

Use of Outsourcing in Creating the Intellectual Capital of Small and Medium-Sized Enterprises

Marek Matejun

Department of Management, Technical University of Lodz, Lodz, Poland

(matejun@p.lodz.pl)

Abstract: Development of outsourcing provides new possibilities for using this concept in creating the intellectual capital of enterprises. This idea may also be successfully applied by small and medium-sized companies, which gain an opportunity to develop individual elements of the intellectual capital by overcoming the internal limitations of resources. The purpose of the article is to define potential directions of the use of outsourcing in creating the intellectual capital of SMEs. Outsourcing can be used here, among others, as a knowledge development method or a method shaping relationships with suppliers. The important role of the concept is also connected with improvement of the quality of the performed processes and the access to the required resources or technologies in order to implement innovations. This is confirmed in the article by the results of the research carried out on a sample of 177 SMEs, which use outsourcing solutions in their operations.

Keywords: innovation, intellectual capital, knowledge, outsourcing, small and medium-sized enterprises

I. INTRODUCTION

Development of outsourcing leads to the separation of business processes, strategic involvement of partners in transformation of the applied solutions or the use of external services involving advanced technologies and knowledge services; it provides new possibilities for using this concept in creating the intellectual capital of enterprises.

This idea can be also successfully applied by small and medium-sized enterprises (SMEs) that face opportunities of developing particular components of the intellectual capital by means of partnership and long-term relationships with outsourced service providers overcoming their internal limitations of resources. Outsourcing affects here not only the intellectual capital area connected with human resources, but also its market, organizational and innovative aspects, ensuring the company development, the increase in its value and enabling the development of sustainable competitive advantage.

The purpose of the article is to define the potential directions of the use of outsourcing in creating the intellectual capital of SMEs. The aim of the work was supported with empirical research carried out on a sample of 177 small and medium-sized enterprises operating in the European Union and using outsourcing solutions in their operations.

II. DIRECTIONS OF USING OUTSOURCING IN CREATING INTELLECTUAL CAPITAL OF SME SECTOR

Outsourcing can be defined as a concept consisting in the reduction of operations performed by internal company services based on employment and hierarchical relationships and entrusting the tasks to external service providers based on formalized contractual or capital relationships.

The rationale behind the development of outsourcing was largely affected by such theoretical concepts as the economies of scale, the economies of transactional costs, the resource approach in the business entity management, changes related to the manufacturing processes and creation of business relationships [1]. From amongst other theoretical trends exerting impact on the outsourcing concept, we can mention managerial dilemmas, such as “to make or to buy” [2], the contractual theory of a corporation [3], the value chain concept [4] or the concept of core competencies [5].

Integration of theoretical foundations of the outsourcing concept leads to the assumption that it is a method of shaping organizational structures of contemporary business entities based on long-term and partnership cooperation with outsourced providers of business solutions. Its use can lead to the decrease in the costs of business operations, more flexible and less hierarchical organizational structures; it also enables the concentration of resources in core functional areas of enterprises.

However, the outsourcing concept is still evolving towards the solution of a strategic character for organizations. Such an approach allows contracting operations and shifting the responsibility for execution of specific business processes, which can be observed especially in the Business Process Outsourcing (BPO) concept. The development of the model is affected by such drivers as: broadband internet, business specialization, educational attainment, inexpensive data storage, online analytic processing and internet security [6].

The strategic involvement of partners in the transformation of the adopted solutions can be accompanied by the processes optimization as for the requirements, efficiency and operational costs. The above-mentioned developmental directions can be observed mainly in the Business Transformational Outsourcing (BTO) model [7]. The approach is a combination of

consulting, technological solutions and outsourcing, which enables and facilitates organizational transformations and helps creating and maintaining the flexibility of operations. As compared to the traditional model of outsourcing, BTO allows the company to seize new market opportunities in a fast and sustainable way and to safely manage the company in the changing environment, taking advantage of opportunities to build new competitive signifiers [8].

Another trend resulting from transformations observed in the contemporary business environment as a consequence of the shaping of knowledge-based global economy is Knowledge Process Outsourcing (KPO). This solution consists in separating expert and highly-specialized services, such as investment analyses, market and marketing research, patent solutions, research and development area or legal analyses out of the organizations. In such circumstances, the external provider has to have highly-educated and qualified human assets capable of independent thinking and acting as well as implementing their own solutions consistent with set research criteria. KPO involves high risk level as the service providers perform and integrate a wide range of business processes, technologies and services implemented within the framework of outsourced services. Processes executed within KPO may require a cooperation of a large team of experts and specialists, such as MBA managers, engineers, scientists, lawyers, financial analysts, accountants and other specialists [9].

