Innovate on Purpose – Factors Contributing to Innovation in IT Outsourcing

Anna-Luise Boehm
Accenture GmbH
anna-luise.boehm@accenture.com

Bjoern Michalik
University of Cologne
michalik@wiso.uni-koeln.de

Nikolaus Schmidt
Accenture GmbH
nikolaus.schmidt@accenture.com

Dirk Basten
University of Cologne
basten@wiso.uni-koeln.de

Abstract
In addition to IT expenditure reduction, the ability to generate innovation is an important criterion when selecting a provider for IT-related initiatives. Considering an outsourcing life cycle model, we identify and evaluate factors that foster innovation in IT outsourcing projects. Our study thus addresses an essential issue in outsourcing – the links between outsourcing and organizational innovativeness. Hence, our findings strengthen practitioners’ awareness of the variety of influences that need to be considered in order to foster innovation. Moreover, the overview of the factors we identify serves as a checklist for IT outsourcing projects. Building on this list, future research should aim to develop a process model to guide (1) decisions concerning the selection of IT outsourcing partners, and (2) the collaboration along the entire IT outsourcing life cycle.

1. Introduction

The reduction of the client’s overall IT costs has traditionally been the main objective of IT outsourcing [1]. However, lessons from various IT outsourcing experiences reveal that hidden costs are often underestimated [2]. Hidden costs that are neglected include primarily the management resources and time the client is required to invest to coordinate the IT outsourcing process. Moreover, the sole focus on costs in IT outsourcing may not be sufficient.

Research on current market developments shows that the purpose of IT is changing rapidly [3]. The most recent findings suggest that, besides delivering stable and cost-efficient IT services for organizations, IT departments are required to (1) support organizations’ business strategy, and (2) deliver innovations. Thus, a major future challenge for IT departments is to provide IT-based innovations, while keeping in mind the cost-efficient delivery of IT services for organizations.

Recently, Oshri and Kotlarsky [4] indicate that, for more than half of the 253 largest European companies, ability to generate innovation is an important criterion when selecting a provider for IT-related initiatives. For such decisions, it is thus important to be aware of the factors that influence the generation of innovations within IT outsourcing. In line with this need, we conducted the study presented here with the aim of advancing our understanding of factors that foster the generation of innovation within IT outsourcing. Our work is guided by the following research question:

Which factors influence the generation of innovation in information technology outsourcing along the different phases of the outsourcing lifecycle?

To answer this question, we apply a two-step research approach. Based on a comprehensive literature review, we first identify factors concerning innovation in IT outsourcing. Second, we conduct semi-structured interviews with experts working in the field of IT outsourcing to deepen our understanding and generate propositions about the influence of the factors identified through this process.

The study findings thus advance the understanding concerning the process of innovation generation within IT outsourcing. While the in-depth insights from the expert interviews help to guide practitioners towards better outsourcing decisions in the future, researchers might use our propositions regarding the importance of the factors for further empirical validation of our findings, or for focusing their studies.

Our paper proceeds as follows. Next, we present the background concerning IT outsourcing and innovation. We describe our research approach in section 3. This is followed by our results in section 4, which are discussed in section 5. In section 6, we conclude with limitations of our study, implications for practitioners, and an agenda for future research.

2. Theoretical background

2.1. IT innovation

An innovation is a new idea, successfully used in an organization’s products, services, or processes, in
order to generate additional value for the organization and strengthen its market competitiveness [5]. Weeks and Feeny [6] differentiate three types of IT innovation, which are briefly described below.

**IT operational innovation** refers to technology changes not affecting the organization’s business processes but rather enabling new and superior ways to use IT within these processes (e.g., deploying a new operating system).

**Business process innovation** includes changes that significantly affect the way work is performed within an organization, affecting an organization’s business processes (e.g., implementing a new enterprise resource planning system that enables the organization to improve inventory processes and thus reduces inventory costs.)

**Strategic innovation** pertains to changes that significantly improve organization’s products and services for existing or potential customers. Thus, such initiatives might allow entry into new markets (e.g., the EcoDrive system developed by Fiat and Microsoft, which helps drivers improve their driving style and thus reduce fuel consumption. This not only retains existing customers, but also attracts new customers who bought cars of other manufactures before.)

