International Journal of Information Systems and Project Management

Volume 5 | Number 1

Article 3

2017

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Anne-Maarit Majanoja University of Turku

Linnéa Linko University of Turku

Ville Leppänen University of Turku

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Majanoja, Anne-Maarit; Linko, Linnéa; and Leppänen, Ville (2017) "Developing offshore outsourcing practices in a global selective outsourcing environment – the IT supplier's viewpoint," *International Journal of Information Systems and Project Management*: Vol. 5 : No. 1, Article 3. Available at: https://aisel.aisnet.org/ijispm/vol5/iss1/3

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International Journal of Information Systems and Project Management ISSN (print):2182-7796, ISSN (online):2182-7788, ISSN (cd-rom):2182-780X Available online at www.sciencesphere.org/ijispm

Developing offshore outsourcing practices in a global selective outsourcing environment – the IT supplier's viewpoint

Anne-Maarit Majanoja

University of Turku, Department of Information Technology FI-20014 Turun yliopisto, Finland www.shortbio.net/anne-maarit.majanoja@utu.fi

Linnéa Linko

University of Turku, Turku Centre for Biotechnology FI-20520 Turku, Finland www.shortbio.net/linnea.linko@utu.fi

Ville Leppänen

University of Turku, Department of Information Technology FI-20014 Turun yliopisto, Finland www.shortbio.net/ville.leppanen@utu.fi

Abstract:

Currently, internal IT organizations use outsourcing and offshore arrangements to achieve cost savings and gain access to new capabilities. It was found that suppliers' personnel at the operational level can face challenges with internalizing their operations based on the agreed outsourcing practices and transferred responsibilities. This study gives voice to the supplier and studies the impact of offshore outsourcing operation development activities. The internal IT unit from Nokia Devices selectively outsourced global IT service activities and responsibilities to the IT supplier. The outsourced activities were implemented by offshore centers in India and China. It was found that the global selective outsourcing environment (GSOE) did not provide a solution to all of their expectations, and new unexpected challenges occurred. Several practices, communication and information sharing, and behavior-related lessons learned items were identified. It was found that the GSOE operation needs to be developed and implemented in an agile and incremental manner, instead of a singular implementation approach. Also, the globally distributed teams' group dynamics critically impacted on the teams' ability to work. The lessons learned items and recommendations can be utilized by other companies during their mode-of-operation development.

Keywords:

global IT services; selective outsourcing; offshore outsourcing; quality practices; operation development.

DOI: 10.12821/ijispm050102

Manuscript received: 30 June 2016 Manuscript accepted: 8 December 2016

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International Journal of Information Systems and Project Management, Vol. 5, No. 1, 2017, 27-43

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1. Introduction

Recently, several internal Information Technology (IT) departments have faced increasing pressure to achieve and accomplish more with less money and resources. One approach to solve the problem has been outsourcing services. Typical approaches are total or selective outsourcing of internal IT solutions and activities to external service providers (later called the suppliers) and to utilize the suppliers' offshore services. Despite the extensive amount of outsourcing knowledge and experiences, the outcomes from outsourcing arrangements can surprise and not always positively. For example, Lacity et al. [1] and Lacity and Rottman [2] have identified that the service purchasing company's side can be unprepared for the challenges, and Ikediashi et al. [3] found that suppliers can show underperformance. Previous studies, (e.g., [4]-[5]) found that outsourcing arrangements do not provide quick solutions or "silver bullets" to solve all existing problems or expectations. Also, the challenge is that no explicit standards or guidelines exist that define how companies should design and implement their outsourcing arrangements.

Outsourcing can bring about new kinds of failures, challenges in group dynamics, and negative impacts on customer satisfaction (e.g., Raassens et al. [6]). Typical outsourcing challenges are unsuccessful leadership and communication; as Lacity and Willcocks [7] described, without the right leaders the practices are less efficacious. Global operations in virtual teams include challenges when activities need to be implemented without constant face-to-face interaction [8]. Previous studies (e.g., [9]-[10]) have found that a favorable working atmosphere and cultural intelligence play an important role in successful interactions and relationship building between the outsourcing parties. Therefore, it is important that employers create a favorable atmosphere, which enables success and maintains enthusiasm [11]. However, Ohlsson [12] found that, in practice, it is challenging to create such an atmosphere, which helps organization members to master practices collectively and critically.

In this paper, the focus is on analyzing a global selective outsourcing environment (GSOE), which includes both the service purchasing company and the selected external service providers. In this kind of GSOE situation, the operational level personnel must be able to rapidly show a successful and coordinated operation and group dynamics that will provide the expected service outcomes and ensure customer satisfaction. The operational level problem studied in this paper is the supplier's challenges to internalize and operate based on the agreed GSOE roles, expectations, and jointly defined processes, and still meet the supplier's own internal requirements and practices. In earlier studies, this problem is approached by identifying various client, supplier, and relationship risks and challenges [1],[3],[13], identifying good and/or bad sides of outsourcing arrangements [14], or examining how outsourcing affects human resources [2],[15]. Therefore, the cause of outsourcing challenges can originate from both the service purchasing companies' and the suppliers' side. However, previous studies have not considered further operation development activities in an outsourcing situation and, thus, do not provide knowledge of the effectiveness and sustainability of such activities. In this research, the target is to study the effectiveness and sustainability of the implemented operation development activities in a real-life GSOE situation, and to propose focus areas for further iterative development.