The above outsourcing developmental directions indicate the increasing significance of outsourcing in the process of supplementing not only physical resources but more often, and even primarily – knowledge and intangibles that create foundations of the intellectual capital in contemporary organizations. Outsourcing is an interesting solution also for small and medium-sized enterprises. On the one hand, such enterprises are oftentimes restricted internally by the shortage of resources, whereas on the other hand, proper management of such entities helps building competitive advantage based on opportunities offered by the circumstances.

Primary qualitative features of small and medium-sized enterprises that ensure their competitive advantage involve high flexibility of functioning, creativity and possibility of faster implementation of innovations that can be more easily verified by the market demand. Another crucial element is the entrepreneurship of owners and employees of such entities and their capability to ensure a proper dynamics of market activities. An important feature is also the easiness of entering into cooperation relationships including cooperation with institutions operating in the science/technology sector. Additionally, the competitive advantage of SMEs can be built by taking advantage of privileged terms of acquiring financial resources or promotional, technological and educational support from sources launched especially to support local economies and small business [10].

Nevertheless, the condition of taking advantage of these opportunities is the capability of ensuring a suitable

level of intangibles, especially related to the intellectual capital. Such resources in small and medium-sized enterprises are oftentimes more significant than tangible assets, and the development seems to be facilitated due to the natural flexibility and entrepreneurship of smaller business entities. Thus, the intellectual capital concept (IC) underlies the significance of soft assets in the management of contemporary enterprises.

In the business practice, the term was popularized by Scandia, a company from Sweden, where it was defined as the possession of knowledge, applied experience, organizational technology, customer relationships and professional skills [11]. Currently, the intellectual capital is treated as a supplementation of the company physical and financial assets. Its underlying components are frequently referred to in various IC models as follows: human resources, market and relationship resources, organizational resources and innovation resources [12]. As each of the above areas is composed of numerous specific dimensions and measures, their analysis should be multidimensional and based on theoretical concepts specific mainly for the resource management approach [13].

The dynamic increase in the value of enterprises becomes the underlying purpose of developing and supporting the intellectual capital. Such effects additionally supported with advantages of implementing innovations and building competitive advantage based on knowledge can be achieved by small and medium-sized enterprises using the intellectual capital concept in the company developmental processes. The major hindrances in the implications and intellectual capital research can be, first of all, difficulties in the intellectual capital measurements and frequently unstable nature of organizational solutions.

However, intellectual capital provides SMEs with immense diversity of organizational value, such as strategic positioning (e.g. local market share, leadership, name recognition), profit generation, acquisition of innovations from other firms, customer loyalty, cost reductions, improved productivity and more [14].

The outsourcing concept can become a method of creating the intellectual capital of SMEs as the solution is based on the inter-organizational cooperation and enables the development of all the components of the intellectual capital. The proposed model of creating the intellectual capital by small and medium-sized enterprises based on outsourcing assumes stimulating all four components of IC. Outsourcing can be used, inter alia, as a method complementing the SME owners' and employees' knowledge and skills (the area related to human resources). The shaping of sustainable and partnership relations with suppliers (the market area) is another significant effect. A crucial role of this concept is also related to the quality improvement in operations and processes (the organizational area) and the access to necessary resources or technologies enabling the implementation of innovations in small and medium-sized enterprises (the innovation area).

III. METHODOLOGY

In the last few years, in the Department of Management, Technical University of Lodz, three research projects were carried out with respect to the use of outsourcing concepts in the management and creation of the intellectual capital of SMEs in the European Union, as follows:

1) Project no. 1 dealt with the role of outsourcing in the fields of accountancy and fiscal advisory services in the development of small and medium-sized enterprises. The research was carried out in 2005 with the participation of 110 micro-, small and medium-sized enterprises. The research was carried out by M. Matejun, PhD, under the academic supervision of Professor S. Lachiewicz.

2) Project no. 2 dealt with the outsourcing concept use by SMEs operating in the region of Lodz. The research was carried out in 2008 with the participation of 30 enterprises, by Ł. Fogel, MA, under the academic supervision of M. Matejun, PhD.

