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Motives for multisourcing in the IT sector

Abstract

Multisourcing is a relatively new phenomenon that began a decade ago as companies began developing strategies to split large information technology (IT) contracts into smaller ones. This provided the opportunity to choose best-of-breed suppliers, who were supposed to collaborate to provide a seamless service to the company. Firms began to multisource when the large IT contracts they had did not bring assumed benefits. At the same time, the business environment was forcing them to be flexible, efficient and able to quickly implement new technologies. The trend to multisource has been growing, so it is worth investigating why companies prefer this form of cooperation. This topic was not a subject of research previously.

The goal of the article is to identify, structure and analyze the motives for choosing multisourcing as a model for cooperation between firms. It verifies motives based on IT multisourcing literature. Case study is described, which, following Eisenhardt, is the correct method for early stages of studies on a topic such as multisourcing, which is still in its nascent stages.

The identified motives for multisourcing are uncertainty bounding, access to resources, preparedness, effectiveness, learning, and external motives. In any case, companies need to be mature and ready for it, so the motive of preparedness is the most crucial one to realize benefits of this form of cooperation. Knowledge of motives for multisourcing is important for companies that take decisions on service supplier strategy. The article helps to increase understanding of the multisourcing phenomenon and offers a fertile basis for future research.

Keywords: multisourcing, cooperation motives

Introduction

Multisourcing has been growing in importance in recent years in information technology (IT) and business services, to the point of being called by Capgemini an “outsourcing model of the future” [The Keys to Successful Multisourcing, 2008]. Both its benefits and threats are discussed in the literature. As it is a relatively new phenomenon and “the literature on multisourcing is in its nascent stages” [Bapna, Barua, Mani, Mehra, 2010], no attempt has yet been made to put together motives for multisourcing. The goal of the article is to identify, analyze and structure the motives for choosing multisourcing as a form of cooperation between firms. This topic is important both from a theoretical and practical point of view. It adds to theoretical understanding of multisourcing, its reasons but also its characteristics, and opens ground for further research on multisourcing and its effects. By understanding why this form of cooperation is chosen, one can hypothesize about and prepare for its future development. It also gives practical understanding as to why and when firms should decide on multisourcing and what to expect from it. It will help them in implementing multisourcing to gain advantage over competitors.

Multisourcing is defined according to various components, the widest definition based on cooperation with multiple suppliers, and the most specific one based on cooperation – competitive cooperation – of multiple best-of-breed suppliers. Aspects of definitions by various authors are shown in table 1.

TABLE 1. Aspects of multisourcing in definitions, by authors and publications

Authors	Publication year	Multiple companies	Business goals and strategy	Best of breed suppliers	Collaboration between suppliers
Porter, M. E.	1985	X			
Lacity, M.C., Willcocks, L.P.	1998	X			
Cohen, L., Young, A.	2005		X		X
Gibson, S.	2006	X			
Nagle, A., Maughan, A.	2007			X	
Bielewicz, A.	2008	X			
Levina, N., Su, N.	2008			X	
Capgemini White Paper	2008	X			X
Sobińska, M.	2009	X		X	
Stora, J.	2010	X			
Waszczuk, P.	2010	X		X	

Authors	Publication year	Multiple companies	Business goals and strategy	Best of breed suppliers	Collaboration between suppliers
Kulesza, M.	2010		X		
Andone, I.I., Păvăloaia, V-D.W.	2010	X			X
Bapna, R., Barua, A., Mani, D., Mehra, A.	2010	X			X

Source: Own analysis, based on literature.

In this article the most specific meaning of multisourcing will be used: working with more than one external best-of-breed supplier with similar capabilities but different specialities, which work in a spirit of trust and teamwork in a collaborative process to achieve the client's business goals. This is closest to the definition provided by Andone and Pavaloaia [Andone, Pavaloaia, 2010, p. 163]. In this article, service outsourcing for ongoing management and delivery of services will be referenced and cases will be chosen in which multisourcing was preceded by one-firm outsourcing (mega deal), which was unsatisfactory [Dieckmann, 2003, p. 1].

The structure of the article reflects the approach taken in the research: to first analyze the literature to identify potential motives and then to verify them in the practice of multisourcing. Literature concerning theories on interfirm cooperation, presented in section 1, suggests several potential candidates for motives and their applicability to this form of cooperation is verified in section 2, in which articles and cases of multisourcing in IT are analyzed. In section 3 a model is proposed for classification of these motives and conclusions.

Theoretical background for multisourcing as a form of cooperation

Multisourcing is a form of cooperation between companies. Various theories and concepts have attempted to explain why cooperation takes place: transaction cost economics (TCE), a resource-based view, game theory and strategic management theory. They will be reviewed in order to identify candidates for multisourcing motives.