### 2.2. IT outsourcing

In general, IT outsourcing is the purchase of IT products and/or services that were previously provided internally [7]. It concerns the transfer of property or decision rights over IT infrastructure from a client organization to an external provider [8, 9]. Such assignments of rights to external providers are a well-known and established technique and a practice that has been utilized since the 1980s [5]. Cullen et al. [10] propose an outsourcing life cycle model, which consists of four phases outlined below.

**Architect phase:** In this phase, the foundation for the outsourcing project is laid by performing the following tasks: (1) investigating the organization’s situation and establishing realistic expectations, (2) targeting the activities best suited for outsourcing, (3) strategizing the outsourcing project, and (4) designing a detailed configuration, by defining, for instance, the pricing framework, the duration, the resource ownership, and the commercial relationship.

**Engage phase:** The engage phase is important due to the long-term dependence on the provider. “Determining which provider(s) to depend on for years to come is akin to acting as the matchmaker for an arranged marriage” [10, p. 237]. It comprises two main tasks – (1) outsourcing provider(s) selection, and (2) contract negotiation. Selecting the outsourcing provider(s), typically via a competitive bidding process, which includes conducting discovery, performing due diligence and evaluating the bids. When the final contract is negotiated, as recognized in extant literature [10], the last task should not comprise give-and-take negotiations, as issues such as service-level agreements or due diligence should have already been dealt with in previous steps. “When the outsourcing life cycle model is followed, negotiation simply involves refining the exact wording of various documents” [10, p. 238].

**Operate phase:** Once the final contract is signed, the operate phase commences and typically involves (1) transition of the outsourced activity (however, planning of this task should be started as soon as it is believed that the deal will be accomplished), and (2) the operation management, which includes continuous planning, assessing and improving the relationship.

**Regenerate phase:** This phase is entered either by early termination of one of the parties, or by contractual and/or mutual agreement. It focuses on re-assessing all outsourcing options and decisions made during the outsourcing project. Its outcome may be a renegotiation, starting the outsourcing life cycle from the beginning, or back sourcing.

Across all phases, Cullen et al. [10] stress the success criticality of excessive planning in advance.

### 2.3. IT innovation outsourcing

Combining the two aforementioned concepts, we define IT innovation outsourcing as the external purchase of IT products and/or services with the additional or even sole aim of enhancing the organization’s innovativeness. Thus, an outsourcing project’s outcome can be either generation of innovation as a side effect (e.g., the main goal being cost reductions), or the main goal itself.

However, previous research reveals that IT innovation outsourcing needs to be considered as a source of opportunity as well as threat for the outsourcing organization. On the one hand, innovation outsourcing can be essential as the innovation process becomes more complex and can only be achieved by utilizing the highly skilled specialists in outsourcing networks [11]. Thus, IT innovation outsourcing exhibits a high potential as it enables organizations to participate in valuable networks [12–16]. On the other hand, diminishing innovative capabilities by the outsourcing can be one of “the most serious threats resulting from a reliance on outsourcing” [17, p. 766]. It bears the risk of forgoing an organization’s knowledge base and being leaked by the supplier [12]. While innovation can be bought, it must be acknowledged that vendors have limitations and expectations need to be managed [18].
In this context, trust is instrumental in the success of IT innovation outsourcing. If an organization relies on outsourcing while downsizing its own capabilities, its innovativeness may be impaired [18]. Some authors point out that “while innovation can indeed be achieved within outsourcing, it is dependent on certain attributes within client and supplier, and in the relationship between them” [6, p. 145].

Several case studies investigate the impact of outsourcing on innovation [6, 11, 19]. However, this relation is still poorly understood: Oshri et al. [20] conclude that “the outsourcing field is lacking a conceptualization of factors affecting innovation in outsourcing” (p. 2). The authors for instance reveal that certain contract types and the strength of the client-supplier relationship affect innovation in outsourcing projects. Moreover, in the few available studies considering innovation, innovation was modeled as an independent variable rather than outcome variable [21].

Our study is, therefore, a first step towards better understanding of one of the most important issues in outsourcing – the links between outsourcing and organizational innovativeness [22].