3). Project no. 3 dealt with the use of outsourcing in the development management in small and medium-sized enterprises and included in-depth empirical research. The research was carried out in 2010 with the participation of 37 enterprises operating in the Lodz province, by M. Kaczmarek, MA, under the academic supervision of M. Matejun, PhD.

In all the research projects, the methodology based on surveys with the technique of surveys handed directly to respondents was used. As a research tool, the author's questionnaires for the survey were elaborated, however, with an attempt at ensuring the possibility of comparing answers provided by the respondents. In all the three projects the sample was selected based on targeting at the enterprises that met the definition of micro-, small and medium-sized enterprises binding in the European Union pursuant to the recommendation of the European Commission of 6 May 2003 [15]. In order to select the research objects in a precise manner, each meeting was preceded with a short interview with a person representing the company.

In total, 455 surveys with questionnaires were distributed and 181 responses collected (survey response rate at the level of 39.8%). The final research was based on 177 correctly filled in questionnaires collected from small and medium-sized enterprises. Micro-companies (0 – 9 employees) dominated in the research sample, functioning usually as companies held by individuals, sometimes as civil companies or limited liability companies. Small enterprises (average annual employment of 10 – 49 employees) were at the level of 14%, while medium enterprises (average annual employment of 50 – 249 employees) – 5% of the sample. Most of the studied enterprises operated in the service sector, mainly within the local area.

All the analyzed enterprises used the outsourcing concept in their business activities, the most frequently outsourced services being accountancy and fiscal advisory

services. Popular outsourced areas in the analyzed enterprises included maintenance and renovations, security, payroll and HR services, cleaning services and transportation and logistics.

The research respondents included owners or contracted managers responsible for the enterprises. The participants of the research were mainly males, over 40 years of age, with academic or secondary education.

IV. RESULTS

The empirical analysis of using the outsourcing concept in creating the intellectual capital of small and medium-sized enterprises was divided into four parts corresponding to the components of the intellectual capital of small and medium-sized enterprises, as follows:

- 1) analysis of the outsourcing impact on areas related to human resources, expertise, capabilities and skills;
- 2) analysis of the outsourcing impact on the market area related mainly to the relations with the organization stakeholders;
- 3) analysis of the outsourcing impact on the organizational area related mainly to the improvements in the functions and business processes performed in the organization; and
- 4) analysis of the outsourcing impact on the innovation area related to the access to necessary resources and technologies enabling the implementation of innovations.

The analysis of using outsourcing **in the human resources area** reveals that in the studied enterprises the method was used chiefly as a solution complementing and increasing the knowledge and competencies of the enterprise owners and employees. The advantage of using outsourcing in small and medium-sized enterprises basically consisted in the facilitated and cheaper access to expertise and specialized knowledge.

The results of the research reveal that in the majority of the analyzed enterprises (66%) the increase in the access to expertise and specialized knowledge as a result of cooperation with external providers was observed. The rate was even higher in the case of professional services rendered in the field of accountancy and fiscal settlements. In project no. 1, as many as 79% of respondents observed that the application of outsourcing enabled a better access to specialized accounting and fiscal knowledge. Outsourcing solutions within accountancy and fiscal advisory services resulted, among others, in the decrease in inconvenience of fiscal inspections (in 85% of the analyzed enterprises) or improved control over proceeds and expenditures of the enterprise (in 75% of the analyzed enterprises).

As the results reveal, apart from the access to expertise and specialized knowledge, the application of outsourcing allowed the owners and shareholders of small and medium-sized enterprises to increase their knowledge. For example, in project no. 1, 63% of the analyzed entrepreneurs observed the increased knowledge of legal and fiscal aspects of carrying business operations. It is

noteworthy that the outcome in many cases was unexpected, i.e. the owners had not assumed that their legal and fiscal expertise should increase before actually using outsourcing.

In the subsequent part of the research, the impact of outsourcing **on the market area of the intellectual capital** was analyzed. In this aspect, outsourcing seemed to be, first of all, a solution that increased the number of stakeholders in the analyzed enterprises. The cooperation with external providers involved the cooperation of the analyzed small and medium-sized enterprises with providers of various business-related services.

The primary entities cooperating with the analyzed enterprises included as follows: providers of accounting and fiscal advisory services, security services, cleaning services, logistics and transportation services and marketing agencies. It is noteworthy that in the majority of instances the providers of outsourced services also belonged to the sector of small and medium-sized enterprises.