(a) Multisourcing in transaction costs economics

According to the TCE, initially formulated by Coase [1937] [Coase, 1937] and “operationalized” by Williamson [Williamson, 1983] [Williamson, 1985], the decision to organize transactions within the firm or on the open market depends on the relative costs of internal versus external exchange [Prokop, 2010, p. 45] or of “make” or “buy”

[Klein, 2004]. Transaction costs are those experienced when arranging, managing and monitoring transactions in the market. Examples include writing a contract, negotiation, logistics, and monitoring.

Based on “rational economic reasons” as described by Williamson [2002], firms evaluate transaction costs of the exchange before selecting between three main governance structures: market, hybrid, and hierarchy [Williamson, 2002]. In all the structures, firms undergo various transaction costs. In hierarchies they include costs of management, risk of intrafirm relations, required level of engagement, and others. In the case of the market, costs include access to satisfactory prices, contract writing and execution, and others. A market would be thus chosen when adaptation, performance evaluation, and safeguarding costs are low. If these costs exceeded the production costs advantage, hierarchy would be chosen [Rindfleisch, Heide, 1997, p. 32]. Asset specificity, which appears when specific investment is required to make contracts effective [Thompson, 2003], is negatively related to performance of market transactions [Poppo, Zenger, 1998, p. 853], because with more specific assets quasi rents are created and opportunistic behavior appears which makes vertical integration a less costly solution [Klein, Crawford, Alchian, 1978].

Hennart [1993] has proved that using a mix of market and hierarchy is the most efficient form, as it minimizes the sum of shirking and cheating costs [Hennart, 1993, p. 529]. The so-called hybrid form of cooperation combines elements of both market and hierarchy. Their goal is to get rid of deficiencies of one organization (limited resources, low effectiveness, low efficiencies of scale, or possibility to split risks into more firms) and of hierarchy. In an extended enterprise the hybrid is a better choice, because hierarchy may be too cumbersome and impractical [Tanriverdi, Konana, Ge, 2007]. The choice of a specific partner is also connected with firm's evaluation of transaction costs involved [Gulati, 1993, pp. 8-9]. Qu and Brocklehurst [2003] have conducted an analysis of transaction costs in the supplier selection and suggest ways and means by which a specific relationship between buyer and supplier may circumvent these costs [Qu, Brocklehurst, 2003, p. 53].

Multisourcing is a hybrid form closer to market than hierarchy. When compared with market exchange, mega deal and hierarchy, as in table 2, there are more factors increasing transaction costs incurred by multisourcing than decreasing them, as compared with other settings. An exception can be uncertainty reduction, as multisourcing lowers the costs of risk and opportunism versus market and of shirking versus mega deal and hierarchy. IT decisions violate many of the TCE assumptions, and only by relating to uncertainty and small numbers can the anomalies be explained [Lacity, Willcocks, 1995]. In addition, empirical evidence shows that uncertainty reduction may be an important reason for choosing multisourcing [Łoboda, 2012]. Looking at other sources of costs, firms decide for multisourcing even though it bears higher relative transaction costs than market, hierarchy and the mega deal. An explanation for this phenomenon may be

TABLE 2. Sources of transaction costs increased (+) or decreased (-) by multisourcing as compared with market, hierarchy and “mega deal”

Multisourcing increases(+) or decreases(-) costs of: vs.	Market	Mega deal	Hierarchy
search for (quality) suppliers	- +	+	+
culture fit	+	+	+
information search on suppliers	+	+	+
diverging objectives of partners	+	+	+
contract completeness	+	+	+
contract writing	-	+	+
more frequent contracting	-	+	+
having to coordinate many suppliers	+	+	+
management (HQ)	+	+	-
uncertainty	-	+	+
risk	-	+	+
opportunism	-	+	+
efficiency of scale	-	+	+
logistics	-	+	+
access to information	-	even	+
access to specific assets	-	+	+
access to good price	+	- +	-
access to assets/ HR/ knowledge	+	-	-
flexibility	+	-	-
shirking	+	-	-

Source: own elaboration, based on: B. Łoboda, 2012, Transaction Costs Lowering as a Motive for Multisourcing in the Information Technology, Proceedings of the International Conference on Business Management and Information Systems, Bloomsbury.

that firms have the capability to handle the costs. One way to reduce the transaction costs associated with information asymmetries, opportunism, bounded rationality, uncertainty and similar issues is better service quality resulting from a symbiotic relationship between the client and the service provider. Firms also lessen the costs by using appropriate contracts [Gulati, 1993, pp. 8–9] and by properly arranging, managing, and monitoring transactions [Child, Faulkner, 1998, p. 20]. Among other factors that contribute to lowering transaction costs are lowering the costs of preparation, management and monitoring of the transaction, and eliminating the risks of opportunistic behavior, as well as improving coordination through better exchange of information, common decision making, and ensuring discipline in implementing decisions [Czakon, 2007, p. 115].