3. Research approach

In the research described here, we follow a two-step approach. We first perform a comprehensive literature review to identify innovation-promoting factors in IT outsourcing projects. Next, we conduct semi-structured interviews to deepen our understanding of the relevance of each of the factors noted in the extant literature, as well as to identify new ones.

3.1. Literature review


Publications dating from 2001 to 2011 in each of the 19 aforementioned journals were reviewed by reading their titles and abstracts. Articles dealing with innovation, IT outsourcing, or knowledge sharing were read in detail. Following this approach, we identified eight articles describing innovation-promoting factors concerning IT outsourcing projects. Following Webster and Watson [23], we also conducted a forward and backward search, which led to five additional articles. Thus, we identified a set of 13 articles, which contained 33 factors contributing to innovation in IT outsourcing projects (presented in section 4).

3.2 Semi-structured interviews

To deepen our understanding of the relevance of these 33 factors, as well as to identify new ones, we conducted ten semi-structured expert interviews [24]. The interviews were held from February to March 2012, each lasting one to two hours.

All interviewees are highly experienced in IT outsourcing, and were at least once fully or partially responsible for managing such a project. Table 1 identifies our interviewees with regard to their position and experience.

<table>
<thead>
<tr>
<th>No.</th>
<th>Current Position</th>
<th>Professional experience in current position (in years)</th>
<th>Number of outsourcing projects participated</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Manager</td>
<td>6</td>
<td>9</td>
</tr>
<tr>
<td>2</td>
<td>Analyst</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>Senior Manager</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>4</td>
<td>Manager</td>
<td>8</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>Divisional Director</td>
<td>20</td>
<td>6</td>
</tr>
<tr>
<td>6</td>
<td>Manager</td>
<td>7</td>
<td>2</td>
</tr>
<tr>
<td>7</td>
<td>Principal Project Manager</td>
<td>20</td>
<td>4</td>
</tr>
<tr>
<td>8</td>
<td>Manager</td>
<td>7</td>
<td>5</td>
</tr>
<tr>
<td>9</td>
<td>Project Manager</td>
<td>20</td>
<td>12</td>
</tr>
<tr>
<td>10</td>
<td>Consultant</td>
<td>3</td>
<td>3</td>
</tr>
</tbody>
</table>

Since innovation generation is influenced by the client as well as the contractor, we included interviewees from both parties. All interviewees worked in financial or telecommunication sector.

While the company size in each case exceeded 250 employees, the size of the outsourcing projects varied from 10 to 1,000 employees. We used an interview guide, which we pretested within the researcher group.
The interviews were audio-recorded, transcribed, and finally reviewed by the interviewee to ensure communicative validity [24]. During the interviews, the experts described their views pertaining to the relevance of the factors our literature review yielded, rated them on a 7-point Likert scale (total disagreement – total agreement), and proposed additional ones.

4. Results

Our two-phase research approach yielded 37 factors (33 identified during the literature review and 4 proposed by the expert interviewees) that foster the generation of innovation within IT outsourcing projects. To structure our results, we use Cullen et al.’s [10] widely-cited outsourcing life cycle model (cf. section 2.2). Below, we provide an overview of the factors (cf. Table 2) and discuss those pertaining to each phase in more detail, focusing on those our experts deemed most and least important. We also explain the four factors identified by our interviewees. Since these were not part of the initial interview guide, we did not ask the experts to assess their importance and thus could not include them in our factor ranking.

4.1. Architect phase – investigate, target, strategize, and design

Concerning the architect phase, we identified twelve innovation generating factors (cf. Table 2). Eleven of those were found in the reviewed literature and the remaining one was mentioned in the expert interviews (Existence of an innovation agenda). With an average rated importance of 5.23, the architect phase is considered least important, in comparison to the other phases, for which we could calculate an average score (for the regenerate phase, we could not calculate an average score since the only factor was mentioned by the experts and its importance thus not assessed).

Our analysis indicates that Existence of an innovation outsourcing strategy is the factor our experts related the highest, based on its ability to generate innovation within the architect phase.

Innovation outsourcing projects, which are linked to the corporate strategy, are more visible within the company and might therefore be more strongly supported. The experts indicated that innovation outsourcing decisions are often only taken implicitly by the choice of technology. One manager doubts that an “innovation outsourcing strategy is necessary but by all means an innovation strategy” (Manager).

