life cycle costs.

Besides, according to the research findings of Laios G and Moschuris S. (2001) purchasing process varies on different types of enterprises. In the course of the research the enterprises were classified into 3 (Three) types: (1) service providers, (2) producers of industrial products and services, (3) producers of standardized consumer products. Where service provider enterprises mainly purchase large variety of technical materials and equipment to maintain their production facilities and their service network; producers of industrial products and services purchase large variety of technical materials, parts, equipment, and accessories, which become part of their output; and producers of standardized consumer products purchase large quantities of a few commodity materials transformed to become part of the final product.

The research has resulted with the conclusion that producers of standardized consumer products compared to other two types of enterprises, show lower level of articulation during the supplier selection process, which means that supplier selection process is less conducted by specialized departments, and skilled employees in the enterprises producing standardizes consumer products. According to the research findings these type enterprises are involved into supplying of routine selection of standardized materials, and, therefore, there is no need for discrete purchasing tasks and specialized bodies. In contrast to the manufacturers of standardized consumer products, the service providers are deeply involved into purchasing activity on supplier selection of capital items. The cost of supplied capital items, make this type enterprises develop “procurement planning processes, specification committees, sourcing policies, and special committees for receiving and inspecting the capital items” (Laios G and Moschuris S., 2001, p.366). Besides that, supplier selection process in service provider enterprises differs from other enterprises by higher formalization in order to ensure transparency and accountability of this process. Meanwhile among producers of industrial products and services their process of supplier selection is distinguished by depth analysis of available suppliers. “The recurrence, high complexity, and high overall expenditure, which characterize these materials, force the enterprises to perform extensive pre-purchase investigations, more systematic evaluation of
suppliers, and application of state-of-the-art financial tools and methodologies in order to select the most suitable source of supply” (Laios G and Moschuris S., 2001, p.367).

The above stated research findings indicate that the process of supplier selection varies between enterprises of service providers, producers of industrial products and services, producers of standardized consumer products enterprises. According to the results of the research, supplier selection process varies on the degree of articulation, formalization and depth of supplier analysis.

In summary, the cross-researches’ results demonstrate the linkage between the type of enterprise, purchase item (based on Kraljic P. (1983) classification) and characteristics of supplier selection process:

### Table 1.3. Summary table of linkage between the type of enterprise, purchase item and characteristics of supplier selection process

<table>
<thead>
<tr>
<th>Type of Purchase Item (on Laios G and Moschuris S., 2001, research)</th>
<th>Example of Purchase Item</th>
<th>Type of Purchase Item on Kraljic P. (1983) Classification</th>
<th>Characteristics of Supplier Selection Process</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service providers</td>
<td>Capital items such as technical materials, equipment to maintain production facilities</td>
<td>Leverage purchase item</td>
<td>- Broad range of suppliers are available&lt;br&gt;- Short term relations with suppliers&lt;br&gt;- Decision making power belong to medium level managers&lt;br&gt;- Process involves planning, specification committees, sourcing policies, and special committees for receiving and inspecting purchase items</td>
</tr>
<tr>
<td>Producers of industrial products and services</td>
<td>Technical materials, parts, equipment, and accessories, which become part of firm’s output</td>
<td>Strategic purchase item</td>
<td>- Few suppliers are considered to be strategic&lt;br&gt;- Medium or long term supplier relationship are tend to be designed&lt;br&gt;- Decision making power belongs to top level management.&lt;br&gt;- Profound analysis of supply options includes pre-purchase investigations, systematic evaluation of suppliers, and application of state-of-the art financial tools and methodologies. Detailed supplier analysis process involves planning, specification committees, sourcing policies, and special committees for receiving and inspecting purchase items</td>
</tr>
</tbody>
</table>
Producers of standardized consumer products  
Raw materials  
Routine purchase items  
- Clerical purchase task,  
- Short term supplier relations  
- Large amount of supply firms  
- Lower level of articulation during the supplier selection process. The process is less conducted by specialized departments, and skilled employees. Delegation of decision making power to lower level of managers.

| No information | No information | Bottleneck items | - Monopolist sourcing  
- Long term relationship,  
- Contingency planning,  
- Delegation of decision making power to higher level of management |

Source: The author.

As it is shown at the table, selection of strategic item source differs from purchase other types of item with profound analysis and ongoing evaluations of supply choice.

Findings of the paragraph

The paragraph on strategic supplier selection was purposed to regard structure of supplier selection processes, methods of choice rationalization, and applied evaluation criteria. Along the analysis the following conclusions were made:

- Supplier selection is the main task of purchasing management.
- Strategic supplier selection is a complex process of purchasing management in the organization.
- Supplier selection process can be described as four stage process: buying firm problem definition, defining the criteria of supplier selection, pre-qualifying suitable suppliers, making final choice of selection.
- There is large number of methods to rationalize supplier selection on each phase of the process. The most used of them are interpretive structural modeling approach, data envelopment alternative, cluster analysis, total cost of ownership analysis, linear weighting models, mathematical programming model, statistical modal, artificial intelligence based model, analytic hierarchy process.
- There three main criteria of supplier selection quality, delivery, and price/cost (William Ho et al. 2009).
- Value-creation and total cost ownership concepts impacted on supplier selection process suggesting, additional apart price/cost, evaluation criteria for selection of supplier. TCO introduced use of quantitative, semi-quantitative and qualitative criteria for supplier
selection; and value creation concept suggests taking into consideration not only quantitative data on costs, but also qualitative criteria such as buyer-supplier relations.

- Most of the authors of strategic purchasing suggest that company will benefit having fewer suppliers, and maintaining close collaboration with them at long term perspective. Consequently, the goal of strategic supplier selection is to reach suppliers which available for designing close cooperation and capable to benefit realization of company’s goals. Not quantity of suppliers but the quality of relations with them makes use for the business development.

- Literature review shows that supplier selection process varies on the type of firm-buyer and the type of purchase item and type of enterprise.
3.1.3. Supplier Development function of strategic purchasing in the organization

Supplier development is relatively new function of strategic purchasing management. The idea of supplier development process contradicts to traditional approach of purchasing management which recommends buying firm to keep suppliers at “arm’s length” and to avoid any form of commitment (Porter, 1980). Morissey B. and Pittaway L. (2004) state that during 1970s to 1980s buyer-supplier relations were described as adversarial and “arms length”. Describing traditional approach to buyer-supplier relations Dyer and Singh (1998) give following characteristics to arm lengths relationship between actors, describing them as: nonspecific assert investment, minimal information exchange, low level of interdependence between buyer and supplier, minimal investment in governance mechanism from both sides. Meanwhile, during the 1990s distance approach to buyer – supplier relations appear to have been replaced by more collaborative relationships, characterized by mutual beneficial and trustful cooperation between the trading parties (Morissey B. and Pittaway L., 2004, p. 254).

Taking into account historical stability of “arm length” approach to purchasing strategy, supplier development process turned out to be radically new ways to buyer – supplier relations. Similarly to new approach to supplier selection, supplier development concept derived from recently formed perception of suppliers as partners of a buying-firm. Laios G. and Moschuris S. (2001) argue that in our days, more and more buyers state that they think of their suppliers as “partners and stakeholders in goal achievement and value creation” (p. 352) in their companies. Sarkar A. et al. (2006) states that effective and efficient supplier relationship management greatly contributes to the creation of competitive advantage of buyer-organization, and in this sense it is crucial to identify by firm its key suppliers for business in order to allocate firm’s resources for building and developing beneficial buyer –supplier relations. And on this issue Sarkis (2002) states that “buyer-supplier relationships based solely on price are no longer acceptable for suppliers of critical materials” (p.18). Mendez and Pearson (1994) reports that suppliers are critical team members who assist through initial product design suggestions, technology contributions, and quality assurance considerations. The perception of supplier as a partner of the business is based on the belief that close buyer-supplier cooperation can improve outcome performance of buying-firm.

In spite of the fact that suppliers have always been an integral component for maintaining firm’s business operations, the actors of purchasing process considered each other as competitive sides, and were mostly developing “win-lose” relationship philosophy. Khurrum and S. Bhutta (2002) states that historically, the relations between buyer and supplier were antagonistic relationship; however, the changes happened in the past few years have positively turned this tendency. Bhutta, K., Huq F. (2002) state that such trends as shortened product life cycles, increased rates of technological progress, global sourcing opportunities, have given rise to improved communication and cooperation between buyers and suppliers. So, at the end of 20th century many companies reached the awareness of efficiency to design business partnership with their suppliers.