(b) Multisourcing in resource-based view

According to the resource-based view – the name was first used by Wernerfelt [1984] – companies gain competitive advantage based on resources they own and relations be-

tween them [Rumelt, 1984, pp. 557–558]. Resources are defined as assets, capabilities, processes, firms' attributes, knowledge, and other factors controlled by a firm that enable the firm to pursue a strategy that improves its efficiency and effectiveness [Barney, 1991]. Three types of resources are classified: physical capital, human capital, and organizational capital resources. Penrose sees a firm as a set of human and material, organizational and intellectual resources [Penrose, 1959]. To bring a sustained competitive advantage, the resources need to have four attributes: be valuable to improve firm's efficiency and effectiveness, be rare, be imperfectly imitable and be without strategically equivalent substitutes [Barney, 1991]. High-quality scarce resources can bring additional revenues, called rent [Rumelt, 1991].

The resource dependence perspective focuses on how firms deal with the scarcity of supplies [Child, Faulkner, 1998, p. 34]. It is not possible for a company to have all resources and competencies needed; companies need to acquire the resources, for example by cooperating [Cygler, 2009]. Together firms gain from synergies from cooperation, leading to competitive advantages not separately available. Through cooperation, companies may also limit competitors' access to supplies by blocking allies, setting technological standards, blocking distribution channels, and collusions [Czakon, 2007, p. 121]. As firms attempt to exert power, influence and control organizations possessing required resources [Pfeffer, Salancik, 1978], some companies start to cooperate to reduce uncertainty of depending on other organizations [Gulati, 1993, p. 10].

Among the immaterial resources, organizational capabilities are becoming more important [Itami, Roehl, 1987], for example, good financial control or the pace of implementing innovations. Capabilities differ from resources by the fact that resources are tradable and non-specific to the firm, whereas capabilities are firm-specific [Amit, Schoemaker, 1993]. Developing and using unique, valuable, and costly-to-copy capabilities can be a source of competitive advantage. A core competence needs to pass three tests: providing access to a wide variety of markets, offering perceived benefits to customers, and being difficult for competitors to imitate [Prahalad, Hamel, 1990, pp. 83–84]. Prahalad and Hamel [1990] point out that a multitude of cooperative relations is in many cases a key success factor and the ability to cooperate and create partnerships becomes a strategic competence [Sulejewicz, 1997]. Since the ability to multisource is difficult to copy by competition, can provide access to a wide variety of technologies, and can benefit customers by giving them access to better products in shorter time, this ability may be considered a strategic competence itself. In addition, the resource-based view provides an important insight into the motivations for multisourcing, because the scarcity and unequal split of resources, skills and information between suppliers contribute to company's selecting multiple best-of-breed suppliers, thus maximizing the usage share and gaining on time, cost, and access to knowledge.

(c) Multisourcing in game theory

Game theory is a specific form of decision-making theory based on mathematical modeling of specific situations, processes, and phenomena [Cygler, 2002, p. 47]. It analyzes rational behavior when payoff depends on the steps taken by players [Camerer, 1994] and considerations and following moves of the rational participants [Heifetz, 2012, p. 3]. Game theory is useful to explain the strategies of competition and cooperation by observing which strategies players in a game adopt and which outcomes are achieved [Child, Faulkner, 1998, p. 26].

It is assumed that the birth of the theory was in 1944, with the publication of Neumann and Morgenstern's *Theory of Games and Economic Behaviour* [Malawski, Wiczorek, Sosnowska, 2009, p. 12]. However, it was first applied to economics in the late 1970s, with Spence's work on market signaling. Four problems with implementing game theory to strategy involve: they are too hard to use (chopstick problem), there are no general principles (collage problem), they are hard to test (testing problem) and they can explain anything (Pandora's box problem). Education, longitudinal tests and more detailed research might solve these problems [Camerer, 1994, pp. 218–219].

In an interfirm setting when the optimal score can be achieved through cooperation, firms are concerned if their partner would not defect [Child, Faulkner, 1998, p. 27]. The strategy of defection is rational in a zero-sum, non-repetitive game. In repetitive games it would be hard for companies to find potential partners for cooperation when their reputation is harmed, so cooperation is a preferred strategy. On the other hand, Rotemberg claims that long-term contracts reduce quality because companies do not fear that the partner would not buy from them [Rotemberg, 1991]. Thus writing mid-term contracts can increase probability of cooperation and increase quality. It might be the reason that contracts in multisourcing last for shorter periods than the mega deals.

It is possible to increase the probability of cooperation by setting a pro-cooperative structure of pay-offs or taxation of defection, better availability of information and increasing "the shadow of the future", as described by Axelrod, which reflects the influence of the future on today's actions. Value of the long-term benefits from cooperation can be larger than the short-term benefits of defection [Sulejewicz, 1994, p. 63]. Other factors include limiting the amount of players, teaching people reciprocity and caring about each other, and improving recognition abilities [Axelrod, 1984].