In this paper, the examination point-of-view is on the supplier's side, and the voice is given to the supplier's operational level personnel. One of the internal IT units at Nokia Devices and its selected IT supplier implemented several outsourcing arrangements during 2009–2012. Therefore, it was an ideal case environment to find lessons learned items from offshore outsourcing arrangements. This study also further elaborates earlier studies [16]. To evaluate the effectiveness of the development activities, an action research method, interviews, questionnaires, and hands-on experience approaches were used to evaluate and present the findings. The corporate level elements are excluded, such as research and marketing, end-consumers' satisfaction, or company-wide leadership practices. The study begins by providing an overview of the relevant research on offshore outsourcing challenges, and section 3 describes the research methods and hypotheses. Section 4 presents the research results and analysis. The final section concludes the findings.

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2. Literature

Based on Lee et al. [17], Kruise and Berry [18], and Ho and Atkins [19], IT outsourcing (ITO) focus areas have included the following historical phases: hardware (1960s), software (1970s), hardware, software, and communications (1980s), total solutions (1990s), and business process outsourcing, offshoring, and focusing on core-competencies (2000s). When it comes to the ITO mode, Lacity and Willcocks [20] and Dahlberg et al. [21] have used the following definition: "Selective outsourcing means that the proportion of outsourced services is 20–80 % of the IT budget. Total outsourcing means that the proportion of outsourced services is over 80% of the IT budget." Also, the degree of outsourcing can vary, such as total or selective single-supplier, total or selective multi-supplier, insourcing, and strategic partnerships [20]-[22]. However, based on earlier studies [20]-[21], it is not possible to declare which ITO mode ensures definite success, because it is always a situation-specific decision and solution.

An offshore outsourced operation means that a significant amount of work will be implemented abroad. Rauffet et al. [23] identified two specific characteristics in a global operation. First, each site and/or subsidiary (e.g., offshore center) is relatively autonomous and has local management mechanisms that can differ between sites. Second, each site/subsidiary presents specificities that depend on its local history and geographical context (e.g., language, laws, culture, and traditions). Vernadat [24] noted that teams in different sites can standardize operations or adopt new kinds of practices. However, based on Rauffet et al. [23], this requires circumstances that enable innovation and enrich the organizational learning. These findings have similarities with Tynjälä [11] and Ohlsson [12]. Lönnblad and Vartiainen [25] also identified that a global situation requires specific employee and leader competencies and skills, such as a proactive working style, effective communication and interaction skills, a recognized global focus, cultural aspects, and flexibility.

A global operation is complex and demanding, and previous studies (e.g., Muhic and Johansson [26]) have reported various kinds of risks and challenges associated with outsourcing arrangements. Lacity et al. [1] wrote that outsourcing will continue to be a high-risk practice with significant hidden costs, over-promises, and under-deliveries. Ikediashi et al. [3] reported risks that included poor or absent service quality, suppliers' under-performance, contractual risks, inadequate definition of scope and services, and the loss of strategic flexibility. Lacity and Rottman [2] maintained that offshore arrangements included challenges to verify work estimates and hidden costs, and offshore personnel did not fully understand requirements or they were overly optimistic. Based on previous researches, such as Daim et al. [8], it is evident that operating across multiple time zones and national differences (such as national events affecting schedules) will have an impact on outcomes, communication, and interactions.

Ultimately, the success of offshore outsourcing arrangements depends on the personnel working at the operational level in the IT services. In an outsourcing situation, a lot of knowledge must be shared among the outsourcing parties, even when the personnel might be naturally antagonistic towards each other [27]. In previous studies [1],[28], one of the concerns in offshore arrangements was the high turnover rate of offshore personnel. Quite often, service purchasing companies complain that it is extremely expensive to train offshore employees due to the threat of turnover and the offshore employees' limited understanding of the service purchasing company's business domains [1]. In addition to this, Lacity and Rottman [2] found that in a nearshoring situation, the knowledge transfer happened incrementally over an extended period of time (e.g., several months), but with offshore personnel, it happened in an intensive timeframe (e.g., within two weeks). Furthermore, Lacity et al. [1] reported that after the transition phase, the suppliers' transformation leaders typically moved on to new challenges on new accounts, and the remaining personnel were too exhausted or lacked ideas to initiate new transformation or development activities. This kind of significant change in contacts and personnel can have a negative impact on the service purchasing company's satisfaction, stability of the IT services, knowledge transfer, knowledge retention, and sustainability of the outsourcing relationship.