Literature review on the topic provides us with the range of definitions of supplier development process. Krause and Ellram (1997) define supplier development as any effort of the buying firm with a supplier to increase the performance and capabilities of the supplier. Watts and Hahn (1993) consider supplier development process as “a long-term cooperative effort between a buying firm and its suppliers to upgrade the suppliers’ technical, quality, delivery, and cost capabilities and to foster ongoing improvements” (p. 12). Supplier development concept considers variety of activities to improve supplier performance and/or capabilities (including assessing supplier’s operations, providing incentives to improve performance, and working directly with suppliers through either training or other activities). Meanwhile being long term relations approach it demands elaboration of effective methods of evaluation the outcome performance (Handfield et al. 2002). According to definitions of supplier development process, it
is long term oriented program purposed on achieving improvements in supplier’s operation, and regular monitoring of supplier performance.

Formation of supplier development concept was predetermined by a number of theoretical concepts appeared in the academic environment in the end of 20th century. Pender R. (1993) argues that supplier development process derives from continuous improvement process based on total customer focus, leadership, commitment, education and training. Pender R. (1993) states, that supplier development process is necessary in order to develop suppliers with the highest standards of quality.

On the other hand, another group of researchers states that the appearance of supplier development concept linked with development of transaction cost theory (Laios G and Moschuris S., 2001; Heide and Stump, 1996; Noordewier and Nevir, 1990) which originated from the field of institutional economic and exerted influence on many management disciplines in the 90th of 20 century (Rindfleisch A. and Heide J., 1997). Transactional cost analysis (TCA) idea is purposed to design efficient mechanisms for conducting transactions, which in industrial purchasing management associated with the costs of writing, negotiating and enforcing contracts. Taking into consideration significant amount of transaction costs, buyer companies put effort on the developing long term, closer and more cooperative relationships with their suppliers (Heide and Stump, 1996). Thus, according to Heide and Stump, under the TCA influence companies reconsider traditional view on the supplier relations toward developing “partnerships” with them.

Besides transactional cost analysis, considerable contribution into increase of supplier development approach was made by relation view. Dyer and Singh (1998) argue that competitive advantage of partnership can be achieved only if relations move beyond the market relations. The partners admit significant information exchange and investments in designing close cooperation. The researchers indicate 4 (Four) categories which can improve competitive advantage from firms’ partnership:

1. Investments in relation asset,
2. Knowledge exchange which lead to the join learn,
3. Combining valuable and scarce resources which can result with new product development,
4. Low transaction costs and effective governance mechanism.

These four categories are the principals of efficient supplier development process.

Thus, such concepts as transaction cost theory and relation view have exerted influence on formation of supplier development approach, impacted on perception of supplier as a “partner” and relations with supplier as efficient partnership.

Literature review discovers a number of programmes of supplier development which can be undertaken by buying-firm. As it is stated by Handfield et al. (2002) in case supplier does not meet expectations of buying-company, the customer has three options, which are (1) to bring the outsourced item in-house and excluding supplier service, (2) find more capable supplier, (3) improve existing supplier capabilities. If company chooses the third option “to improve supplier capabilities”, there are several strategies which can be followed to reach this goal. Krause D. et al. (2000) through literature analysis discovered 4 (Four) strategies to improve supplier’s capabilities:

1. Competitive pressure,
2. Evaluation and certification systems,
3. Incentives strategy,
4. Direct involvement.

Further, the short description each of these strategies is performed.

1. Competitive pressure: using the multiple source strategy, the buying company motivates alternative source suppliers with its customer commitment in case supplier-company improves its performance. At this case, the buying-company impacts influence not only on involved
supplier, but also other alternative supply sources will receive motivation for further
improvement of their performances. Tezuka (1997) states that suppliers which demonstrate
improved performance may be rewarded with increased business over time.
(2) Evaluation and certification systems. This supplier development strategy implies the
establishing the system of regular and formal supplier evolution procedures. Carr and Pearson
(1999) argue that routine supplier evaluation and supplier certification system will communicate
buying firm expectations with supplier performance, plus motivate suppliers to improve it.
(3) Incentives strategy. In case of this supplier development strategy, buyer firm motivate
suppliers with shred achieved cost savings and recognitions supplier achievement by granting
awards.
(4) Direct involvement. Direct involvement strategy implies most active participation of buying-
company in supplier’s improvement programmes. Krause D. et al. (2000) states that “direct”
supplier development can be performed in several ways, (A) procuring firms’ makes capital and
equipment investments in supplier operations; (B) manufacturers partially acquire the supplier
firm, which consequently entails vast expenses for the buyer; (C) firms may choose to invest
human and organizational resources to develop supplier performance.

These 4 (four) strategies were classified by Krause D. et al. (2000) on the base of
literature findings; meanwhile, literature findings indicate another classifications of supplier
development strategy. Meanwhile, Wagner S. (2005) states that there are two main types of
supplier development program which buying- company can apply to supplier, “direct” and
“indirect” supplier development programmes. The main distinction of “direct” supplier
development is its purpose to improve supplier’s long term capabilities neither its short term
performance. Wagner S. (2005) states that improvement of suppliers can be accomplished
through dedication of human and/or capital investments into specific supplier business aspect
(Krause, Scannell, and Calantone 2000; Monczka, Trent, and Callahan 1993). The author
emphasizes the provision of equipment or capital to supply company upon direct supplier
development programme, which might include such activities as on-site consultation, education
and training programs, temporary personnel transfer, the transfer of knowledge and
qualifications into the supplier’s organization.

In contrast to “direct” supplier development, “indirect” supplier development purpose at
short term supplier performance improvement. Contrary to “direct” supplier development,
“indirect” supplier development does not require much of investment and joint efforts from
buying company. The idea of “indirect” supplier development is the range of incentives or
enforces supplier’s performance improvements. To “indirect” supplier development practices
can be related regular and written supplier evaluation and supplier auditing, regular
communication and feedback on supplier’s performance. According to Wagner S. (2005)
“indirect” type of supplier development also impact on suppliers overall performance.

Sanchez-Rodriguez C. et al. (2005) classify supplier development types into basic,
moderate and advanced supplier development. Basic supplier development characterized with
the most limited firm’s involvement and minimum investment of the buyer’s resources (i.e.
personnel, time, and capital). Mainly basic supplier development consists of evaluation of
supplier performance and providing feedback to suppliers. The second type of supplier
development is moderate strategy. This type takes more resources than basic supplier
development. Moderate supplier development is aimed at the “collaboration with suppliers in the
improvement and development of new materials and components completed the moderate
supplier development construct” (Sanchez-Rodriguez C. et al., 2005, p. 291). The third type of
supplier development is advanced supplier development. This type is purposed at full
involvement of supplier in buyer’s product/process development. It is characterized with
significantly larger spend of resources “high levels of implementation complexity include
training supplier, and cooperative climate in buyer-supplier relations” (Sanchez-Rodriguez C. et
al., 2005, p. 291).

Scope of discussions about the programmes of supplier development entails the question on efficiency of supplier development strategies. Prhinski C. and Benton W. (2004) arranged a research the degree of efficiency of supplier development communication strategies, from supplier perspective. Prhinski C. and Benton W. (2004) classify three communication strategies of supplier development: indirect influence strategy, formality and feedback, where indirect influence strategy is desire by buying firm to change the supplier beliefs and attitudes, such as through education and communication of the evaluation; formalization is the degree to which the inter-organizational communication on the supplier evaluation is submitted to structure and routine; and feedback is “supplier attempts to discuss the buying firm’s evaluation of the supplier’s performance” (p.41).

On the results of the research Prhinski C. and Benton W. (2004) concluded that all three communication strategies exert positive influence on supplier buyer relations, however none of these strategies according to suppliers’ point of view, does not impact direct influence on supplier performance improvement. Prhinski C. and Benton W. (2004) states that according to suppliers’ view only growth of supplier commitment (which as it is proved derived from buyer – supplier close relations) to buyer firm, impacts positively on the supplier performance improvement. So, due to the results of conducted research, buying firm can influence on supplier relations by undertaking supplier evolution strategies. Supplier evaluation communication strategies do not ensure supplier performance improvement unless the supplier is committed to the buying firm,

Furthermore, the choice of supplier development strategy is not obvious and depends on the number of complex factors of purchasing process. The finding from literature identifies that foremost variation of supplier development process depends on the value of purchase item, amount of purchase item, and the type of supplier enterprise. Laios G and Moschuris S. (2001) states that relationship between seller and purchaser depends on the value of purchased goods. Referring to the Kraljic P. (1983) purchase item classification, there are 4 (Four) possible types of purchase item, which are routine items, bottleneck items, leverage items and strategic items, Cooper R. (1997) states that it is crucially important for buying- company to identify the strategic supply for its business. Identifying strategic supply, company should undertake measures on the evaluation the overall performance of its supplier. Suppliers of strategic items are the objects of supplier development process initiated by buying firm. Besides, Cooper R. (1997) states that not all companies-customer need to hold supplier development. First of all the necessity depends on which type supplier the company sources from. If supplier is large and high business developed enterprise any type of supplier development process will not be necessary at this case. Besides, the necessity of supplier development process depends on the quantity of purchased item. In case the amount of purchase good is minimal, it will not be profitable to the customer to input into supplier development. Furthermore, evidential difference on the extent to apply supplier development strategies takes place among service-based and product-based enterprises. According to Krause and Scannell (2002) research, the service base companies usually prefer to use competitive pressure market force strategy to reach desired level of supplier performance, while product based enterprises prefer to employ “direct” strategy of supplier development process.
Findings of the paragraph:

Paragraph on Supplier Development function of strategic purchasing is purposed to study relatively new concept of purchasing management. The concept is based on the perception of supplier as a business partner of buying firm, and relationship with suppliers as a partnership. Along consideration the topic the following conclusion were made:

- Supplier development concept is element of new approach to buyer - supplier’s relations as “partnership”. The perception of supplier as a partner of the business is based on the belief that close buyer-supplier cooperation can improve outcome performance of buying-firm.
- According to definitions of supplier development process, it is long term oriented program purposed on achieving improvements in supplier’s operation, and regular monitoring of supplier performance.
- Elaboration of supplier development approach was predetermined by a range of theoretical views and concepts, such as relation view and transaction cost concept.
- There are several classifications of supplier development strategy applied by buying firm. Krause D et al. (2000) classification based on the types of undertaken measures, Wagner S. (2005) classification is based on type of improvements which buying firm expect to reach, capability or performance improvement, and Sanchez-Rodriguez C. et al. (2005) base their classification on level of buyer involvement and characteristic of implementation complexity.
- Efficiency on supplier performance improvement depends on the supplier development strategy. Prhinski C. and Benton W. (2004) states that according to suppliers’ view only growth of supplier commitment (which as it is proved derived from buyer – supplier close relations) to buyer firm impacts positively on the supplier performance improvement, while communication supplier development strategies help to increase commitment.
- Supplier development process depends on the value of purchase item, amount of purchase item, and the type of supplier enterprise. Suppliers of strategic items are the objects of supplier development process initiated by buying firm. Service base companies usually prefer to use competitive pressure strategy to reach desired level of supplier performance, while product based enterprises prefer to employ “direct” strategy of supplier development process.
3.1.4. Performance of strategic purchasing, supplier selection and supplier development functions in small and medium size enterprises.

According to the general view of political, economical and social analytics, small and medium size enterprises are the engine of economic growth and considerable resources for employment. Xavier Barre (2005) states that small and medium-sized enterprises play a crucial role in developing national economy and creating employment.

In our days in the world there is no common approach to define the term “small to medium size enterprise”. On the base of two criteria which are (1) number of employees in the firms and (2) its annual turnover, each of the nations establish its scale to measure and define the company. As the example of calculations of small to medium size enterprises, the approaches of European Union, Russia, USA and Japan are regarded below.

European Union and Russian Federation, USA and Japan, practice two different approaches to calculation of small to medium size enterprises. European Union and Russia have fixed intervals on number of employees and annual turnover. In contrast to fixed number approach, USA and Japan apply different requirements depends on industry the firm operates in.

Calculation of SME in European Union entered into force by the European Commission on 1st of January, 2005. It introduces three categories of enterprises. An enterprise is by definition “any entity engaged in an economic activity, irrespective of its legal form”, where medium size enterprise is the entity with less than 250 employees, with € 50 million or less turnover, and balance sheet less / or equal to € 43 million. Small entity with less than 50 employees, with € 10 million or less turnover, and balance sheet less / or equal to € 10 million. Micro entity with less than 10 employees, with € 2 million or less turnover, and balance sheet less / or equal to € 2 million.

In Russian Federation, according to Federal Law from 6th of July, 2007, medium size enterprises are considered to be entity within 101 – 250 employees, and turnover less than 1 bil. RUS RUB (around € 25.7 million); small enterprises are entities from 15 to 100 employees, and turnover 400 mil. RUS RUB (around € 10.3 million); and finally, micro companies are 1 - 15 employees and turnover 60 mil. RUS RUB (around € 1.5 million).

Meanwhile in the United States of America, Department of Small Business Administration (SBA) established scale of industry varied criteria for small firms. The admitted number of headcount for small firm basically is until 500 employees, though for a number of industries it can be grow till 750 employees (for example, cooking and cracker manufacture, distilleries, etc.), and 1000 employees (cigarette, footwear manufacturing, etc.) Besides, the scale of annual turnover significantly varies cross industries, from $ 7 million (around € 5.5 million) for retail service industries to $ 33.5 million (around € 26.3 million) of annual for most general & heavy construction industries. In Japan the government performed the categorization of economy into 4 (Four) main sectors and assign following quotes for small scale enterprise: for manufacturing and others – 300 or less employees; wholesale and services – 100 or less employees, retail – 50 or less employees.

Significant difference among approaches to calculate small and medium size enterprises in the different countries complicates the studies of SME. Cross regional comparison of small to medium size business statistics and practices, faces the question which business entities related to small business on national level can be suitable for international comparison of phenomenon.

In practice, the importance of SME size enterprises for economically developed countries is obvious from national statistics on SME’s share in economy. In instance, in European Union according to European Commission annual report on EU SMEs in 2008, in EU-27 there were over 20 million enterprises where about 43 000 were large scale enterprises. Consequently, the 99.8 % of EU enterprises are SMEs. Besides, the figures over the period 2002-2008 indicate that
the number of SMEs in the EU has grown faster than the number of large enterprises. The number of SMEs increased by 2.4 million and the number of large enterprises by 2,000 enterprises (European Commission, Annual report, 2009). As described by Birley and Westhead (1990), historically the small size enterprises have been playing a major role in western economies for years. Meanwhile, there is outstanding SME statistics in Japan. According to Small and Medium Enterprise Agency, in Japan economy share of SME in 2001 was 99.7%, with 70.2 per cent of market employees. Taking into consideration the vast amount of small to medium size businesses in different regions of the world, SME’s management has to receive careful attention of academic studies.

Due to the common agreement on importance of small to medium size enterprises for national economies of developed countries, the studies on small and medium size business have been rapidly growing since the end of 20th century, however the issues of effective purchasing in SME has not been still studied full. Particularly, it is stated that there is low amount of analysis of purchasing management in SME (Quayle M., 2000; Christensen, 2003; Ellegaard, 2006; Pressey et al., 2009) “A review of the purchasing and small company literatures demonstrates limited interest in this hybrid theme and few cross-literature synergies” (Ellegaard, 2006, p. 272). Meanwhile, literature review on implication of strategic purchasing in SME discovers opposite points of view on the purchasing role and its function in small to medium size enterprises. Evidently we can divide expressed opinions into “optimist” and “pessimist” views on possibility of strategic purchasing management in small to medium size business. In instance, Carr and Pearson, (1999) express concerns that strategic purchasing may be unsuitable for SMEs, which often lack the flexibility to devote resources to such initiatives. Quayle M. (2000) concludes from empirical analysis non importance of strategic purchasing in SME, due to its resource limitation and vast size asymmetries in the markets. Furthermore, Zheng et al. (2004) argues that purchasing management is fragmented and non-strategic as small-medium size enterprises usually buy in small quantities due to cash flow.

On the one hand, limitation of resources in SME leads to significant differentiation of purchasing practices in SMEs and large scale enterprises; and hence, is an obvious hinder for strategic purchasing adaptation. On the other hand, there are a number of authors who consider strategic purchasing as opportunity for SME to obtain lacked resource. So, Park and Krishnan (2001) regarding the necessity of any sized firm to respond on the challenges of enhance global market competition, and common possibility of the firms to integrated/aligned the purchasing function into strategic planning, argues that strategic purchasing is regarded as being relevant to firms of all sizes. According to Pressey et al (2009) literature analysis “Several authors agree that small- to medium-sized enterprises would particularly benefit from effective purchasing (Dollinger and Kolchin, 1986; Gadde and Hakansson, 2001) since in order to be successful their own limited resources need to be complimented by external resources” (Pressey et al., 2009, p. 214)

Considering both “optimist” and “pessimist” points of view on possibilities of small to medium size enterprises to employ strategic purchasing in their organization, it is obvious that both points of view derive from the same argument. They consider the amount of resources which company posses, and while “optimists” conclude that strategic purchasing is the efficient solution for SME to overcome resource limitation, “pessimists” insists in the opinion that due to the shortage of SME recourses, small to medium size enterprises are not able to implement strategic purchasing.

Literature analysis indicates that several studies on implementation of strategic purchasing and its functions in small to medium size firms were conducted. These studies gave the following results.

The comparison of strategic purchasing implementation in SME and large scale enterprises shows that SME and large size companies’ attitudes to purchasing differ. Besides, on
base of conducted researches several authors report that supplier selection, supplier development and other functions of strategic purchasing barely find use in small to medium size businesses (Quyale M., 2002; Overby J. and Servais P., 2005; Ellegaard C., 2006; Pressey et al., 2009). Quyale M., (2002) suggests that large firms were positive about the role that purchasing plays in comparison to smaller firms, who were less positive about the contribution of purchasing to the organization’s performance. Finley (1984) notes one obvious hinder for SME to develop long term and close collaboration with supplier, it is the lack of purchase volume, which in many cases place small buyers in asymmetrical power positions to larger scale company supplier, it reduces the possibilities of buyer to request low prices.