Contract-based risk and rent sharing was rated second most important factor within this phase. In general, contractual constructs used for innovation outsourcing projects should be clearly different from those deployed in conventional cost-focused IT outsourcing projects [28]. The right choice of the contractual constructs can incentivize providers to interchange their expertise and best practices, which increases the likelihood of innovation generation during outsourcing projects. Contract-based risk and rent sharing allows the client and the provider to share risks as well as participate in the associated profits. The experts rated this factor as highly innovation-enabling, as this instrument “[…] allows the client to share the entrepreneurial risk” (Principal Project Manager) of the innovation outsourcing project. “The more the provider benefits financially, the more he will take care of innovation related matters” (Consultant). However, it was brought up during the expert interviews that measuring the generated innovation can be problematic and thus making it hard to use such contractual instruments. The client has to be capable of measuring the innovation. “The factor ‘Contract based risk and rent sharing’ will definitely promote innovation, but I claim that [generated innovation] is hard to measure” (Consultant).

Contrarily, IT’s contribution to organizational performance was rated second least important, and thus not perceived as crucial. The experts agree that it is not necessary for the IT to be recognized as a department that contributes to overall organizational performance to generate innovation in outsourcing relationships. However, it should not be seen solely as a cost center. “If the IT however is perceived as a cost center, strategic innovations will probably not be generated” (Consultant). In those organizations, the emphasis will be on IT operational innovations at best.

Deploying an Effective conflict management was not rated as an innovation facilitating factor, as the experts do not see a direct correlation between the factor and the generation of innovation. “If the conflict management within the project is efficient, innovation might be generated. But if the conflict management is more efficient, there will not be more innovation generated” (Principal Project Manager).

A factor that was additionally mentioned by two of the experts is the Existence of an innovation agenda, which they deemed should be a part of the contract. “Within this innovation agenda, the client and the provider define in which context they are talking about innovation and how innovation will be generated during the outsourcing project” (Consultant). The client might oblige the provider to hand in an innovation-related point of view from time to time.

4.2 Engage-phase – select and negotiate

Concerning the engage phase, we identified twelve innovation generating factors (cf. Table 2). Eleven of
### Table 2. Factors enhancing innovation along the different phases of the outsourcing lifecycle