Based on Westner and Strahringer [29], operational level IT offshore outsourcing success factors (e.g., in offshore information systems projects) include offshoring expertise (managing and conducting offshoring in an efficient and successful way), knowledge transfer (project/service-relevant explicit and implicit knowledge efficiently transferred to the offshore personnel), liaison quality (the degree of connection and quality practices in order to achieve the goals and

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objectives), and trust (an actor will fulfill obligations, behave predictably and act fairly when the possibility of opportunism is present). Based on these success factors, the offshore outsourcing activities need to focus on leadership, organizational learning, and quality management practices to enable successful global operations, trust among the parties, and customer satisfaction. Fig. 1 presents the main elements and theories used in this paper in a house-model.



Fig. 1. Operational level success factors (adapted from ISO 9002:2008 [30]; Senge [32]; Argyris and Schön [34]-[35]; Nissinen [39]-[40]).

To ensure successful liaison quality, the outsourcing parties need to focus on implementing efficient quality management practices and a quality culture, for example, based on the ISO 9001:2008 eight quality management principles [30]. Over the years, quality management practices have been used to improve and increase companies' productivity and profits. The impacts of the ISO 9001 standard implementation were studied by Levine and Toffel [31]. They found, based on 916 adopters and 17,849 non-adopters, that the ISO 9001 adopters had higher growth rates for sales, employment, payroll, and average annual earnings than the non-adopters. In addition, focus is needed on quality leadership, because leaders need to take control and implement the needed processes (such as quality management practices, operational level processes, etc.), guide the operational level personnel, improve the operation and outcomes, and guide the (global) teams to make the right decisions.

Westner and Strahringer [29] identified knowledge transfer as one of the success factors that have an impact on learning. Senge [32] highlighted that typically companies fail to see the organization as a dynamic process, and their focus is on the parts rather than the whole. As a consequence, it has a negative impact on the success of knowledge transfer and organizational learning. Typically, people think that cause and effect will be relatively close to one another. Therefore, they implement short-term improvement activities, which often involve significant long-term costs and impacts (such as severe damages on the viability of an organization) [24]. Instead, based on Senge's [32] fifth discipline, the focus should be on systems thinking (Fig. 1), which leads to more appropriate action. However, Bui and Baruch [33] have argued that Senge's fifth discipline is difficult to translate into a systematic learning-process evaluation model.

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The used learning and knowledge transfer approach also affects the outcomes and learning (i.e., superficial or deep approach). Single-loop learning (Fig. 1) is about achieving and maintaining the given targets with certain activities, whereas double-loop learning (Fig. 1) involves the elements of changing the objectives of the system (Argyris and Schön [34]-[35]). Argyris and Schön [34]-[35] pointed out that various underlying assumptions and beliefs can hinder and/or prevent double-loop learning. Therefore, superficial or deep approaches have an impact on the service outcomes and the operational level personnel's capabilities to innovate, learn, and develop the operation further. For simplification only, Argyris and Schön's [34]-[35] model is included in Fig. 1. Other researchers have further extended the learning model created by Argyris and Schön. For example, Tosey et al. [36] and Armitage et al. [37] wrote about triple-loop learning, which includes fundamental changes in governance, norms, and protocols.

One of the success factors identified by Westner and Strahringer [29] was offshoring expertise and trust, which in conjunction comprise the notion of successful leadership capability. Kotter [38] wrote that leadership is about vision, behavior, and getting people's commitment. In this study, the leadership approach was selected from Nissinen's [39]-[40] Deep Leadership model, which has been used in the Finnish defense forces' leadership training since 1998, and it is also the scientific model for the 360-profile development tool [41]. This transformational leadership model is based on leaders' potential, leadership behavior, and outcomes (Fig. 1). Accordingly, the focus is on motivation, learning, and trust. Interestingly, the model also includes two "non-leadership" dimensions: "controlling and corrective", and "passive," which highlight the possibility of inadequate leadership. Mäkinen [42] wrote that these two non-leadership dimensions may be alternatives for the model, but should not be part of it.

In summation, the challenges related to offshore outsourcing include leadership problems, contract-related risks, cultural challenges, hidden costs, overpromises, failures in knowledge transfer and quality management activities, high turnover rate of human resources, and underperformance. Despite earlier studies reporting offshore outsourcing success factors and failures, a knowledge gap still exists in the operational level implementation of offshore outsourcing development activities in a GSOE operation.

3. Research methods, data collection, and hypotheses

During 2009–2012, one service purchasing company's internal IT unit was responsible for developing and maintaining the global end-consumer IT services (such as an error reporting tool and end-consumer support services). To achieve cost savings, the service purchasing company made a strategic decision to use only a few preferred global large-scale suppliers that also offered offshore services. A significant amount of the case IT unit's IT development and service activities were selectively outsourced to the new supplier. However, the ultimate ownership of the IT services remained within the IT unit. Based on the defined outsourcing agreements, the supplier was responsible for executing and managing the operational level activities. The IT unit and the supplier jointly defined and implemented novel way-of-working approaches, strategies, and over 30 information technology infrastructure library (ITIL) processes to ensure good quality global operations [16]. A majority of the operational level activities were executed at the offshore centers in India and China.