Besides, paying attention to supplier development process, large amount of supplier development programmes initiated by giant companies can be discovered. For instance, Quayle M. (2000) indicates training efforts done by specialized Toyota Supplier Support Center (TSSC) in the United States, which participated that large number of suppliers has received assistance from Toyota in building up lean manufacturing capabilities, or by General Motors which initiated the program of Purchased Input Concept Optimization with Suppliers. The capabilities which were developed in the suppliers after the training courses benefited the suppliers and the company initiator on the long run.

From described examples of supplier development processes in large scale enterprises, it is obvious that giant companies spending the resource believe that the final result of cooperation with suppliers will overcome the inputs in undertaken supplier development programmes. Meanwhile, small to medium size enterprises can not afford this type of supplier development programmes due to their limitation in turnover.

Furthermore, researchers of purchasing practices in SME state that purchasing practices across SME significantly differs from entity to entity (Ellegaard C., 2006; Pressey et al., 2009). Morrissey and Pittaway (2004) studying purchasing management in small to medium size firms concluded that on purchasing point of view SMEs can not be considered as homogeneous group as purchasing practices within SMEs varies greatly. Besides, Park and Krishnan (2001) research of supplier selection models in small businesses supported the hypotheses stating that significant amount of variations in small firms’ supplier selection process determined by:

1. Set of objective criteria,
2. Factors of industry and its competitive environment in which the firm operates, and also
3. Such personal characteristics of small firms’ executives as age, work experience, and level of education.

Concerning supplier selection and evaluation criteria in SME, researchers agree that most of the small to medium size enterprises apply quality and cost/price criteria to the purchase item (Pearson and Ellram, 1995, Quayle, 2002). Moller and Pesonen (1981) emphasize general loyalty of SME to its constant suppliers. Loyalty to supplier demolishes the necessity to initiate new supplier selection process, and besides it considers being the way to mitigate supply risks. Further, Pressy et al. (2009) state that many small to medium firms do not practice formal supplier evaluation procedure, and generally formality level is staying low. From the stated literature findings it can be concluded that supplier selection process in small to medium enterprises significantly varies cross SMEs. Besides the set of selection criteria, external conditions of industry, and personal characteristics of firm’s executives, impact on supplier selection performance in SMEs. As the result, researchers recognize that supplier selection process in small to medium size firms are staying considerably tactic rather strategic process, and performed in traditional rather then strategic way.

Meanwhile, previous researches on management of purchasing report about strategic alliance of purchasing duties and CEO’ responsibilities in SME. Particularly, Gadde and Hakansson (2001) report that purchasing function is integrated into responsibility of the owner, or, as Dollinger and Kolchin (1986), Quayle (2002) notice in some cases purchasing management is delegated to the key employees in the enterprise.
Literature analysis on supplier development function in SME indicates lack of researches on this area. Ellegaard (2006, p.276) notes that both the purchasing literature on SMEs and the SME literature in general pay significant attention to supplier performance management. Quayle, M. (2000) stays that due to SMEs’ lack of resources and power, supplier development is thought to be of little importance. However the topic on implementation of supplier development concept in SME is still not researched thoroughly.

Results of literature analysis on performance of strategic purchasing, supplier selection and supplier development functions in small to medium size enterprises, state that small to medium size enterprises express less interest on practice strategic purchasing management, then large scale enterprises. Supplier selection process varies greatly among SMEs entities, and supplier development process in SME has not received considerable academic researches.

Findings of the paragraph

In the paragraph on strategic purchasing, supplier selection and supplier development functions in small to medium size enterprises, it was conclude that:

- In practice, there are two radically different approaches to calculate small to medium size enterprises. One is considered on the example of EU and Russian, and it is based on fixed number categories; while another is used in USA and Japan, and based on variation of SME’s scale on its industry.
- SME plays the crucial role in the national economies of developed countries, which is obvious on the statistic of SME development in the region, and proportion between large size companies and SME.
- Most of the authors on purchasing management in SMEs state that this topic was not studies fully in spite of the general interest to small to medium size business.
- Studies on small and medium size business have been rapidly growing since the end of 20\textsuperscript{th} century, however the issues of effective purchasing in SME has not been still studied full.
- Concerning possibility of strategic purchasing in SME authors opinions are controversial, and can be defined as “optimistic” and “pessimistic” point of views. However, despite of supporting different conclusions, most of the authors rely on the resources of SME, so part of them state that the limited amount of resources will not allow SME to establish strategic purchasing, while other conclude that due to the limited resources SME will especially benefit from strategic purchasing, as the source to complement missed resources.
- Literature analysis indicates that several studies of implementation of strategic purchasing and its functions in small to medium size firms were conducted. The comparison of strategic purchasing implementation in SME and large scale enterprises shows that SME and large size companies’ attitude to purchasing differ. Large companies spending the resource on supplier development programmes believe that the final result of cooperation with suppliers will overcome the inputs in undertaken supplier development programmes. Meanwhile, small to medium size enterprises can not afford this type of supplier development programmes.
- Concerning supplier selection and evaluation criteria in SME, researchers agree that most of the small to medium size enterprises apply quality and cost/price criteria to the purchase item. Researchers recognize that supplier selection process in small to medium size firms are staying considerably tactic rather strategic process, and performed in traditional rather then strategic way.
4. Empirical Research on Realization of Strategic Purchasing in Small to Medium Size Enterprises

This chapter is devoted to empirical study of role and function of strategic purchasing in small to medium size enterprises. Study of SMEs’ strategic purchasing performance in economy of Russia is introduced. Further, the secondary data on implementation of strategic purchasing management in SMEs of other countries is reviewed in order to perform cross regional SME comparison between received primary data and secondary data on former researches on the topic.

4.1. Performance of Strategic Purchasing and its Functions in Small to Medium Size Enterprises of Russia

Pursuing the purpose of current research the profound interviews with 5 (Five) small and medium size firms established in Russian market were arranged. Selection of the companies for interview was based on firm’s performance and span of life at the market.

Due to a number of specific characteristics of Russian market, such as unstable economic situation (in instance, economical crisis of 1991, 1998, 2008), frequently changing legal regulations (tax policy within 2000-2008), and finally, high percentage of small enterprises is reported to be in the “shadow economy” i.e. not registered, keep no official books and pay no taxes (Barre, 2005), brings to the necessity to impose following requirements on sample of interviewed companies:

- Full registration of SME;
- Calculation of SME on base of Russian Federal Law about small to medium size enterprises (2007);
- Companies life span at the market not less then 10 years.

Five interviewed companies perform in different economy sectors, trading/service, pharmaceutical trade/medical service, agriculture/trading, manufacture, printing house/ outdoor commercial service. The database of the companies participated in the interview and their business description are given in Appendix 1.

The interview was designed in semi structured way and was conducted with owners, CEOs, commercial directors or concerned managerial purchasing tasks employees. Conducted interview structure with main question blocks are given in the Appendix 2.

Results of interviews

Respondents answering the questions related to strategic purchasing management and its performance in their companies, gave the following information.

Allocation of human resources on purchasing function: in three interviewed companies, purchasing management performed by commercial director. In two companies there is a division of purchasing duties on strategic and tactic. Up present moment tactic duties are in response of purchasing manager in one firm, and in response of production manager at another, while, strategic duties, such as relationship with suppliers, communication, and meetings, are performed by CEOs of the companies.

Four out of five interviewed companies expressed considerable interest to purchasing management in their organizations. They emphasized long term and close relations with their key suppliers. All four respondents paid attention to the fact that their firms have been working
with key suppliers since the first years of firm’s formation. Only one out of five interviewed companies has defined the role of purchasing to be crucial for business support, but rather tactic than strategic task in the organization. This company does not strive to design close communication with suppliers than those which necessary for order performance.

On the issues of relations with suppliers, the companies which have emphasized long term relations with suppliers stated maintaining positive collaborative relations with them. At the question how would respondents define their relations with suppliers, as trust by their lasting relationships, newly formed partnerships, satisfaction with quality/price ratios of procured product, and suitable supply source, four out five companies defined their current buyer-supplier relations as trustful partnership. Meanwhile one out five companies which does not maintain long term relations with suppliers defined suppliers as suitable source to supply business maintaining items.

At the question about the number of suppliers the companies supply from, four respondents reported about supply base with average number of 30 suppliers, however, it was emphasized that strategic product/service are acquired from average three strategic suppliers. Meanwhile one interviewed company has about 10 considered to be key suppliers of row materials and services. The respondent explains considerable number of key suppliers with the fact that none of the companies at the local market can meet the full sector of needs on row materials, meanwhile international source resource were not considered be available due to the necessity to source unpredictable (depends on respondent’s customer order) set of materials in short term.