The amount of players is an especially significant factor in multisourcing. According to game theory, the more players there are, the more difficult it becomes to promote joint interests and coordinate. The game becomes more complex and information costs increase. Cooperation is less stable and results are lower [Cygler, 2002, p. 54]. Because monitoring is more difficult, it is possible to observe the free ride phenomenon. In addition, with numerous players it is more difficult to follow the mutuality principle and provide immediate and just punishment [Sulejewicz, 1994, p. 71]. This leads to the conclusion that multisourcing is a complex setting and special measures

should be provided to limit the risk of free ride and to implement institutions allowing coordination and monitoring of results of each supplier. Therefore, companies need to be well prepared for multisourcing and design measures to increase the probability of cooperation.

(d) Multisourcing in strategic management theory: effectiveness, learning and external motives

As a part of the strategic management theory, Contractor and Lorange [1988] concentrated on the following antecedents for alliance formation: risk reduction, achievement of scale economies, technology exchanges, co-opting or blocking competition, overcoming trade barriers, facilitating international expansion, and linking complementary contributions of firms [Contractor, Lorange, 1988]. Other motives for collaboration include effectiveness, learning, transaction costs, resources, and uncertainty bounding [Czakon, 2007, p. 115]. Of these, two motives adding an interesting insight to multisourcing have not been discussed previously: effectiveness and learning.

Effectiveness can be achieved in three ways: through lowering purchasing or production costs, effects of synergies (economies of scale or scope, specialization), and increase of value [Contractor, 1986]. In multisourcing, cost effectiveness seems to be of lesser importance; having numerous suppliers does not create such economies of scale as in the case of one supplier. The post-contract management costs in multisourcing are estimated at close to 8% of total IT outsourcing costs [Lacity, Willcocks, 2001]. The costs are meant to be a trade-off with service quality, working with best-of-breed suppliers and innovation, which are at the heart of expectations from this relationship. Therefore, the value component of effectiveness could play a role in multisourcing, but not the cost component. If multisourcing were defined only as working with numerous competing suppliers, cost lowering could be expected, but as it aims for higher quality, flexibility or innovation, this factor should be less important.

Learning takes place while acquiring and using knowledge and improving processes. Powell et al [1996] distinguish between acquiring knowledge as a resource and learning, understood as evolving knowledge in a community between firms, universities, laboratories, suppliers, and consumers [Powell, Koput, Smith-Doerr, 1996, p. 116]. Child and Faulkner [1998] notice that the more ties there are in an industry, the more research intensive it is [Child, Faulkner, 1998]. Firms cooperate to be a part of such a group in order to innovate [Powell, Koput, Smith-Doerr, 1996], but also to pool technologies of partners, achieve technological synergy and exchange patents [Contractor, 1986], bring together complementary talents, enter markets faster, and join production resources to develop new technology. As multisourcing originated due to the fact that the large, one-supplier IT contracts did not bring expected results in terms of process excellence, innovation, and quality, one may expect that learning plays an important role in choosing cooperation with numerous providers.

Faulkner [1995] classifies motives into external (concerned with globalization or regionalization, international turbulence and uncertainty, fast technological change, and shortening of product life-cycles) and internal ones (resource dependency, minimization of transaction costs, need for speed to market, and spreading of financial risk) [Faulkner, 1995]. Internal ones have been discussed in previous sections of this article. However, external motives are very appropriate to multisourcing because it originated from changes in the environment. Most of the factors influencing it are also external, including economics, geography, organizational policy, culture, quality, trust, protection of supply source, price competition, and buyer inertia [Quayle, 2001, p. 43].

(e) Motives for multisourcing based on theory

The theories and concepts described above propose multiple, often overlapping candidates for multisourcing motives. TCE suggests the motive of uncertainty bounding. Analysis of other transaction costs suggests that firms do not undertake multisourcing to lower those costs, because it increases costs compared to hierarchy, mega deal or market. Instead, firms need to implement measures to counteract them by preparation and properly arranging, managing and monitoring transactions.

The resource-based view suggests such motives as access to material and non-material resources (capabilities, financial resources, prestige, knowledge, employees, and organizational solutions), synergies, and reducing the uncertainty of depending on other organizations. Game theory indicates multisourcing to be a complex setting, due to the increased risk of free ride involved in cooperation with multiple suppliers, and therefore a firm's preparedness is an important condition for multisourcing.