The cooperation with outsourced providers analyzed in the empirical research was of a sustainable character. The empirical justification of such an approach is a long-term character of outsourcing agreements entered by the analyzed small and medium-sized enterprises with their service providers. A significant majority of agreements (79%) was entered on for an indefinite period of time, and only 3% of agreements concluded by the analyzed enterprises were made out for the period shorter than 1 year. Solutions applied by the analyzed companies were in line with the contemporary strategic character of the outsourcing concept. 82% of the analyzed entrepreneurs in all the three projects asserted the outsourcing cooperation as a strategic long-term organizational solution. Such an orientation allows treating the external provider (in the organizational sense) as an internal company unit performing specific functions or processes and connected with the mother organization with specific contractual bonds. The results of the carried out empirical research in projects 1 and 3 reveal that almost 54% of responders treated their outsourced providers in such a way.

In the theoretical foundations of the outsourcing concept, it is also stressed that the cooperation is of a mutual partnership character. The results of the carried out research reveal that 72% of respondents in all the three research projects observed such a character of the relations.

The analysis of the outsourcing use **in the organizational area** of the intellectual capital concept reveals a significant role of the concept related to the improvement in the quality of functions and processes performed in the analyzed enterprises with the use of external providers.

The results show that 80% of respondents observed the improvement in the execution of functions or processes as a result of outsourcing. It was especially visible in the case of outsourcing accounting and fiscal advisory services analyzed in project no. 1, where 92% of respondents who had expected the improved quality of the processes executed in the areas actually observed the expected outcomes.

The use of outsourcing also exerted impact on the ordering of organizational procedures related to carrying out business activities in the analyzed enterprises of SME sector. In this case as many as 82% of respondents observed that the applied outsourcing solutions organized and positively simplified organizational procedures, ensuring the continuity and efficiency of business processes.

In the last part of the research, the impact of outsourcing solutions on the development of **the innovative area** of the intellectual capital concept with respect to small and medium-sized enterprises was analyzed. In this case, 67% of the analyzed entities within SME sector observed advantages resulting from the elimination of costly investments in the equipment and appliances necessary to fulfill the specific functions or business processes. It indicates a crucial role of outsourcing as a method enabling the noninvestment development of specific areas within small and medium-sized enterprises.

An important effect of the use of outsourcing in the process of stimulating the innovative area of the intellectual capital in the analyzed entities was an opportunity of focusing on strategic areas of business operations and core competencies of the enterprises. The results show that in 82% of the analyzed cases the respondents observed that the application of the outsourcing concept enabled further focusing on their core business activities. The effects were mainly observable in the case of accounting and fiscal advisory services.

An indirect effect of focusing on core operations was the release of resources (not only financial resources but also time and creativity), which in 52% of enterprises were used to implement innovations, first of all, in the form of new products and services offered by the analyzed enterprises.

Moreover, in 53% of the analyzed enterprises of SME sector, the use of the outsourcing concept triggered further organization, process and product transformations, showing the need of introducing changes and improvements in the enterprise to the SME owners and managers.

V. DISCUSSION

Development of the intellectual capital components by small and medium-sized enterprises themselves is frequently impossible because of shortages in the resources of the enterprises. The concept of outsourcing and basing the intellectual capital creation on partnership and strategic relationships with business environment can offer the required solution in this case.

Theoretical considerations and carried out empirical research lead to the determination of the following directions of the impact of the outsourcing concept use on creating the intellectual capital of small and medium-sized enterprises:

- 1) In the human resources area, the role of outsourcing in creating the intellectual capital involves

mainly a facilitated access to knowledge and specialized and expert services. The access to external, specialized knowledge in the analyzed enterprises usually took place without the decrease in the level of employment. The research results reveal that in over 75% of the analyzed companies belonging to the small and medium-sized enterprises sector the use of outsourcing did not involve the decrease in the employment level. Therefore, the use of outsourcing in such a case should not exert any negative social or economic impact as it happens in the case of large enterprises and offshore outsourcing [16].

2) On the market area of intellectual capital, the use of outsourcing in the small and medium-sized enterprise sector primarily increases the number of stakeholders in the organization, creating networking solutions based on sustainable and partnership cooperation. Unwillingness of the owners and managers of small and medium-sized enterprises to enter onto contractual market relations can pose a threat in this case. On the one hand, the relationships may result in positive synergy effects of the cooperation, but on the other hand, such bonds assume a partial restriction of the company operational autonomy.