The written agreements with defined strategic suppliers are done by all respondents.

Main criterion of supplier selection for three interviewed companies is reported to be quality of purchase item. Two company put of five indicate main criterion to be quality verses price, depends on the requirements which its customer put on the order.
Second popular criterion among three respondents is price, while two others report that it is assortment. Besides, two interviewed firms reported high priority of supplier which gives opportunity to purchase with no prepayment of order.

At the question on supplier development none of the respondents has reported “direct” strategies of supplier development. Even more, none of the respondents has shown awareness of efficiency to invest human, time and finance resources in suppliers’ firms.

However, referring “indirect” strategies of supplier development as competitive pressure, evaluation and certification systems, incentives strategy (Krause et al., 2000), three out of five companies undertook at least one of these strategies.

One of the companies has reported that after supplier selection and order performance, they have undertaken supplier evaluation and have reported the results to suppliers. The step to evaluate was undertaken in order to assure itself that in right supply choice and to emphasize to supplier its expectations to purchase high quality goods.

One company undertakes organization of annual educative seminars on mutual topics, and holds joint meetings on outcome of the seminars.

The third company conduct the regular meetings with three key suppliers for evaluation their collaboration and for searching other aspects of business where they can increase beneficial cooperation. This company already has beneficial cooperation with its suppliers apart the order performance. For instance, the company respondent and its suppliers hold joint maintenance /repair service of equipment acquired by company’s customer.

Concerning formal written procedures of purchasing management such as purchasing performance reports at the companies, written supplier performance evaluation and auditing,
methods of supplier selection, etc, four respondents out of five have stated unimportance of these actions. Referring to the lack of resources at the companies, they consider to be not necessary to spend time for additional “paper work”. Meanwhile, one company out of five reported that it seems necessary to rationalize evaluation of purchasing management performance in the company and introduce formal written and regular procedures.

**Conclusion of interview findings**

Four interviewed companies put effort on purchasing management development in the company and design close relations with strategic suppliers.

On the base of their core business four companies have selected their strategic suppliers, consider them to be their business partners, and orient to have long term cooperation with them. The strategy of these companies is to develop close relationship with fewer suppliers and regularly maintain relations with them. They choose suppliers among those who open for participation in the dialogue, negotiating additional to order aspects of cooperation and searching for mutually beneficial forms of cooperation.

Similar for all company respondents is the way of purchasing organization in the firm. Purchasing duties are mainly focused upon the CEO’s or commercial director’s responsibility. Usual scheme of purchasing organization is: CEO who is involved into supplier selection and development and commercial director who is in charge of processing the purchase orders, control of purchasing tasks and its coordination with company’s budget. Thus, in interviewed companies, purchasing function can be divided into strategic and tactic levels, where strategic functions and decision making power belongs to CEO, while tactic operations belong to commercial director.

Among interviewed companies only printing-house does not have close relationship with suppliers. Its supplier’s database is large and information exchange with suppliers develops only within order performance. The company holds the strategy of multi sourcing with an aim to control offered costs among alternative supply sources. This company mainly purchases raw materials to perform print items and lighting solutions for outdoor commercial. The findings of interview with this company can be explained by the classification of purchase item by Sarkar A. et al. (2006) who stated that routine items (for example raw materials) characterized with selection among large number of supply sources, with short term supplier relations, and narrowing supplier selection function to tactic operation. Meanwhile four out of five interviewed companies have not realized the need of purchasing planning, purchasing performance reporting nor formal regular evaluation of suppliers. Relying more on subjective judgments on these issues, they prefer to keep away procedures which take additional resource spend.
4.2. Performance of Strategic Purchasing and its Functions in Small to Medium Size Enterprises of United Kingdom and Denmark

Literature analysis on realization of strategic purchasing management, supplier selection and supplier development functions in SME revealed disagreement of authors on the range of key items. First of all, several authors (Carr and Pearson, 1999; Quayle M., 2000; Zheng et al., 2004) question suitability of strategic purchasing management in small to medium size enterprises. Referring to the shortage of vital resources in SME, they conclude that it creates hinder for implementation of strategic purchasing in small to medium size firms. Secondly, several researchers (Ellegaard C., 2006; Pressey et al., 2009; Morrissey and Pittaway, 2004) reports the findings support the high extent of variations of purchasing management practices in SME. And finally, there is lack of researches about supplier development performance in small to medium size enterprises.

Taking into account researchers’ disagreement on strategic purchasing performance in small to medium size businesses, it seems necessary for current research to consider as much studies of purchasing management in SME as it is available, and preferably to conduct cross regional studies of supplier selection and supplier development functions of strategic purchasing in small to medium size businesses.

As the result of literature review, 4 (Four) suitable studies for the purpose of current research were discovered. These researches are Quyale M. (2002) survey of 400 (Four hundred) small firms in Suffolk region, in United Kingdom (UK); Pressey et al. (2009) survey of 97 (Ninety Seven) small to medium size enterprises in UK; Overby J. and Servais P. (2005) international purchase activity of 139 (One Hundred Thirty Nine) small to medium firms in Denmark; Ellegaard C. (2006) interview of 16 (Sixteen) small firms’ owners in Denmark. Due to the selected researches, the countries of strategic purchasing management studies in SMEs are United Kingdom and Kingdom of Denmark.

Both Denmark and United Kingdom have considerable share of small to medium size businesses in their national economies. SMEs in the United Kingdom and Denmark are the backbone of the national economies. Besides, the SME population of the UK (almost 1,6 million in 2005) is consider to be one of the largest in the EU-27. Besides, being the member states of European Union both of the countries follow EU standard on calculation small to medium size enterprises. On the base of EU’s SME scale, United Kingdom has 4.8 million private sector enterprises (in 2008), where small and medium-sized enterprises accounted for 99.9 per cent of these enterprises, with 59.4 per cent of private sector employment and 50.1 per cent of private sector turnover. Kingdom of Denmark has 99.7 per sent of SME in private sector of national economy. It has 66.0 per cent of employment and value added rate 64.8 per cent (Eurostat data, 2005). Thus, according to statistics data, United Kingdom and Denmark are the countries of developed private sector of economy with extremely high percentage of small to medium size enterprises.

Selected studies on purchasing management in small to medium size enterprises of United Kingdom and Denmark resulted with following conclusions:

**United Kingdom**

Through a survey of 97 small to medium size enterprises of UK SMEs’ managers, Pressey et al. (2009) revealed that:
- Purchasing practices varied greatly across SMEs.
- Purchasing formality is generally low.
- Purchasing planning appears to be taking place less formally and/or less long-term: “revealed that the sample did not engage in formally writing a long-range plan for the purchasing function for the next 5–10 years” (Pressey et al., 2009, p. 219) However, the authors mark that SMEs have tendency to incorporate purchasing plan with corporate plan and put into focus the relationship with key suppliers.
- Limited evidence of purchasing being employed strategically. “Only 12.6% of the SMEs in our sample claimed to employ strategic purchasing (denoted by ‘agree/agree strongly’ responses) with the majority of firms’ sampled (54.7%) not subscribing to strategic purchasing”. (Pressey et al., 2009, p. 219)
- Many firms not undertaking formal supplier evaluations. “16% of firms made no or very little use of supplier evaluation. This finding suggests that in approximately half of the SMEs sampled supplier evaluation is undertaken” (Pressey et al., 2009, p. 221)

At another research, exploring awareness of effective purchasing among small to medium size enterprises Quayle M. (2002) has performed the survey of 400 small firms in Suffolk region, UK. The following results of research were obtained:
Issues of purchasing and purchase-related activity (purchasing, subcontracting and supplier development) do not appear to be important.

- Quality, price, product reliability are main supplier selection criteria. The results also name such criteria as service reliability, capability to support, time to market.
- It is reported that 46% have a supplier development programme.
- “Only 19% of the companies have a separate purchasing function, which is, on average, two buyers”. However, 81% has a designated employee (often the owner manager) performing purchasing task jointly with his main organization duties (Quayle M., 2002, p.154).
- 65% of respondents perceived purchasing to be unimportant. “The general view (65%) was that with little or no perceived purchasing power, there was no need to pursue the activity through additional resource(s)” (Quayle M., 2002, p.154).