Despite the extensive amount of preparation and implementation activities to ensure successful operations among the GSOE parties, the service purchasing company was dissatisfied when it came to the operations' development, outcomes, and interactions [16]. Therefore, various operational development activities were defined and implemented to improve the situation. This research aims to study the effectiveness and sustainability of the offshore outsourcing development activities from the point-of-view of the supplier's operational level personnel. Our main research approach was an action research method to participate in the practical problems, develop new processes and solutions, and observe the change effects and, thereby, obtain operational level knowledge and insights to propose focus areas for iterative operation development.

In the case of the IT unit, two current state analysis (CSA) interviews and surveys were conducted during 2010 and 2011, which provided various GSOE operation development needs to the supplier. At Nokia Devices, some interviewees did not want their interviews recorded (especially the representatives in Asia), and therefore, it was

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decided together with the IT unit's leaders that the interviews would not be recorded. In addition, Nokia Devices (and Microsoft) and the IT supplier are restrictive in making public their operation, and for confidentiality reasons, it is not possible to present the activities or results in full detail. Therefore, this research presents only illustrations, analyses, and evaluations of the development activities.

After the decision not to record the interviews, all global IT unit members, such as team leaders, product and service managers, IT specialists responsible for architecture, databases, networks, and technical solutions, agreed to participate in the CSA interviews, and they freely shared their perceptions. The interview notes were written down by the interviewer (one of the authors of this paper) during the interviews by capturing the main messages and ideas. The interviews in Europe were conducted face-to-face, and phone interviews were used with the representatives working in Asia and the Americas. These interview notes were theme-based coded to identify development needs. Based on the CSA themes, a set of development focus areas were constructed under three categories: 1) Practice; 2) Interaction and information sharing; and 3) Behavior and mind-set (Table 1). These focus areas will be discussed and analyzed further in section 4, where each focus area will be covered with the supplier's lessons learned findings. The interviews included a variety of themes, for example, global IT projects and services, contracting, quality and risk management, communication and interaction, training and competencies, etc. The same interview frame and themes were used in both CSA interview rounds. Also, the IT unit's members provided a numerical satisfaction evaluation, and the survey included the same themes as the CSA interviews. Therefore, the survey focused on measuring the IT unit's satisfaction before and after the development activities.

Category	Focus area	Examples of the identified development needs
C1 Practice	C1.1 Operation management	Avoid underperformance Operate according to the jointly defined processes
	C1.2 Quality Management	Lack of quality activities and results to achieve progress visibility over the operational level activities
C2 Interaction and information sharing	C2.1 Knowledge transfer	Challenges in knowledge transfer and learning operational level activities and responsibilities High turnover rate at the offshore centers
	C2.2 GSOE relationship	Maintain the enthusiasm and commitment of investing in the GSOE relationship after the contracting phase
	C2.3 Communication	Improve the communication-triangle: IT unit – Supplier onsite – Supplier offshore
C3 Behavior/ mind-set	C3.1 Group dynamics	To achieve consensus among the globally distributed GSOE teams to ensure ability-to-work
	C3.2 Mind-set	Operate based on selective outsourcing approach and transferred responsibilities instead of resource-based approach

Table 1. The offshore outsourcing development focus areas based on the CSA findings

The supplier established a development team (later called the global team), and the team planned and managed the implementation of the development activities. After the implementation phase (beginning of 2012), the global team members were interviewed, such as account leaders, quality managers, and project managers responsible for development activities. The interview questions focused on analyzing the supplier's development project, the definition and implementation phases, the team's communication and interactions, and the team's various lessons learned items. In addition, a survey was sent to the operational level personnel (i.e., IT specialists) working at the India and China offshore centers to study the effectiveness and sustainability of the implemented activities from their point-of-view. The surveys included both numeric and open questions, and the main themes were: 1) development project's communication, roles and responsibilities, and ability to have an impact on corrective activities; and 2) the impact of the

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implemented corrective activities, risk and quality management, and lessons learned items. The survey focused on analyzing the activities' sustainability on daily operational level activities.

This paper aims to study the effectiveness of the development activities from the operational level personnel's point-ofview based on their lessons learned findings. This study suggests the following set of hypotheses:

- H1: Leaders have a tendency to focus on short-term activities and implement "quick-fixes" during operation development activities instead of long-term improvements, which prevents operational level sustainability and learning.
- H2: The lack of successful communication and interactions in a GSOE situation can lead to a micromanagement approach, which limits operational level success and the personnel's commitment.

In this paper, we used existing interview and survey materials. First, we analyzed and coded the IT unit's CSA interview notes and created the offshore outsourcing development focus areas (Table 1). Second, we analyzed the supplier's interview notes and the offshore centers' survey materials. We identified lessons learned items under three categories as defined in Table 1. In section 4, Tables 3–5 present the main lessons learned items per category. Third, based on the lessons learned items, a set of recommendations were identified for further iterative development.