Effectiveness can motivate firms to multisourcing through a synergy effect and an increase of value. The third way of achieving effectiveness, lowering of costs, seems to be of lesser importance in multisourcing because having numerous suppliers increases costs. Learning (innovation, acquiring knowledge as a resource, using knowledge, and improving processes) may play an important role in choosing multisourcing because it was initiated due to the fact that large, one-supplier IT contracts did not bring expected results in terms of process excellence, innovation, and quality. External motives are also very appropriate to multisourcing because it originated due to changes in the environment. Thus the goal of overcoming market turbulence and uncertainty as well as taking advantage of changes in the market provide a motivation for employing multiple suppliers.

Candidates for multisourcing motives and corresponding theories that helped to develop them are presented in table 3. Two motives which are often used in explaining other forms of cooperation are excluded from the table because as they are based on theoretical deliberation, they apparently do not refer to multisourcing: reducing transaction costs and effectiveness through cost reduction. Thus the following is proposed in

this article: multisourcing is undertaken based on various motives: internal, such as uncertainty bounding, access to resources, preparedness, effectiveness (synergies, increase of value), learning, and external motives.

TABLE 3. Candidates for multisourcing motives and corresponding theories

Motive	Underlying theory/concept
Uncertainty bounding	TCE, Resource-based view, Strategic management theory
Access to resources (including knowledge)	Resource-based view, Strategic management theory
Preparedness	Game theory, TCE
Effectiveness (synergies, increase of value)	Resource-based view, Strategic management theory
Learning (innovation, using knowledge, improving processes)	Strategic management theory, Resource-based view
External motives (overcoming and taking advantage of changes in the market)	Strategic management theory

Source: own elaboration based on TCE, game theory, resource-based view and strategic management theory.

Analysis of motives for multisourcing

(a) Method of the analysis

To verify whether the findings from theories explaining interfirm cooperation refer to multisourcing, articles and cases from IT have been analyzed. This industry was chosen because research on multisourcing concentrates mainly on IT and business services. Case studies taken from literature were analyzed following Yin and Eisenhardt [Piekkari, Welch, Paavilainen, 2009, p. 570]. Eisenhardt [1989] stresses the usefulness of the case study method for early stages of research on a topic or for a “freshness of perspective” [Eisenhardt, 1989, p. 532]. Yin [2003] states that case study investigates a contemporary phenomenon within its real-life context when the boundaries between phenomenon and context are not clearly evident, and in which multiple sources of evidence are used [Yin, 2003]. In the case of multisourcing, the topic is relatively new and motives for it have not been elaborated before; therefore, case study is a relevant research method.

Six companies were identified that previously had outsourced their IT to one company and switched to multisourcing, and articles were found in which they explained the reasons for multisourcing. Those articles included interviews, press releases, and reports as well as press and scientific articles found in EBSCO and ProQuest and other databases available on the Internet. Literature concerning multisourcing in general was also collected and analyzed to find possible rationales for their choices. This use of three sources

– theories on interfirm cooperation, case studies, and multisourcing articles – produced a triangulation of data, which assures reliability of findings.

(b) Start of multisourcing and its motives among selected firms

In 1996 Sears signed a 10-year £344 million total outsourcing deal – for finance, logistics and computer operations – with Andersen Consulting [Lacity, Willcocks, 2001, p. 37]. It was cancelled after 17 months and changed into two contracts: with ISSC for distributed systems and help desk, and Advantis for mainframes. The reason for the change was a series of mergers that expanded the internal IT capabilities of the firm. Sears focused the new internal IT staff on development of new applications in which external suppliers manage existing systems, to better leverage existing resources. Sears' main motives for multisourcing were thus leveraging resources, preparedness, and effectiveness.

Chevron started to multisource in 1998. The company asked Electronic Data Systems (EDS) for mainframe computer operations, GTE for voice and data networks and Sprint for running help desk support. The deal was signed for five years and was valued at \$450 million [Lacity, Willcocks, 2001, p. 25]. Previously all the services were provided by one company: Chevron Information Technology Company. Chevron managers expected to reduce IT costs by 10%, focus on their core business, increase their service level, and provide better career opportunities for their IT employees. They also believed that selected suppliers would provide greater focus on their IT customers [Chevron will Outsource Selected IT Services to EDS, GTE, Sprint, 1997]. Their main motives were cost effectiveness, access to resources and learning.

In 2003 and 2004 Procter & Gamble (P&G), who had previously handed over all IT and business processes to EDS, signed deals with three firms: Hewlett-Packard (HP) for IT infrastructure and a business process outsourcing (BPO) deal covering finance and accounting, IBM Global Services for BPO to handle human resources and Jones Lang LaSalle for facilities management. Their goal was to become independent from a single provider [Gibson, 2006]. P&G's main motive was uncertainty bounding.