**Denmark**

Overby J. and Servais P. (2005) conducted the research on international purchase activity of small to medium 139 Danish firms. Focusing their research mainly on studying the extent to which SME’s purchase abroad, Overby J. and Servais P. (2005) have as well analyzed such issues as supplier selection criteria for buying firm and relationship with suppliers. Concerning supplier selection criteria the authors report that:

- Price/cost and quality reveal to be the most important motive for buying firm, while reliability of delivery, lead time and negotiation were only perceived as moderate motivators. However, the authors mark that rate of supplier selection criteria depends on the type of purchase item. So, quality criterion for purchase of raw materials is not the foremost one, while “quality” is crucial contributor in purchase of machinery item.
- Concerning the supplier relations Overby J. and Servais P. (2005) state that 43% choose supplier abroad as their supplier was more willing to negotiate than other suppliers were. Besides, the authors mark the positive linkage between the complexity and importance of purchase item and close buyer-supplier relations.
At another research, accomplishing literature review through purchasing and small company business agenda, Ellegaard C. (2006) supplemented the research with interview of 16 small firms’ owners. During research the author obtained the following results:

- Purchasing was handled by the company owner in 15 of these companies, while one company assigned responsibility to a highly merited employee very close to the owner.
- Due to the lack of resources, small company owners perform operational acquisition of components, but do not develop their purchasing skills and procedures.
- The empirical data supported the contention that small companies use little time on strategic purchasing.
- One out of 16 interviewed company owners perceived purchasing as a key task, other 15 (Fifteen) do not perceive purchasing as distinct task.
- Buying companies show loyalty to their suppliers; however it is explained not with tendency to long-term relations, but as a means to mitigate supply risks.
- Supplier selection process is performed rarely. Mainly company owners rely on “very few formal procedures/ guidelines and often ad hoc when the need emerges”. Consequently, company owners have limited supply market knowledge. “The empirical data revealed that the studied small company owners have some knowledge of the local market, poor knowledge of the regional and national market, and next to no knowledge of international sources” (Ellegaard C., 2006, p.280)
- The formality level of supplier selection process is low, “few documented procedures existed and written contracts were rarely made” (Ellegaard C., 2006, p.280).
- They tended to have stable and close supplier relationships, ensuring consistency of supplies.Besides, the interviewed small company owners all perceived close relationships with suppliers as a critical necessity for success.

**Cross research result findings**

Performed studies on purchasing practices in SMEs of United Kingdom and Denmark show high variation of purchasing practices. Generally there are little data confirming implementation of strategic purchasing management in small to medium size enterprises of these countries. However, on the other hand, not fully used strategic purchasing approach has impacted influence on designing purchasing function in SMEs, so that purchasing executives partly applied elements of strategic purchasing in the firms, such as tendency to long term relations and focus on key suppliers.

Supplier selection and supplier development functions have not been the focus of considered researches; however these functions were mentioned in the results as significant part of strategic purchasing. According to the finding, supplier selection has been mainly employed in traditional way; no rationalize selecting method are used, the process is usually based on price/cost and quality criteria. Meanwhile supplier development, being the part of relations with supplier, was part of companies supply strategy (46% of sample studied by Quayle M., 2002).
4.3. Discussion of findings from empirical research of strategic purchasing management performance in small to medium size enterprises in Russia, Denmark and United Kingdom

Have obtained results of empirical studies of strategic purchasing management performance in small to medium size enterprises in Russia, Denmark and United Kingdom, the next step is to make cross regional comparison of results and conclusion on extent of strategic purchasing management in SMEs in this region.

Cross regional comparison allows obtain objective knowledge of studied issue. Small to medium size enterprise is common form of business development which is used in all regions of the world; however the extent of its application and share in national economy varies from country to country. So, in Russian market the share of SME is estimated to be 15-17%, which is incredibly low, comparing to 99.7% in Denmark, and 99.9 % in United Kingdom.

Meanwhile United Kingdom and Denmark being the member states of European Union and subjecting SME’s calculations to the common EU scale, turn out to be available for comparison with SME private sector in Russia, due to the fact that EU’s and Russin’s scale of SMEs calculations is relatively similar.

Table 2.1. European Union and Russian scale of small to medium size enterprise calculation

<table>
<thead>
<tr>
<th></th>
<th>EU</th>
<th>Russia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Headcount</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medium</td>
<td>51 - 250</td>
<td>101-250</td>
</tr>
<tr>
<td>Small</td>
<td>11 - 50</td>
<td>15-100</td>
</tr>
<tr>
<td>Micro</td>
<td>1 - 10</td>
<td>1-15</td>
</tr>
<tr>
<td>Turnover</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medium</td>
<td>€ 50 mil</td>
<td>1 bil RUS RUB (around € 25.7 million)</td>
</tr>
<tr>
<td>Small</td>
<td>€ 10 mil</td>
<td>400 mil RUS RUB (around € 10.3 million)</td>
</tr>
<tr>
<td>Micro</td>
<td>€ 2 mil</td>
<td>60 mil RUS RUB (around € 1.5 million)</td>
</tr>
</tbody>
</table>

Source: The author.

In spite of the shift to extent the number of small business employees in Russia, scales offer the same interval for micro, small and medium size business, which is 1 to 250 employees.

The comparison of results on purchasing management studies conducted in United Kingdom, Denmark, and Russian small to medium size enterprises in respect to characteristics of strategic purchasing and its supplier selection, supplier development functions performance, are indicated in the summery table below:
Table 2.2. Summary table of strategic purchasing characteristics and its implementation in United Kingdom, Denmark and Russia

<table>
<thead>
<tr>
<th>Characteristics of Strategic Purchasing, Supplier Selection, Supplier Development Functions</th>
<th>United Kingdom</th>
<th>Denmark</th>
<th>Russia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Long term purchasing planning</td>
<td>No long range planning</td>
<td>No information</td>
<td>No long range planning</td>
</tr>
<tr>
<td>Consistency of purchasing plan and corporate plan in the organization</td>
<td>It is reported that there is tendency to incorporate purchasing plan with corporate plan (Pressey et al., 2009)</td>
<td>No information</td>
<td>There is no evidence of purposed elaboration of consistency between purchasing and corporate plans.</td>
</tr>
<tr>
<td>Long term purchasing decision</td>
<td>No information</td>
<td>SMEs support long term relations as a means to mitigate supply risks</td>
<td>SMEs mainly support long term relations, as result of trust and partnership relations</td>
</tr>
<tr>
<td>Close cooperation with top management in a firm</td>
<td>No information</td>
<td>Purchasing duties are mainly handled by company’s owner (Ellegaard C., 2006)</td>
<td>Purchasing duties are mainly handled by company’s owner</td>
</tr>
<tr>
<td>Focus on strategic suppliers and relationship with them</td>
<td>Small companies are reported to be tend to put into focus relations with key suppliers (Pressey et al., 2009)</td>
<td>Small company owners perceive close relationship with suppliers as a critical necessity for success (Ellegaard C., 2006)</td>
<td>Close relations with key suppliers are in the focus of owner/CEO of firms. Managers show general awareness of benefits from close cooperation with strategic suppliers.</td>
</tr>
<tr>
<td>Rationalized supplier selection process</td>
<td>No information</td>
<td>Supplier selection is performed mainly in reactive, ad hoc way</td>
<td>Supplier selection of none strategic items performed mainly on cost/price criteria</td>
</tr>
<tr>
<td>Supplier selection criteria</td>
<td>Traditional criteria (quality, price, product reliability)</td>
<td>Price/cost, quality, readiness to negotiate (Overby J., and Servais P. 2005)</td>
<td>Quality; price/cost; assortment</td>
</tr>
<tr>
<td>Formality level</td>
<td>Formality is generally low</td>
<td>Formality is generally low</td>
<td>Formality is generally low</td>
</tr>
<tr>
<td>Supplier development</td>
<td>46% have a supplier development</td>
<td>No information</td>
<td>Undertaken mainly “indirect” supplier</td>
</tr>
<tr>
<td>Evaluation of purchasing performance</td>
<td>Formal supplier evaluation is not undertaken</td>
<td>No information</td>
<td>Formal supplier evaluation is not undertaken</td>
</tr>
<tr>
<td>-------------------------------------</td>
<td>-----------------------------------------------</td>
<td>----------------</td>
<td>---------------------------------------------</td>
</tr>
<tr>
<td>Attitude to strategic purchasing</td>
<td>Limited evidence purchasing employed strategically (Pressey et al., 2009); 65% perceive purchasing to be unimportant (Quayle M., 2002)</td>
<td>Companies use little time on strategic purchasing (Ellegaard C., 2006)</td>
<td>Companies prefer to spend least time for strategic purchasing aspects and do less what they call “paper work” such as: evaluation of purchasing performance, written procedures,</td>
</tr>
</tbody>
</table>

*Source: The author.*

Summary table shows similar level of implementation strategic purchasing, supplier selection, and supplier development functions in Russia, Denmark and United Kingdom. Despite of being countries with different share of SMEs in economy, small and medium size firms in the studied countries mainly follow such principles of strategic purchasing as top management involvement in purchasing issues, cooperation with other functions in organization management, source from few numbers of key suppliers, orientation at close and long term relations with key suppliers. Meanwhile, findings of cross regional comparison have little evident of long term purchasing planning and regular evaluation of purchasing performance in all of studied countries.