<table>
<thead>
<tr>
<th>Innovation Factor</th>
<th>Mean</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Architect Phase</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Existence of an innovation outsourcing strategy [25]: A strategy within the client specifies which</td>
<td>5.8</td>
<td>11</td>
</tr>
<tr>
<td>innovations / parts of the innovation processes should be outsourced. It is important for the client</td>
<td></td>
<td></td>
</tr>
<tr>
<td>organization to stay targeted in their innovation outsourcing endeavours in the long term.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contract-based risk and rent sharing [25–28]: A contractual tool allowing risks and rewards of innovation-</td>
<td>5.7</td>
<td>14</td>
</tr>
<tr>
<td>focused outsourcing projects to be shared and regulated among the parties involved.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Experience in innovation outsourcing [29]: The client’s experience with innovation outsourcing projects.</td>
<td>5.6</td>
<td>16</td>
</tr>
<tr>
<td>With growing experience, the company develops a concept of how to measure innovation and how to</td>
<td></td>
<td></td>
</tr>
<tr>
<td>interact effectively with its providers.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Communication between business and IT [26]: Communication between the business and the IT fosters the</td>
<td>5.6</td>
<td>17</td>
</tr>
<tr>
<td>IT’s understanding of the organizational requirements. Hence, lack of communication will make it hard</td>
<td></td>
<td></td>
</tr>
<tr>
<td>to define a outsourcing project generating innovation and thus business value.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>New forms of contract setting [6, 28]: Usage of new contractual elements incentivizing the provider</td>
<td>5.4</td>
<td>19</td>
</tr>
<tr>
<td>to generate innovation (e.g., an agreement to share knowledge and best practices across outsourcing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>partners).</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Internal &quot;masters of process&quot; [11]: Individuals or groups of internal employees with specific</td>
<td>5.3</td>
<td>22</td>
</tr>
<tr>
<td>knowledge and expertise of the company’s processes, who are specialized in identifying the best</td>
<td></td>
<td></td>
</tr>
<tr>
<td>outsourcing partners.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&quot;Brokers&quot; to facilitate interaction [30]: Mediators between the client and the provider that translate,</td>
<td>5.2</td>
<td>23</td>
</tr>
<tr>
<td>coordinate and align the different perspectives and the different knowledge of the groups and thus</td>
<td></td>
<td></td>
</tr>
<tr>
<td>help create a mutual understanding.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agreed guidelines of interaction [31]: Definition of formal guidelines of interaction (type and extent</td>
<td>4.6</td>
<td>28</td>
</tr>
<tr>
<td>of knowledge exchange) in order to facilitate the knowledge exchange between the outsourcing partners.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Focus on innovation [27]: Clear focus on innovation, rather than costs, within the outsourcing project.</td>
<td>4.6</td>
<td>29</td>
</tr>
<tr>
<td>IT’s contribution to organizational performance [26]: Perception of the IT as a department that</td>
<td>4.5</td>
<td>30</td>
</tr>
<tr>
<td>contributes to the overall organizational performance within the client company and not just as a cost</td>
<td></td>
<td></td>
</tr>
<tr>
<td>centre.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Effective conflict management [25, 32]: Implementation of flexible conflict escalation and resolution</td>
<td>3.7</td>
<td>32</td>
</tr>
<tr>
<td>processes to strengthen trust and learning within the relationship, as well as maintain knowledge and</td>
<td></td>
<td></td>
</tr>
<tr>
<td>innovation generation.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Existence of an innovation agenda (identified within expert interviews): (Contractual) agreement</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>between client and provider which defines how innovation will be generated (e.g., monthly innovation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>workshops).</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Engage Phase</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Capacity to absorb knowledge [6]: The ability to recognize the value of new external information, to</td>
<td>6.4</td>
<td>2</td>
</tr>
<tr>
<td>process this information and to apply it. This process facilitates, for instance, contribution to</td>
<td></td>
<td></td>
</tr>
<tr>
<td>discussions and development of new ideas.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proactivity [28]: A proactive provider is able to anticipate changes in the client's business. It</td>
<td>6.3</td>
<td>5</td>
</tr>
<tr>
<td>proposes new ideas in order to help the client while taking available resources and costs into account.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Compatibility of corporate cultures [28]: Compatibility of the client and provider’s corporate cultures</td>
<td>6.3</td>
<td>4</td>
</tr>
<tr>
<td>is critical for achieving both parties outsourcing objectives.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Development of a common vision [11]: A common vision of how innovation will be generated between the</td>
<td>5.9</td>
<td>9</td>
</tr>
<tr>
<td>client and the provider is necessary to promote an atmosphere of innovation among the employees.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tendency to innovate [11]: Provider’s tendency to appreciate and stimulate the generation of</td>
<td>5.7</td>
<td>13</td>
</tr>
<tr>
<td>innovation.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Network and collaboration of the provider [6]: The degree of the provider's connection to other clients.</td>
<td>5.7</td>
<td>15</td>
</tr>
<tr>
<td>The higher the degree of the provider's connections, the greater the ability to innovate.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Geographically and technological distance [25, 30]: The degree of interaction and understanding</td>
<td>5.4</td>
<td>21</td>
</tr>
<tr>
<td>between the client and the provider tends to increase with the decline in the geographical and</td>
<td></td>
<td></td>
</tr>
<tr>
<td>technological distance.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Complementarity of the knowledge [31]: Complimentary knowledge of the client’s and the provider’s</td>
<td>5.1</td>
<td>24</td>
</tr>
<tr>
<td>employees results in greater cooperation and therefore fosters innovation.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Compatible &quot;Innovation Roadmap&quot; [28]: The “Innovation Roadmap” defines the goals for generating</td>
<td>5.0</td>
<td>25</td>
</tr>
<tr>
<td>innovation and explains how to reach them (e.g., in which technologies a company is going to invest).</td>
<td></td>
<td></td>
</tr>
<tr>
<td>If the “Innovation Roadmap” of the client and the provider coincide, innovation is likelier to occur.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3249
Use of boundary objects [30]: A boundary object is an object such as a technology or a set of rules, which serves as a common agreement between the client and the provider. They provide a common understanding, allow for coordination between the groups and might be conjointly developed further.

Company size [33]: The company’s size has a positive impact on the number of innovations. The larger the company, the higher the number and scope of innovations.