4. Results and analysis

4.1 The service purchasing company's satisfaction results

Table 2 shows the service purchasing company's satisfaction results based on the CSA surveys. The target level was set at 3.5, which was defined by the service purchasing company's leaders. The initial CSA satisfaction result (3.2) was below the target. Based on the CSA findings, the supplier defined and implemented several development activities. After the development activities, the new result (3.7) was above the target. The results indicate that the development activities had a positive impact on the service purchasing company's satisfaction.

Offshore site	Original value	New value	Change%
India	2.7	3.5	30
China	4.0	4.3	5
Both centers	3.2	3.7	17

Table 2. The service purchasing company's satisfaction results

When the results were analyzed based on the offshore centers, it was apparent that the China offshore center had substantially better results than the India offshore center (Table 2). The reason for this is that the China offshore center provided services only to China, whereas the India offshore center provided services to all other countries. Therefore, China's offshore center did not face the same cultural, language, and geographical distance challenges as India's offshore center. A majority of the development and implementation activities happened in India, and India's change percent was 30%, whereas China's change percent was only 5%. This finding supports Rauffet et al. [23], who found that offshore teams were relatively autonomous and had local management mechanisms that differed between sites.

4.2 The supplier's findings and perceptions

The main responsibility for the development activities was on the supplier's side as the supplier was responsible for the operational level execution. The global team, which was located in Europe, was responsible for leading the planning and implementation activities. The global team included both leaders and specialists, and the multi-national group represented several cultures and backgrounds.

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In this research, it was found that the development and corrective activities had already been limited at the very beginning by the supplier's leaders: "*Find those things that are broken and fix them. Find the 'low-hanging fruits' to achieve the customer's satisfaction. Continuous improvement activities can be done in other streams as well.*" This guideline placed the development focus on short-term activities (corresponds with H1). The guideline was contradictory to the systems thinking approach (cf. Senge [32]), and it also followed the single-loop learning approach (cf. Argyris and Schön [34]-[35]). Therefore, the leaders' aim was to achieve the expected targets without fundamental changes to the existing operational practices and underlying assumptions; consequently, they did not achieve any benefit from the double-loop learning approach.

This limitation also indicated that financial elements had a significant impact on the development activities. The main target was to find quick solutions to achieve the service purchasing company's satisfaction with a minimum amount of investment. However, this approach neither guaranteed changes in personnel's mind-set or behavior, nor ensured that the operational level personnel would commit to the implemented activities in the long run. One of the main findings from this study was that the offshore outsourced GSOE operation should include continuous improvement practices. The GSOE operation should be developed incrementally and utilize an agile approach, rather than a massive waterfall-based development approach.

4.3 Category: practice

To improve the existing situation, the GSOE parties ensured that the operational level teams would follow the expected compliance requirements as defined in the contracts and jointly agreed practices. The supplier and the IT unit provided retraining (e.g., ITIL processes and the jointly agreed mode-of-operation practices). The idea was to ensure that the operational level personnel knew the "why" elements of the operation and business domains. It was observed that the operational level team members were enthusiastic about developing their practices and considered it important to improve the existing routines and performance quality. However, some of the supplier's leaders did not commit to the idea of proactively developing the practices without extra payment. As an example, one of the leaders commented: *"Make this a project where money is involved. If there is no money, there are two things: 1) no interest; 2) the priorities are what they are, and the end-result is not guaranteed and it includes more risks"*. Based on this, the expectation was to only implement activities based on purchase orders without taking any responsibility to improve the operational level practices and outcomes proactively, despite the transferred responsibilities (corresponds with H1).

A majority of the planning activities were defined by the global team, but the offshore centers implemented the activities. The visibility over the implemented actions was not always optimal due to the geographical distance. Also, some of the planned activities were not always clear enough to be implemented and followed by metrics (impact on H1). After the implementation phase, the global team considered that the implemented activities were more effective compared to the offshore teams' assessment. This finding could be explained by the global team members becoming more familiar with the offshore centers' daily activities (corresponds with Rauffet et al. [23]), but the true level of the effects on daily activities was not that significant as assessed by the offshore teams (supports H1).

In this research, it was found that the supplier implemented several practice-related activities that had a positive impact on the service purchasing company's satisfaction (Table 2). However, there was still room for further improvement. Table 3 presents the global and offshore teams' main lessons learned findings from the planning and implementation phases based on the focus areas defined in Table 1.