From the analysis results of 2.1 – 2.3 paragraphs, conclusion of implementation of strategic purchasing and strategic supplier selection and supplier development functions in small to medium size enterprises can be draw as SWOT table.
Table 2.3. Summary SWOT Analysis

<table>
<thead>
<tr>
<th>Strengths</th>
<th>Weaknesses</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Overall improvements of firm’s outcome</td>
<td>1. Misunderstanding among SME’s employees goals and processes of strategic purchasing and its functions</td>
</tr>
<tr>
<td>2. Efficient achievement of corporative goals</td>
<td>2. Lack of strategic supplier selection methods knowledge among employees</td>
</tr>
<tr>
<td>3. Effective sourcing of strategic items</td>
<td>3. Resource (e.g. time, finance) spends on training for employees</td>
</tr>
<tr>
<td>4. Gaining competitive advantage at the market</td>
<td>4. Strategic purchasing requirement of considerable firm’s human/ time resources involvement</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Opportunities</th>
<th>Threats</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Many SMEs have already been following some principles of strategic purchasing management (e.g. develop long term relations with key suppliers, CEO participation in key supplier relations)</td>
<td>1. Limited resources</td>
</tr>
<tr>
<td></td>
<td>2. Not possible to reach supplier with interest to communicate open and develop close relations</td>
</tr>
<tr>
<td></td>
<td>3. Underestimation of strategic purchasing formalities (e.g. planning, routine evaluation, etc.)</td>
</tr>
</tbody>
</table>

Source: The author.
5. Discussion of results

Analyzing implementation of strategic purchasing and its supplier selection and supplier development functions in small to medium size enterprises, range of research methods were employed to reach the stated purpose.

Firstly, profound literature analysis on conceptual development of strategic purchasing within 1980 to 2010 was performed. The analysis included observation of strategic approach to purchasing management verses traditional practices of purchasing. Besides, special attention were paid to supplier selection and supplier development functions of purchasing, as are defined to be the most important functions of purchasing management in organization.

Secondly, the empirical studies on the base of both primary and secondary data were conducted, have developed knowledge about purchasing practices in small to medium size enterprises in Russia, and have created cross research results observation of purchasing practices in SMEs of United Kingdom and Denmark.

The following correlation between theoretical and empirical parts of current research was revealed.

Purchasing function in organization can be performed in traditional or in strategic ways. Recently, due to the triggers of external and internal environments, strategic approach to purchasing management in the organization is considered to be more beneficial than traditional. However, the empirical studies focused on small to medium size enterprises indicate that strategic purchasing does not find full implementation in SME’s as this type of enterprises limited in basic resources to support strategic strategy and its procedures.

Some researchers (Carr and Pearson, 1999; Quayle M., 2000; Zheng et al., 2004) raise the question about suitability of strategic approach to purchasing management in small to medium size enterprises. Regarding the issue through resource-base view they conclude that strategic purchasing can not be realized in SMEs. Meanwhile the empirical findings both of primary and secondary data report that partial elements of strategic purchasing approach play considerable role in small to medium size enterprises. In this sense, it is necessary to mention general agreement of researchers about CEOs and/or owners’ involvement in firms’ purchasing issues. Findings of literature analysis and empirical researches confirm that small and medium size firms’ executives are aware of key role of their strategic suppliers for their business development and success. Top managers are personally responsible for relations with suppliers and trying to develop closer cooperation with them.

Meanwhile, in spite of the tendency to establish close relations with strategic suppliers, SMEs’ purchasing executives also admit other supply sources which increase their supply base. The empirical findings obtained though interview with Russian SMEs’ company owners/CEOs indicate that respondents recognize significant role of key suppliers, meanwhile allowing multi sourcing from alternative suppliers as well. This behavior can be explained with findings from literature review. Several researchers (Ellegaard C., 2006; Pressey et al., 2009; Morrissey and Pittaway, 2004) report about high extent of variations of purchasing management practices in SME. Besides, Park and Krishnan (2001) state that variations of purchasing supplier selection processes in small to medium size firms predetermined by such factors as set of objective criteria, factors of industry and its competitive environment, and personal characteristics of small firms’ executives as their age, work experience, and level of education. Due to these factors, purchasing practices in small to medium size enterprises can vary greatly from one business entity to another.
Furthermore, according to literature findings supplier selection process in small to medium size firms is mainly performed in traditional way, as, firstly, SMEs rely on few supplier evaluation criteria e.g. price/cost and quality; secondly, companies do not employ rationalizing methods of supplier selection; and thirdly, researchers agree that general level of formality procedures in SMEs is low. The same characteristics of supplier selection process in SMEs were reported by participants of interview. They have stated that a lack of companies’ resources prevents them to introduce advanced methods of supplier selection in purchasing practices; the applied criteria to supplier selection are usually limited with price/cost or quality issues, and finally, respondents consider formality procedures as additional “useless” job for employees. Hence, in spite of the fact that supplier selection is main function of strategic purchasing, it is performed mostly in traditional rather strategic way in SME.

In contrast to supplier selection function, supplier development has more influence on strategic purchasing management of SME. According to literature findings, there are three main classifications of it. Supplier selection process is put into classification of two, three and four possible types of supplier development strategy/ programme (Krause D. et al., 2000; Wagner S., 2005; Sanchez-Rodriguez C. et al., 2005). Broad variation of supplier development strategies is predetermined by its definition, where supplier development process is defined to be any effort of the buying firm with a supplier to increase the performance and capabilities of the supplier (Krause and Ellram, 1997). According to this definition both direct and indirect buyer supplier cooperation on improvement of supplier performance is related to supplier development process. Consequently, there is a variety of measures which can be undertaken by buying firm toward supplier improvements, from evaluation and report of supplier performance to direct investments of capital/ human resources into supplier’s business. Basically, supplier development types can be divided into “direct” and “indirect” buyer involvement.

Empirical findings indicated that SME have interest to apply indirect supplier development strategies. Four out of five interviewed companies reported about “indirect” supplier development programs in their firms. Secondary data analysis confirms that small to medium size enterprises employ “indirect” supplier development strategies as a part of buyer-supplier relations. Meanwhile, SMEs do not consider “direct” types of supplier development being profitable for them.

At the result of the study both literature and empirical findings contributed into SWOT analysis of implementation strategic purchasing in SME. According to SWOT analysis, there are significant strengths of strategic purchasing implementation in SME. Strategic approach raises efficiency of purchasing and other management functions in SME, and enhances company’s outcome performance. Among opportunities for implementation strategic purchasing approach in SMEs, there are such principles of strategic purchasing as top management involvement in purchasing issues, cooperation with other functions in organization management, source from few numbers of key suppliers, orientation at close and long term relations with key suppliers, which have been already involved into SMEs’ management. Meanwhile, the threats to implementation of strategic purchasing management in SMEs are: limited resources of small and medium size enterprises, obstacles to reach supplier with interest to communicate open and develop close relations, underestimation of strategic purchasing formalities. As it is seen from SWOT analysis, implementation of strategic purchasing management in SME has both significant advantages and considerable threats which should be taken into account conducting strategic purchasing in SME.

Meanwhile, from performed cross regional analysis it can be concluded that SMEs purchasing practices as implementation of strategic purchasing and its supplier selection and development functions, in the countries with high number of SMEs and with low number of SMEs, have similar tendencies of implementation strategic purchasing and its functions.
 Conducted analyses on implementation of strategic purchasing in SME makes contribution into research hybrid theme of purchasing management and small to medium size business. The study provides research of implementation strategic purchasing, and its supplier selection and supplier development function in SMEs. Profound analyses of supplier selection and supplier development processes are introduced at the first chapter of the current report. Supplier selection and development functions are considered as the main functions of strategic purchasing in organization. At the second chapter the regional and cross regional empirical studies on topic are introduced. Cross regional analysis allow to research phenomenon in more accurate and objective way. Cross regional comparison of current study includes consideration of SMEs purchasing practices in Russia, Denmark and United Kingdom.

Performed study serves to enlarge knowledge of strategic purchasing implementation in small and medium size business entities, and provides a platform for further research of purchasing practices in small to medium size enterprises.
6. Conclusion

The purpose of current master thesis project is to analyze implementation of strategic purchasing and its supplier selection and supplier development functions in small to medium size enterprises. In order to reach the purpose of the project, the research performed profound literature on the topic, then, special effort was put to research the achievements of previous studies on purchasing management in SMEs, further, the empirical study of strategic purchasing in SMEs was conducted, and its results were compared with the previous researches on the topic in cross regional way.

Developing analysis the project purpose was accomplished and research questions were discovered. The following conclusions of analysis are indicated below:

Characteristics of traditional and strategic purchasing approaches differ in such issues as: reactive verses proactive, short term planning verses long term planning, non integrative verses integrative, top manager view of purchasing as non value added function verses top managers’ attitude as to advantage gaining resource. Strategic and traditional approaches differ in scope of purchasing practices and tasks related to each of the approaches. Strategic purchasing approach outnumber traditional one in number of tasks and procedures.