Use of an evaluation catalogue (identified within expert interviews): Usage of an evaluation catalogue compromising innovation-related selection criteria.

Operate Phase

High level of trust [28, 31, 32, 34]: Innovation outsourcing projects are much more disposed to risk than clearly defined cost-focused outsourcing projects, since the outcome is less specific. Therefore, a high level of trust is a prerequisite for collaborative innovation.

Strategic portfolio planning [25, 28]: Clear portfolio planning of IT innovations and management of the client’s investments positively effects the motivation to generate innovation within outsourcing projects.

Establish interfirm and multifunctional teams [28]: Teams consisting of client and provider staff, as well as including individuals working in different functional areas, will tend to generate more innovations.

Flexible and adaptive relationship [27, 28]: A relationship characterized by flexibility and adaptively allows the employees to think and act out of the box. In order to allow for more flexibility, the client might set goals for the provider but may not determine how to reach these goals.

Tracking of IT innovations [26]: This process includes measuring, tracking and publishing of innovations, fosters continuous improvement, supports sustain innovation, and encourages recognition of innovation.

Provision of IT-enabling infrastructure [11, 26]: Provision of a certain infrastructure (e.g., innovation centres) has a positive impact on the degree of innovation within outsourcing projects.

Innovation trainings [26]: Training programs provide the employees with tools that facilitate an efficient innovation generation process. The training could consist of techniques to moderate and to promote creativity within workshops, aiming to generate new ideas.

Regenerate phase

Project closure and evaluation of provider (identified within expert interviews): Evaluation of the provider at the end of the outsourcing project and identification of areas for improvement.

Factors affecting all Phases

Top management support [6, 26]: Top management support during the entire outsourcing project’s life cycle.

Continuous information sharing and project execution [11]: Information sharing and project execution on a three-point contact system: (1) Development of vision and strategy, as well as continuous realignment of strategy at the top management level, (2) information sharing with the employees whose careers depend on the relationship’s success, and (3) information sharing on an operational level.

Strategic knowledge management [35]: Utilization of strategic knowledge management systems, which includes processes or infrastructure. The aim of this initiative is to gain, generate and interchange knowledge, in order to formulate a strategy or to take appropriate strategic decisions.

Strong leadership [27]: Client’s strong leadership is characterized by the ability to handle adaptive challenges, which require changing values, behaviours, beliefs, relationships, and approaches to work [36].

Win-win situation (identified within expert interviews): A situation in which client and provider mutually benefit from the outsourcing relationship. In addition to contract-based risk and rent sharing, the win-win-situation avoids unforeseen imbalances between both parties throughout the entire outsourcing project.

those were found in literature and an additional one was mentioned in the expert interviews (Evaluation Catalogue). With an average importance of 5.36, it is considered the second most important phase.

Capacity to absorb knowledge was assessed the most important factor for generating innovation within the engage phase. In order to enhance innovation generated within an IT outsourcing project, the experts agree that the ability to recognize, process, and apply new external information and thus possible innovative ideas needs to be high. Additionally, several experts emphasize that the absorptive capacity has to be high on both the client and the provider side. “A client that has already outsourced almost all of its IT will not be able to evaluate new innovative ideas of the provider but rather compare the costs” (Principal Project Manager). “If a client tells us that they already tried something in order to generate new innovations, we as consultants need to be open to do and think in this and any other direction” (Manager).

Proactivity of the provider is the second highest rated factor. During the provider selection process, the
client should already pay high attention to the provider being used to proposing and elaborating new ideas. “From my point of view, a proactive client should not only administrate but rather propose new ideas in order to improve existing or create new services or products” (Project Manager).

The experts rated the Use of boundary objects as a factor of lesser importance. In particular, several experts recognize the problem that those boundary objects “[…] might bear the risk of giving a false image of consensus and agreement” (Project Manager).

Furthermore, the statement that large providers innovate better [33] was mainly rejected by the experts. Company Size is thus the lowest-rated factor not only within the engage phase but amongst all 33 assessed factors. “For me, the size does not matter at all, but rather the people who are working on a project” (Project Manager). Accordingly, most of the interviewees do not see any correlation between the size of the provider and their ability to innovate. Others assumed that the ideal size of the provider depends on the subject to be outsourced. “Small niche providers are more specialized and do develop new ideas and innovations in some areas faster” (Consultant).