The analysis of the lessons learned items highlighted that more focus was needed on practice development:

• The supplier's personnel should get more "need-analysis" competency development. The supplier should focus on analyzing and understanding the received feedback/CSA findings. However, in this case, the global team "jumped" directly to the implementation phase without a proper need-analysis phase. Therefore, it remained unclear what the offshore teams truly implemented and how much the implemented activities improved the operational level's day-to-day work. To fix this situation, the global and offshore teams need to jointly analyze

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and identify the root causes of the non-conformances, and based on this analysis, define the needed development and corrective activities;

- Follow-up metrics and situational targets need to be defined and implemented. The needed quality management practices must be incorporated into the daily practices, processes, and tooling. Only in this way will the quality management activities be conducted as expected. The operational level personnel need quality management training to ensure that all have the same knowledge and understanding of the quality culture, expectations, and practices (e.g., Six Sigma, ISO 9001). Most importantly, more focus and competencies are needed for quality leadership;
- Leadership competencies need to be developed. It is important to recognize the difference between management and leadership. In this case, the leadership elements were especially missing. Leadership is needed to lead the people, set the direction and vision for the GSOE operation, and create something new and inspiring that advances overall commitment. It is essential for leadership skills to be developed on an ongoing basis to ensure continuous leadership competence (corresponds with Nissinen [39]-[40]).

Practice lessons learned items	Focus area
Ensure that funding is in place before starting any actions.	C1.1 Operation management
Verify that it is possible to implement the planned activities and there is a need to make changes to the scope.	C1.1 Operation management
Make sure that there is enough time to concentrate on implementing the defined activities.	C1.1 Operation management
Clarify and communicate schedules and action items in detail.	C1.1 Operation management
Use ad hoc/agile approaches to implement improvements.	C1.1 Operation management
Ensure that there are mandates and top-management sponsors in place to make changes on both sides.	C1.2 Quality management
Implement the development activities in a real project approach with clear targets and the right resources.	C1.2 Quality management
Implement good follow-up practices to show the achievements, added value, and benefits of the activities to the management and operational level teams.	C1.2 Quality management
Implement a clear way-of-doing structure from the very beginning.	C1.2 Quality management
Conduct regular meetings to ensure successful implementation of the expected processes and quality practices.	C1.2 Quality management
Ensure that the activities, commitment, structured approach, plans, ownerships, expectations, targets, and direction are clearly in place, defined, and understood.	C1.1 Operation management C1.2 Quality management

Table 3. Practice-related lessons learned items

4.4 Category: interaction and information-sharing

It was observed that the high turnover of human resources had a significant impact on the teams' learning and information sharing (corresponds with [1], [28]). First, the global team's project leader changed several times; therefore, the planning activities became scattered and were started several times from scratch. These circumstances indicate that the supplier's leaders focused on short-term investments instead of long-term development by ensuring stable resource allocation (supports H1). Based on the interviews, the handovers were not always conducted successfully, thereby creating challenges for the successor. Second, the high turnover rate among offshore personnel had a negative impact on the IT services' stability, organizational learning, and the team members' ability to retain the knowledge and skills. In addition, it was found that the global and onsite team members' lack of operational level progress visibility and the lack

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of direct interaction with the offshore centers' specialists (because of cultural differences) led to a micro-management approach (supports H2).

When analyzing the supplier's interactions with the teams, it appeared that the global team's cooperation was successful. However, the offshore centers and the service purchasing company's representatives were not part of the group of insiders. Therefore, the true benefits from successful cooperation among the GSOE parties were not achieved.

Based on the findings, the quality of the communication (e.g., interpretation of the message) included challenges: "Communication is very important. However, we didn't always pay enough attention when we heard things. Maybe we thought that we understood what we heard, but did we really? We should have dug into it in more detail to see the core of the problem". There were communication barriers between the people, such as cultural differences (e.g., only the offshore managers spoke during the meetings), attitudinal barriers (e.g., management challenges, change resistance), system design (e.g., organizational structure), and physical barriers (e.g., working in different countries).

This study revealed that there was quite a difference of opinion among the global, onsite, and offshore teams when it came to the success of communication and information sharing (corresponds with the findings of Rauffet et al. [23]). The two main challenge areas were: 1) the lack of up-to-date, clear, and regular communication; and 2) trust-related challenges that originated from the communication challenges. In addition, some of the operational level activities were not in place as agreed, and some of the activities were in place but not communicated (such as quality results). Therefore, the lack of operational progress visibility had a negative impact on the teams' overall trust and satisfaction. Consequently, a micro-management approach was used to gain the operational level progress visibility, which negatively affected the offshore team members' trust and satisfaction (supports H2).

During the implementation phase, various communication and interaction improvements were implemented, but it was recognized that sustaining the practices was challenging among the globally distributed teams. Table 4 summarizes the interaction and information-sharing lessons learned findings based on the focus areas defined in Table 1.