3) In the organizational area, the use of outsourcing, on the one hand, may contribute to the improvement in quality of executed business processes and, on the other hand, enable focusing on key functioning areas, which increases the effects in the innovation area of the intellectual capital. The selection of proper areas to be outsourced is the primary requirement in this aspect. The outsourced areas should be those not directly related to the core activities of the enterprise but support the company core operations selected in a transformational outsourcing variant. Undertaking proper decisions in this aspect shall enhance the building of competitive advantage based on innovation, at the same time reducing the risk of the model benchmarking by the competition.

VI. CONCLUSION

In the process of the development and building competitive advantage in contemporary organizations, a special role is held by the intellectual capital. This intangible component of each organization is difficult to measure quantitatively; however, it plays a crucial role in market activity processes.

Theoretical considerations reveal a crucial role of the outsourcing concept in creating the intellectual capital of SMEs. The intellectual capital is developed in the process of a synergic development of its four components: human resources, market, organizational and innovation areas.

Empirical research carried out with the participation of small and medium-sized enterprises reveal the positive effects of using outsourcing in all the areas, and as a consequence, its significant impact on creating the intellectual capital based on inter-organizational

cooperation in the sector of small and medium-sized enterprises. The research results also reveal the prospects of using outsourcing in the sector of small and medium-sized enterprises in line with the assumptions of Business Transformational Outsourcing and Knowledge Process Outsourcing, which can additionally support the future processes of creating the intellectual capital in such enterprises.

REFERENCES

- [1] R. McIvor, *The Outsourcing Process: Strategies for Evaluation and Management*, Cambridge University Press, 2005, pp. 40-62.
- [2] K.W. Platts, D.R. Probert and L. Cádiz, "Make vs. buy decisions: a process incorporating multi-attribute decision-making", *International Journal of Production Economics*, vol. 77, issue 3, pp. 247-257, Jun. 2002.
- [3] P. Milgrom and J. Roberts, *Economics, Organization and Management*, Prentice Hall, Englewood Cliffs 1992, p. 20.
- [4] M. E. Porter, *Competitive Advantage: Creating and Sustaining Superior Performance*, The Free Press, A Div. of Simon and Schuster, 1998, pp. 33-58.
- [5] C. K. Prahalad and G. Hamel, "The core competence of the corporation", *Harvard Business Review*, vol. 8, no. 3, pp. 79-91, 1990.
- [6] T. N. Duening and R. L. Click, *Essentials of Business Process Outsourcing*, John Wiley and Sons, 2005, p. 10.
- [7] J. K. Halvey and B. M. Melby, *Business Process Outsourcing: Process, Strategies, and Contracts*, John Wiley and Sons, 2007, pp. 383-406.
- [8] E. Mazzawi, "Transformational outsourcing", *Business Strategy Review*, vol. 13, Issue 3, p. 39, 2002.
- [9] A. Larkey, "What is KPO?", *Outsourcing Essentials*, vol. 1, No. 5, 2006, www.outsourcing.com.
- [10] M. Matejun, *Barriers to Development of High-Technology Small and Medium-Sized Enterprises*, Technical University of Lodz Press, Lodz 2008, p. 19.
- [11] U. Johanson and J. Henningsson, "The archaeology of intellectual capital: a battle between concepts", in *Intellectual Capital Revisited: Paradoxes in the Knowledge Intensive Organization*, C. Chaminade and B. Catasús, Eds., Edward Elgar Publishing, 2007, ch. 2, p. 14.
- [12] D. Andriessen, *Making Sense of Intellectual Capital: Designing a Method for the Valuation of Intangibles*, Butterworth-Heinemann, 2004, p. 61.
- [13] B. Marr, *Perspectives on Intellectual Capital*, Butterworth-Heinemann, 2005, pp. 31-33.
- [14] S. Harrison and P. Sullivan, "Profiting from intellectual capital: learning from leading companies", *Journal of Intellectual Capital*, Vol. 1 No. 1, pp. 33-46, 2000.
- [15] Commission Recommendation 2003/361/EC of 6 May 2003 concerning the definition of small and medium-sized sized enterprises, "Official Journal of the European Union", L 124, 20.5.2003, p. 36.
- [16] P. McDougall, "There's no stopping the offshore-outsourcing train", *InformationWeek*, No. 990, May 2004, pp. 16-18.