A factor that was additionally mentioned by one of the experts is the existence of an adequate Use of an evaluation catalogue with criteria considering the ability to generate innovations. According to the expert, only then the client will be able to select a provider capable of generating innovation within the project.

4.3. Operate-phase – transition and manage

All of the seven factors pertaining to the operate phase (cf. Table 2) were identified during the literature review. With an average importance of 6.06, this is considered the most important phase.

High level of trust was assessed as most important factor, both in this phase and among all 33 assessed factors. “Especially if innovation needs to be generated, trust is absolutely important” (Divisional Manager). On one hand, in an innovation outsourcing relationship, trust needs to be high, since clients have sometimes to blindly follow the provider without knowing where the journey leads: “The client needs to trust because we might propose innovations that are reaching deeply into processes and the organization” (Consultant).

On the other hand, clients need to accept that some innovations might take years to materialize. “We need to trust that an innovation might be generated after several months or years have elapsed” (Divisional Director).

Strategic portfolio planning of the IT innovations was the second highest rated factor within the operate phase. “If we had an effective and dedicated strategic portfolio planning of IT innovations, it would be easier to effectively manage the innovation and the synergies which can be reached between the projects” (Principal Project Manager). Additionally, the advantage of a dedicated portfolio planning is that “[…] innovations are not generated in areas in which they are not needed” (Consultant).

In contrast, Provision of IT-enabling infrastructure was ranked as the second lowest factor within the operate phase. However, it is still perceived as a factor that potentially promotes innovation. “I think this factor might promote innovations, but there are factors that are more important” (Manager). With an assessed average importance of 5.7, this factor ranked eighteenth among the 33 assessed factors. This finding can be explained by the high assessment of factors associated with the operate phase in general. The experts do agree that, for instance, a platform to communicate new ideas can be very useful in this context. “Such a platform would permit all employees to provide their ideas bottom-up” (Consultant). However, the experts also highlight that such infrastructure only creates added value if it is actively used. “The infrastructure does not promote innovation at all if the employees are not using the offered infrastructure” (Senior Manager).

The lowest rated factor within the operate phase, while still ranking 16th among the 33 assessed factors, is the conduction of Innovation training within outsourcing projects. Thus, in line with the above, it is still regarded as innovation promoting. “Training programs might help, but I would not expect too much from them. You need certain awareness amongst the employees that, in my opinion, cannot be taught in training” (Divisional Director). However, despite the concerns “Innovation training definitely creates more awareness” (Consultant).

4.4 Regenerate phase – refresh

Concerning the regenerate phase, we identified only one innovation generating factor (cf. Table 2), which was mentioned by two experts during the interviews. One of the experts proposed that, in order to enhance the innovation generated within outsourcing relationships, a Proper project closure and evaluation of the provider is needed. “Especially in this kind of projects, it is important to conduct a proper project completion. That includes comparing the desired and the actual outcome for each phase” (Senior Manager). Another expert highlighted that “it is not only important to evaluate the provider in the
aftermath but also to look inside the own organization, to identify areas for further improvement as well as to derive initiatives” (Senior Manager).

4.5 Factors affecting all phases

Finally, we identified five factors affecting all phases of the outsourcing life cycle (cf. Table 2). Of those, four were identified during literature review and one was mentioned in the expert interviews.

Top management support was highest rated in this group. “I think that, particularly within innovation outsourcing, [for] projects which typically require significant investments and organizational changes, top management support is crucial” (Principal Project Manager). “I do definitely agree that this factor is important. Many aspects are decided on an operational level or by the middle management, but finally you need in some cases the decision of the upper management” (Principal Project Manager). The experts agree that, in most projects, the support of the top management is lacking after a while. Therefore, “the project leader should be positioned one or two levels under the board in order to maintain the top management support during the whole life cycle of an innovation outsourcing project” (Project Manager).

Another aspect concerns enduring cost pressure: “Especially in economically difficult times, the focus is usually on cost-cutting projects, so that projects in which innovation is going to be generated need the support of the top management” (Manager).