Interaction and information-sharing lessons learned items	Focus area
Implement a two-way feedback sharing approach. The supplier must also give feedback to the IT unit.	C2.1 Communication
Communicate clearly to the people what needs to be done and ensure that they take the activities seriously.	C2.1 Communication
Focus on efficient and timely handovers between people.	C2.2 Knowledge transfer
Training and knowledge transfer scopes, targets, and measurement practices must be re- defined, documented, and communicated clearly.	C2.2 Knowledge transfer
Communication must focus equally on both internal and external parties.	C2.3 GSOE relationship
It is important to proactively ask for feedback internally and from the service purchasing company.	C2.3 GSOE relationship
Arrange two feedback collection sessions: 1) common session to collect generic feedback; and 2) service specific session.	C2.3 GSOE relationship
Create a power-map together with the service purchasing company and identify the people who must be part of the activities.	C2.3 GSOE relationship

Table 4. Interaction and information-sharing lessons learned

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Based on the lessons learned items and observation findings, it was clear that more development and improvements were needed in communication and interaction practices:

- One of the main challenges was poorly managed handovers. The supplier should define and implement effective handover practices;
- The supplier should implement active customer expectation management practices to ensure that they are able to fulfil the service purchasing company's needs to their satisfaction. This approach would also support ISO9001:2008 [27] customer focus and Senge's [32] shared vision approaches;
- The supplier must focus on ensuring that the GSOE communication triangle works efficiently (i.e., IT unit supplier onsite supplier offshore). Improving only the supplier's internal communication does not increase the service purchasing company's satisfaction or provide operational level progress visibility to all of the GSOE parties;
- More focus is needed on training arrangements. Especially in an offshore outsourcing situation, the IT trainers should have training competencies and preferably pedagogical knowledge. In addition, the trainers need to have hands-on experience (e.g., using ITIL processes in a global IT service outsourcing situation). The service purchasing company must be an integral part of the training arrangements, as they have the core-business knowledge. It is important to share the "why" knowledge with the operational level personnel and to not only focus on the "what" and "how" aspects. Successful training management, which also includes clear definitions of the targets, practices, and content, can bring cost savings and decrease the need to retrain.

4.5 Category: behavior and mind-set

It was identified that the operational level teams' performance outcomes were shared experiences. Fig. 2 illustrates the globally distributed teams' group dynamics. The teams' operations were guided by several process descriptions (such as ITIL processes), assumptions, hopes, and explicit targets (such as contracts and service orders). The GSOE leaders played a critical role in guiding and leading the globally distributed teams' operations. However, the leaders failed to engage the operational level teams, which negatively affected the consensus and the teams' ability-to-work (supports H1 and H2). Based on the interviews, action research observations, and various discussions with the representatives of the supplier and the service purchasing company, it was identified that the teams' basic form of unity was "disharmony" and "differences of opinion." It appeared that the teams were temporarily able to reach a consensus and mutual understanding, but eventually, they reverted to a state of disharmony. Usually, this illusion of harmony was achieved after using a strong managerial grip and a micro-management approach. Even when it seemed that the expected mutual understanding was achieved, in reality, individuals (especially at the offshore centers) hid their real thoughts, and they simply attempted to operate based on the explicit rules. When the micro-management grip loosened, the operational level personnel reverted to their former way-of-working approach. These findings support H2.

Based on action research observations, it was evident that the teams' group dynamics had a significant impact on the quality of operations and outcomes (Fig. 2). In fact, it appeared that the group dynamics affected more than the official targets, such as service orders. The teams' ability-to-work included two key elements: 1) a sufficient consensus to enable cooperation; and 2) a sufficient individual independency to enable innovation (Fig. 2). The consensus had an impact on the group's ability to cooperate internally and with other groups (such as the supplier's onsite and offshore teams, the IT unit's teams). The cooperation among the teams also included challenges, prejudices, and schism. The GSOE leaders attempted to solve the situation by agreeing on "the basic operating rules" and standardizing the service deliveries. However, the lack of individual independency prevented innovation. The micro-management grip (e.g., conducted by the IT unit and the global team) caused frustration and most likely negatively affected the turnover rate at the offshore centers. These finding support H2.

An interesting finding was that the global team's leaders understood and perceived their roles, responsibilities, and activities differently than the rest of the global team's members. The leaders perceived themselves as active and participative. Nevertheless, other global team members commented: *"The management was involved what came to*

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words, but the actual time given to this topic, I would say it was more disconnected and it felt like: 'YOU – take care of this'. Management level people somehow managed to outsource themselves out of the whole case." The other global team members expected the leaders' commitment in sustaining the changes in the operational level's activities and behavior. Instead, some of the leaders transferred their own responsibilities to the operational level personnel, although they did not have the necessary mandate and power to ensure the cultural and behavioral changes. This caused dissatisfaction and frustration among the operational level personnel (supports H1). These findings also correspond with Nissinen's [29]-[30] non-leadership elements: "controlling and corrective" and "passive."



Fig. 2. The group dynamics model

Changing the existing mind-set and way-of-working practices was challenging. As an example, the global team's members had challenges recognizing that the main target of the development activities was to improve the operation, rather than making the reports and metrics look "green" just for the sake of reporting. The global and offshore teams' behavior and mind-set lessons learned findings are listed in Table 5 based on the focus areas defined in Table 1.