In 2006 General Motors (GM) ended its exclusive relationship with EDS and split the deal among EDS, Capgemini, HP, IBM, Wipro and smaller firms. GM's motivation was to achieve savings as it coped with the highest IT costs among carmakers [Gibson, 2006]. The company went through a preparation phase before the deal: it consolidated its systems and applications from 10,000 to 2,500 and spent several weeks writing descriptions for 44 IT processes. GM ordered that all its suppliers use the same language and standards for description of demands, acceptance and validations of systems, project management, monitoring, configuration management, and safety [Bielewicz, 2008]. Thus, the main motives for GM were preparedness and effectiveness.

Nissan started to multisource in 2006, changing a sole-source \$1 billion agreement for application maintenance, support, and enhancement services with IBM signed in 1999 for nine years to services performed partly in-house (business analysis, program

management, and application, and infrastructure architecture planning) partly by Satyam (application services), and partly by IBM (IT infrastructure). The reason was increased competition among outsourcing vendors and the emergence of new offshore firms, as “the world had changed” [Thibodeau, 2006a]. Nissan wanted to better align its technology with business needs, take advantage of the emerging capabilities of its internal organization, and correct the mistake of outsourcing too much previously, as well as to avoid risk, save money and create value for the business [Thibodeau, 2006b]. Nissan’s main motives were uncertainty bounding, preparedness, effectiveness, and external.

Liverpool Victoria (LV) started multisourcing in March 2008. Previously it had a 13-year BPO contract with EDS, which was finished after 4 years. It has signed five smaller partnership agreements to work with its in-house IT team. The goal was to achieve its business targets [LV to Discontinue its 13-Yr, GBP 160Mn BPO Contract with EDS, 2007]. LV’s main motive was thus effectiveness.

(c) Multisourcing motives: evidence and rationale

To facilitate the analysis, candidates for multisourcing motives from the previous section are used in table 4 to show firm’s referrals to each of them. Most of the firms decided on multisourcing for effectiveness. Preparedness, access to resources, and uncertainty bounding were also important, and learning and external motive were mentioned by one company. Each motive and its rationale is described separately in this section.

TABLE 4. Motives for multisourcing among selected firms

Motive	Sears	Chevron	Procter & Gamble	General Motors	Nissan	Liverpool Victoria
Uncertainty bounding			x		x	
Access to resources	x	x				
Preparedness	x			x	x	
Effectiveness	x	x		x	x	x
Learning		x			x	
External motives					x	

Source: own analysis based on articles concerning multisourcing among selected firms.

Uncertainty bounding is confirmed as a motive for choosing multisourcing both by multisourcing literature and the case studies. Uncertainty is lowered in multisourcing first of all through an increase of flexibility by becoming independent on just one partner [Waszczuk, 2010], which was an important benefit for P&G [Gibson, 2006]. Second, uncertainty is decreased through lowering risk, which was an important goal for

Nissan, because it is easier to change one of many suppliers than to change a large one [Bielewicz, 2008]; this is especially important in times of economic slowdown [Sobińska, 2009a, p. 520].

Multisourcing can counter risks connected with large-scale environmental disasters, political unrest, and currency problems [Ellegaard, 2008]. It also helps to lower system risk, because if the safety systems of one partner are “broken”, losses will concern only a part of the project. Third, splitting a large contract into smaller ones can help to fix some of the mistakes committed when writing the original agreement [Bielewicz, 2008], which was one of the goals for Nissan.

There are several kinds of **resources** to which multisourcing allows access, both according to articles and cases. It gives access to “best-in-class capabilities” [Cohen, Young, 2005, p. 94], specialized, niche suppliers, and better service delivery and level. This opportunity of increasing the service level was crucial for Chevron [Chevron will Outsource Selected IT Services to EDS, GTE, Sprint, 1997].

Multisourcing also allows access to suppliers, which, thanks to their specialized knowledge, will propose totally non-standard services, so that they are able to provide totally new services to their clients [Sobińska, 2009a, p. 522]. On the other hand, Sears looked for external resources to take care of existing processes, and to focus its employees on innovation for better leverage of resources [Nannery, 1996] and Chevron looked for access to career options for its employees.

Preparedness for multisourcing, by designing measures to increase probability of cooperation and to lower transaction costs, is a crucial condition both according to game theory and TCE. Evidence from practice confirms the motive, because preparation precedes working with numerous suppliers. JP Morgan and Sears did not opt for multisourcing before they expanded their internal IT capabilities through mergers. Nissan had strengthened the capability of its internal organization and GM had conducted an analysis of all processes and standardized them, as a multisourcing company must be mature in terms of process management [Waszczuk, 2010].

As part of preparation, firms are advised to negotiate good contracts and to measure results [Cohen, Young, 2005]. It requires establishment of standard development tools, templates, integration standards, testing checklists [Howard, 2006, p. 23], and a transparent motivation system for service quality estimation [Sobińska, 2009a, p. 520], and for information exchange. For example, P&G’s goal of improving information flow is to hold regular meetings with suppliers [Gibson, 2006, p. 52].