Supplier selection and supplier development functions of strategic purchasing are consider being the most important functions of purchasing management in organization, however these functions have different rate of implementation in SMEs. Primary and secondary data have coincided pointing that supplier selection in small to medium size enterprises is performed mostly in traditional way. Companies make supply choice basing on few main criteria such as quality, cost/ price, and terms of delivery. No rationalizing methods of supplier selection are held.

In contrast to traditional approach to supplier selection, supplier development plays considerable role in purchasing management of SME. Findings of previous researches indicate the use of supplier development programs in SMEs. Primary data state that small to medium size enterprises tend to undertake “indirect” supplier development programmes purposed at improvements suppliers’ performance. “Indirect” supplier development strategy does not bring considerable expenses to the firm; meanwhile it leads to closing buyer – supplier relations, growth of commitment from both sides and improvement of cooperation.

In contrast to radical statements of ongoing discussion about possibilities to employee strategic purchasing management in SMEs, where researchers’ opinions are divided into “optimistic” and “pessimistic” groups due to their responds, current study comes to conclusion that SMEs’ purchasing management has both traditional and strategic elements.

Both primary and secondary data confirm that SMEs mainly follow such principles of strategic purchasing as:

1. Top management involvement in purchasing issues,
2. Cooperation with other functions in organization management,
3. Source from few numbers of key suppliers,
4. Orientation at close and long term relations with key suppliers.

Meanwhile, analysis has also indicated traditional elements of purchasing management in SMEs, they are:

1. Short term purchasing planning,
2. Lack of routine written evaluations of purchasing performance.

Thus, basing on stated research results it can be concluded that implementation of strategic purchasing in SMEs is partial, since not all strategic purchasing principles are involved.
Since such elements of strategic purchasing as top management involvement, cooperation with other functions in organization management, close collaborative and long term relations with few number of key suppliers, do not take additional resources from SME, and vice versa, they benefit to complement short internal resource by external in more efficient way, strategic approach to purchasing management can be considered as suitable approach to purchasing management in small to medium size enterprises.

Cross regional comparison indicates similar rate of implementation strategic purchasing, supplier selection, and supplier development functions in Russia, Denmark and United Kingdom. Comparison of primary and secondary data shows that there is similar scope of traditional and strategic elements of purchasing management are performed in SMEs of these countries. Thus, it can be concluded that performance of strategic purchasing in SME does not vary on SME’s share in national economy.

Concerning future researches of purchasing management, it seems necessary to divide small and medium size enterprises into separate groups. Medium enterprises, which in Russian scale of SME calculation is 101 - 250 employees and in European scale 50 - 250 employees, have considerably more resources for full implementation of strategic purchasing than small size enterprises, which in Russian scale are limited with 15 – 100 employees and by European scale have 11 - 50 employees. Different amount of resources in small firms and medium size enterprises can lead to different findings on implementation of strategic purchasing management in these enterprises.
List of References


**Appendix 1.**

**Table A.1. Characteristics of interviewed companies**

<table>
<thead>
<tr>
<th>Company</th>
<th>Purchase Item</th>
<th>Business Description</th>
<th>Number of employees</th>
<th>Purchasing Operations</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Trading/ service provider</td>
<td>Strategic items: machines, container handling and humidity control equipment</td>
<td><strong>Offers</strong>: Distribution of transport packaging solutions, factories equipment, machines, container handling and humidity control equipment, <strong>Core business</strong>: atomization of Russian factories, <strong>Competitive advantage</strong>: Company has all knowledge in house and offers full shop stop for its clients, including consolation, individual approach to each needs, transportation, and maintenance of equipment.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>55 employees</td>
<td></td>
<td>The selling items are purchased from the international and local suppliers. The relationship with three key suppliers since 1st year of company’s foundation.</td>
</tr>
<tr>
<td>2. Printing house/ manufacturing and service provider</td>
<td>Capital items: Large scale printing machines (were purchased three years ago) Strategic items: Different types of paper and colors, lighting solutions</td>
<td><strong>Offers</strong>: Production and installation of street billboards, production of printing goods upon order (business cards, calendars, advertisements, etc.), and lighting exhibition stands. <strong>Core business</strong>: production, installation and maintenance of commercial/exhibition equipment. <strong>Competitive advantage</strong>: Offering similar kit of services than its competitors at the industry, company relies on its image of reliable service provider, which presents at the market longer than its competitors and its capabilities confirmed with certificates.</td>
<td>60 employees</td>
<td>Large database of alternative supplier, multi source strategy.</td>
</tr>
<tr>
<td>3. Agriculture/trading</td>
<td>Strategic item: cuttings of plants</td>
<td><strong>Offer</strong>: seedlings of garden flowers and vegetable planets</td>
<td>Regular 15 employees, plus 35-40 employees</td>
<td>International sourcing; three main</td>
</tr>
</tbody>
</table>
| 4. Pharmaceutical production and trade/ medical service | Routine items:  
Row materials for agriculture needs, packages, seeds. | Core Business: growing and selling high quality flower seedlings and vegetable plants.  
Competitive advantage: high quality flowers seedling and vegetable plants have broad assortment of colors and breeds, are sold in main agricultural markets of the city with competitive prices. | during summer season | suppliers from abroad. |
|  | Strategic item:  
Homeopathy final medical goods,  
Ingredients for production homeopathy medicines,  
Routine items:  
Raw materials such as bottles, envelopes, tags | Offer: homeopathy medical treatment, consultation, homeopathy pharmaceutical goods  
Core business: complex service of consultation, homeopathy medical treatment and homeopathy pharmaceutical goods.  
Competitive advantage: firm is unique in the kit of homeopathy medical treatments and homeopathy pharmaceutical goods. There is no similar actor at the market. | 30 employees | International and local sourcing. Five strategic suppliers in homeopathic area. Cooperation since them since foundation of the company. |
| 5. Manufacturer of façade materials | Strategic item:  
Ceramic material  
Routine item:  
Production materials as heat insulation material, ceramic base, etc. | Offer: façade materials  
Core business: producing broad assortment of façade materials, making accent on ceramic goods  
Competitive advantage: produces broad assortment of façade materials, has net of distributors around the city, able to handle nonstandard orders. | 30 employees | Local sourcing; Long term, close collaboration with four key suppliers. |

Source: The author.
Appendix 2

Semi structured interview includes 5 (Five) blocks stated below:

1. Descriptive information about firm
2. Management of purchasing in the firm
3. Supplier selection process in the firm
4. Supplier development process in the firm
5. Estimation of purchasing performance in the firm

Each of the blocks includes the number of basic questions. Following questions related to the blocks:

1st block:

1. Sector your company operates in?
2. How long your company operates in the market?
3. Total number of employees in your company?
4. Who are the main customers of your company? (B2B, B2C, both)
5. Approximate annual turnover?
6. How would you describe the core business of the company?
7. How would you describe competitive advantage company has on the market?

2nd block:

1. What is approximately total purchasing spend of your company?
2. Does your company have purchasing department?
   => If YES, How many employees are working in purchasing department?
   => If NO, who is concerned of purchasing issues.
3. Does you company plan purchasing expenses?
4. Which of the following statements is better characterize purchasing role in your company: (1) purchasing is equal partner of other functions in the company, (2) purchasing is included in the firm’s strategic planning process, (3) purchasing initiate changes in product/service design; (4) purchasing function is performed in ad hoc way

3rd block:

1. Which sourcing strategy your company develops: single, multiple sourcing, parallel sourcing (mix of single and multiple sourcing on different items)
2. Does your company source locally or from abroad?
3. What is total number of suppliers your company has?
4. How many suppliers your company considers to be strategic suppliers? (“strategic suppliers” with whom considerable efforts will be invested to develop long-term relationships)
5. Which criteria your company follows in selecting suppliers?
6. Does a company support relation with suppliers beyond the order processing?
7. Does your company have regular meetings with suppliers?
8. Identify the level of satisfaction with the suppliers? (Trust by their lasting relationships, newly formed partnerships, and satisfaction with quality/price ratios of procured product).
9. Does your company have written agreements with suppliers?
10. Are you satisfied with current suppliers?
11. Has your company applied penalty clauses to current suppliers?
12. Does your company have regular supplier performance evaluation procedure?

4th block:
1. Is your company interested to have closer collaboration with supplier?
2. Does your company initiate other, apart of order processes, collaboration with suppliers?
3. Does your company have supplier development programme?
   => if YES, What type of supplier development strategy your company follows?
4. Does your company provide feedback about supplier performance?

5th block:
1. How would you describe the role of purchasing in your organization?
2. Does your company have regular purchasing performance reporting?
3. How would you evaluate purchasing performance in your company: worse than target, on target, better then target.