Based on the lessons learned analysis, there was still room for behavior and mind-set development:

- The supplier's personnel (both leaders and operational level personnel) need to operate based on the transferred responsibilities and not on a resource-based approach in a selective outsourcing situation. Therefore, the supplier should not expect the service purchasing company to lead all of the operation and development activities on behalf of the supplier;
- The leaders need to commit to and focus on engaging the operational level personnel in the GSOE operation. If the leaders do not commit to the implemented changes, in practice, this means that the changes will not become permanent. This may require leader-specific training arrangements and competency development;
- A lot of training and mind-set changes are needed to ensure a successful mode-of-operation change from the resource-based operation to the selective outsourcing-based operation, where the supplier truly is responsible for the operational level implementation and development activities;

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- The supplier needs to proactively develop the operation instead of waiting for the service purchasing company to
 define all the activities in detail. From the GSOE cooperation point of view, it is important to focus on GSOE
 relationship management and to improve trust and trustworthiness between the GSOE parties. This would enable
 timely and efficient problem and non-conformance solving;
- The onsite and global teams should not micro-manage offshore centers, and the offshore centers cannot be ignored or run roughshod over by other teams. Otherwise, the offshore centers will not commit. In addition, the micro-management approach will negatively affect trust and satisfaction. It is important to recognize the cultural elements of the operation, and the totality of the global system.

Behavior and mind-set lessons learned items	Focus area
Proactively collect the needed information.	C3.1 Mind-set
It is useful to be visible and show presence to the operational level personnel. That way, the operational level people can show what they are doing and ask questions if needed.	C3.1 Mind-set
The supplier should be active instead of waiting for the IT unit to tell us what we should do.	C3.1 Mind-set
There is a need for mind-set changes. Delivering only outcomes is not enough for the customer, and the end-to-end operations and practices must be developed all the time.	C3.1 Mind-set
It is important to think about what is really useful and to not just start doing things. Focus on concrete things and activities; do not just write reports for the sake of reporting.	C3.1 Mind-set
Participate in the meetings; do not just rely on the heard comments.	C3.2 Group dynamics
Implement activities as a joint effort. Sustaining changes will require the cooperation and commitment of both parties.	C3.2 Group dynamics

Table 5. Behavior and mind-set lessons learned

5. Conclusion

This research provided the supplier's point of view of the operational level development outcomes in a global selective IT outsourcing situation. The findings included various practices, interaction and information sharing, and behavior-related development items. This research provided examples and knowledge for different types of companies to develop their selective outsourced operations and group dynamics in a global selective outsourcing situation.

The research provided insights into real-life situations and experiences. The study analyzed the outsourcing development activities and presented the supplier's point of view, instead of the service purchasing company's perceptions. The main managerial implications of this study can be concluded as a need to focus on leadership capabilities, quality management practices, knowledge transfer and successful training arrangements, and trainers' competencies. The offshore outsourcing development should follow agile and incremental development approaches, and the GSOE operation should include continuous improvement practices. From a theoretical perspective, the article provided lessons learned findings that expanded the knowledge of selective outsourcing development. The findings complement existing studies by expanding the understanding of the need to implement development activities in an agile and incremental approach, and to focus on efficient and timely knowledge-transfer activities. The article also analyzed the globally distributed teams' group dynamics and its criticality in the teams' ability-to-work.

Naturally, it is acknowledged that this research has some limitations. The data and the examples are from only one case environment and its global operations in those specific circumstances. It is recognized that the case environment's choices and decisions were in response to specific situations. However, Nokia Devices and its IT supplier have a wealth of experience with offshore outsourced operations, global operations, and IT service delivery arrangements. In addition,

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their employees' knowledge and competencies are well recognized. Therefore, this study provides useful lessons that other companies can benefit from. A further study should be done to investigate the results in different types of environments in other companies, and to test the transferability of the lessons learned findings and the form of group dynamics.

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Biographical notes



Anne-Maarit Majanoja

Anne-Maarit Majanoja is a doctoral candidate at the University of Turku, Finland. She has more than a decade of work experience and her work experience has equipped her with an in-depth knowledge of global IT development and services, quality management, leadership, and logistics and supply chain environments. Her current research interests include: quality management, process development, global IT outsourcing, leadership and change management, and IT education and ethics.

www.shortbio.net/anne-maarit.majanoja@utu.fi



Linnéa Linko

Linnéa Linko, PhD, works as an adjunct professor and lecturer among quality assurance in the University of Turku. She has a wide experience as a clinical chemist in clinical laboratories and as a quality manager in the hospital sector. Her key interest is quality management as a whole and quality assurance of the result.

www.shortbio.net/linnea.linko@utu.fi



Ville Leppänen

Ville Leppänen is a professor in software engineering and software security at the University of Turku (UTU), Finland. He has over 170 international conference and journal publications. His research interests are related broadly to software engineering and security, ranging from software engineering methodologies, project management practices, and tools to security and quality issues, and to programming languages, parallelism, and architectural design topics. Leppänen is currently leading five research and development projects. He acts as the head of Software Engineering (UTU) and leader of Software Development Laboratory of Turku Centre for Computer Science.

www.shortbio.net/ville.leppanen@utu.fi