Multisourcing needs to be considered a strategic decision, needing precise goals and investment [Overby, 2010]. Good coordination should also be set, which requires skills in managing the outsourcing relationships in order to get multiple vendors to deliver a seamless integrated service [Kobayashi-Hilary, 2006]. As multisourcing is a “complex beast” [Kobayashi-Hilary, 2006], companies need to be well prepared for the arrangement, management, and monitoring phase by designing a strategy, conducting an analy-

sis of processes and infrastructure, strengthening internal capabilities, ensuring information flow, and shaping a proper governance and result measurement systems.

Effectiveness is the most often-mentioned motive in the described case studies, despite the fact that it is widely accepted in the literature that multisourcing bears higher costs and lower benefits of scale than one-firm outsourcing. Nissan and Sears focus on effectiveness through value creation, but cost effectiveness is nonetheless important. GM opted for multisourcing to cope its IT costs, the highest among carmakers, Nissan to save, LV to achieve its business targets and Chevron to pursue a 10% cost-reduction goal.

The way to achieve savings is to force suppliers to be more effective through competition [Bielewicz, 2008], and a decision to multisource should be based on economic analysis [Waszczuk, 2010]. Overby [2010] also connects lowering the costs of multisourcing with the competitiveness of offers of various suppliers [Overby, 2010]. To achieve this effect, preparation is crucial at the phase of arranging, managing, and monitoring transactions.

Based on the literature, it was expected that effectiveness based only on synergies and increase of value would be a motive for multisourcing, but not cost effectiveness. This assumption was wrong: cost effectiveness is important, but on the other hand no firm mentioned synergy effect. The reason for the difference between assumptions and practice can be explained by the fact that all cases of multisourcing firms involve large companies, whereas the pieces of the business split between suppliers are still sizeable. Companies whose IT contract value is significant can achieve efficiencies, because such contracts guarantee a premium that is higher than operational risk [Munro, 2010]. Another possibility is that efficiencies were reached because parts of the businesses were moved to cheaper offshore locations. Third, it was especially the early contracts that focused on cost reduction; later ones were supposed to also fulfill other goals [Pinto, Harms, 2005, p. 9].

Learning is another motive proposed by the literature, which finds evidence in practice. Through such cooperation, companies get a higher quality of service and therefore more possibilities of further development combined with better prices [Munro, 2010]. Better service quality results from preference and access to more flexible, niche suppliers [Nagle, Maughan, 2007, p. 42] so that the best solution can be identified for a company's needs. And contracting with best-of-breed suppliers creates competition that enables increasing the quality and the creation of innovative solutions [Sobińska, 2009b, p. 200]. Increase of the service level was an important goal for Chevron, as well as an access to knowledge exchange through better career opportunities for their information technology professionals. In multisourcing, suppliers exchange knowledge not only with the client company but between themselves as well [Sobińska, 2009a, p. 521].

Multisourcing is used to innovate, learn, take advantage of changing trends and technologies, and align technology with business needs, as in the case of Nissan. It is also a chance to demand improvement initiatives [Cohen, Young, 2005, p. 201], to receive

quality over a long time [Bielewicz, 2008], and to acquire new knowledge of internal processes, market mechanisms, and traits of the suppliers. All these motives can be classified as acquiring, using knowledge, and improving processes (excellence).

According to theory as well as multisourcing literature and practice, companies decide for multisourcing due to **external motives**. Cohen and Young [2005] point out conditions in the environment that trigger multisourcing [Cohen, Young, 2005, p. 96]. They are globalization and advances in technology and communications, which allowed outsourcing of new kinds of services. Clients were diversifying and expanding locations from which they purchased services to the emerging countries to benefit from skills and lower cost and to mitigate concentration risk [Palugod, Palugod, 2011, p. 16]. In the new conditions, companies were seeking for competitive and cost advantages, and outsourcing helped them to act quickly: they changed, standardized, and became cost effective [Cohen, Young, 2005, pp. 6–7]. Kulesza [2010] also relates the birth of multisourcing to changes in the IT market, that is, to the dynamics of purchasing and using the services, both from internal and external sources. Companies multisource to sign more flexible agreements for customized services [Kulesza, 2010] to cope with the changing needs of their clients. In the highly competitive economy, long-term relationships between firms are less possible because the market and competencies of firms change quickly [Bielewicz, 2008].

Second, globalization helps with the availability of suppliers. Rarely is one firm able to deliver quality over a long period [Bielewicz, 2008]. And the more complicated the service, the more difficult it is to find one supplier able to provide it comprehensively. Nissan started to multisource to handle increased competition in its segment and to take advantage of better availability of vendors [Thibodeau, 2006a]. If the market does not include enough suppliers with the specialist skills needed for the buyer, they have no chance to choose the best-of-breed [Kobayashi-Hilary, 2006], while in the global market there is more of a possibility to select the right supplier [Bielewicz, 2008]. Thus external conditions motivate firms to handle changes as well as to take advantage of them.

Conclusions: a model classifying motives for multisourcing

Case studies and multisourcing literature confirm the classification of motives proposed after the review of theory in the research proposal. The study has identified the following motives for multisourcing in IT: uncertainty bounding, access to resources, preparedness, effectiveness, learning, and external motives. It also explained the development of each motive, adding a practical perspective to the classification. The most important motives based on the frequency of being mentioned by firms include effectiveness, preparedness, access to resources, and uncertainty bounding.

The most interesting findings, which were not inferred from the theoretical literature, include the importance of increasing the service level and better career opportunities for

IT employees as part of the motive of learning and access to resources. The importance of cost effectiveness is contrary to what was expected in the theory review section, which suggested synergy and value effectiveness as the aim of multisourcing. It is also worth mentioning that the motive of lowering transaction costs, which was excluded based on the literature, in fact did not appear in testimonials of firms. The motives and their developments identified in the study are presented in a model in table 5.

The fact that two out of the six motives (i.e. effectiveness, preparation) demand that the company strives for the success of multisourcing lead to a conclusion that this relationship is very complex. Thus, it is possible to forecast that many of the attempts at multisourcing will fail and that not all companies will try this form of cooperation. At present it seems to be more suitable for large multinationals.

TABLE 5. Model classifying motives for multisourcing

Motive for multisourcing (based on theory)	Development of the motive (conclusions from practice)
Uncertainty bounding	Independence, easier to change one of suppliers
	Lower risk, higher security and (system) safety
	Implementing improvements, fixing previous mistakes, better control
Access to resources	Access to capabilities
	Access to better service delivery level
	Access to niche/specialized suppliers and non-standard services
	Leveraging strengths of suppliers
Preparedness	Preparedness at arrangement phase (Process maturity and firm preparedness)
	Preparedness at management phase (Ability to coordinate multiple suppliers)
	Preparedness at monitoring phase (Measurement of the relationship)
Effectiveness	Cost advantages
	Higher value
Learning	Acquiring knowledge (new knowledge of internal processes, market mechanisms, technologies)
	Using knowledge (using knowledge and skills of suppliers)
	Excellence (chance or improvement initiatives; augment skills and boost innovative capacities, benchmarking, service quality)
External motives	Taking advantage of globalization, advances in technology and communications, availability of best in class vendors
	Handling external conditions (changing demand for competencies, quality, innovation and flexibility)

Source: own elaboration.

Final remarks, recommendations and implications

Multisourcing is getting more significant, and this article helps to understand what motivates companies to start this form of cooperation by proposing a model for classification of motives for multisourcing. Knowledge of the motives has important practical implications for companies which take decision on the service supplier strategy as well as for advisory bodies to recommend or dissuade multisourcing. It can be advised to a firm when it considers supplier strategy and looks for ways of lowering uncertainty, acquiring resources, learning, effectiveness, taking advantage or handling external conditions, and is prepared for multisourcing. This last motive is especially important to be able to realize benefits connected with this difficult form of cooperation. Knowing what to expect from multisourcing also helps its successful implementation, as firms need to turn their goals into measurable indicators and monitor them in order to be able to react if they fail to perform adequately. The main theoretical implications include increasing the understanding of the multisourcing phenomenon and offering a fertile standpoint for future research. The research helped in understanding not only what firms expect from undertaking multisourcing, but also the reasons for its complexity. It would be worth conducting a similar study in multiple industries to identify company- and sector-specific motives. It would also be worth verifying the identified motives in a quantitative study. Only by knowing motives it is possible to study effects: that is, whether multisourcing meets the expectations of firms. Finally, by knowing motives and circumstances, one can understand why this form of cooperation is chosen, and hypothesize on its future development. As external conditions become more turbulent, and firms are expected to be more effective, multisourcing is expected to grow in the coming years, provided that companies are properly prepared for this form of cooperation.

The study also has its limitations because the case study method has some weaknesses. Case study data can be vulnerable to subjective interpretations and may not produce comparable, generalizable datasets [Leonard-Barton, 1990]. To counteract this, triangulation of data, the use of multiple case studies, and references to theoretical background were used.

Multisourcing answers the demands of companies and the market for greater flexibility, higher quality, dynamics, knowledge, specialization, all done with decreased risk. It also takes advantage of globalization and development of IT technologies and communications, but also includes a willingness to reduce risk in more difficult economic conditions. Therefore, its further development is very possible in the years to come, providing fertile ground for further research. On the other hand, it also creates challenges to coordination and induces higher costs. Therefore, knowing the motives for multisourcing should help companies decide in favor of this form of cooperation. This article is a step towards that goal.

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