The second factor that affects all phases is the Continuous information sharing and project execution. This includes information sharing with the operational as well as middle and top management level. However, one expert places particular emphasis on communication at the lower levels. “For me, it is more important that the employees communicate and interchange their results on an operational and on the middle management level than on the top management level” (Project Manager).

The usage of Strategic knowledge management systems was the second lowest rated factor affecting all phases of an innovation outsourcing project. Strategic knowledge management systems are processes or infrastructures aiming to gain, generate, and interchange knowledge in order to formulate a strategy or to take appropriate strategic decisions [35]. However, the experts highlight that those systems only affect the innovation generated within outsourcing projects “[…] if [the strategic knowledge management systems] are properly implemented” (Manager) and “[…] if they are continuously applied” (Manager). Additionally, one expert stated that it depends on the size of an innovation outsourcing project. “In rather small innovation outsourcing projects, it is totally sufficient if the knowledge is only implicitly available” (Project Manager).

Finally, Strong leadership of the client was the lowest rated factor affecting all phases. However, its assessment has to be treated with caution since we recognized that it was very ambiguously perceived due to the experts’ diverging definitions of leadership. “A client that is too pushy and puts too much pressure on its provider is not going to create an environment in which innovation is likely to be implemented” (Consultant). Rather than a strong leadership, experts recommend strengthening project management “[…] which should intentionally and actively foster innovation and support the provider.” (Project Manager)

In addition to the factors identified in the literature, one of the experts highlighted that, especially in innovation-focused outsourcing relationships, a Win-win situation between the client and the provider should be ensured, so that both parties mutually benefit from the innovation outsourcing relationship. “It is important that the client and the provider do mutually benefit from the relationship across all phases. […] That means, I set prices within the engage phase so that the provider is still able to innovate but also able to benefit from the innovations generated within the operate phase” (Project Manager).

5. Discussion

Concerning the quantitative assessment, we observed that the respondents avoided assigning low Likert scale scores to the innovation factors. Even the factor rated least important (i.e., Company size; cf. Table 2) has been rated 3.4 on average. We assume that the experts might not want to rate any innovation factor as being unimportant, as doing so may imply that they would (inadequately) disregard this factor in future projects. A plausible explanation for this behavior can be found in what Edwards [37] defines as social desirability bias. According to this bias, as individuals tend to seek social desirability, they might provide answers they think others expect from them.

Considering the ratings, factors associated with the operate phase of Cullen et al.’s [10] outsourcing life cycle model seem to be the most important ones (cf. Table 2). The fact that the operate phase has the highest average rating might be due to the longer duration of this phase compared to the other phases and the intensity of collaboration within this phase (cf. section 2.2). This group of factors also includes High level of trust, which is the overall highest rated factor. Within the field of IT outsourcing, scholars have extensively studied the establishment and maintenance
of trust relationships [38]. Considering more general research [39], trust is seen as enabler of more open information exchange and cooperative behavior, which can be seen as crucial for generating innovations.

In general, larger organizations are more likely to “be able to afford the costs of innovation” [40, p. 472], adopt innovations (e.g., service-oriented architectures), and thus foster innovation. Contrarily, company size is considered of least importance concerning its effect on innovations in our sample (cf. Table 2). Our experts suggest that generation of innovation rather depends on the context and the people working on an IT outsourcing project (cf. section 4.2). Empirical evidence suggests that smaller companies are able to generate innovation in some contexts. This is in harmony with the perception that startups, as rather small organizations, are often based on employee’s innovativeness.

The regeneration phase (cf. section 4.4) seems to be widely neglected with regard to the generation of innovation in IT outsourcing. While none of the factors identified in literature deals with this phase, at least one factor was elicited during our semi-structured interviews. The relatively low ranking attributed to this phase is surprising, since innovation concerning processes, products, and management depends on technology, which “comes in the form of new knowledge, tools, and methods” [41, p. 32]. Organizations’ success thus highly depends on their processes facilitating learning and knowledge management. In this context, postmortem reviews are a suitable means of promoting these processes. The one factor that has been mentioned with regard to the regeneration phase (i.e., Project closure and evaluation of provider; cf. Table 2) only partially covers the sense of postmortem evaluations. While the evaluation of providers is an approach on behalf of the client, the varying options for designing postmortem reviews require involving at least one member from each major participating organization. A more intensive and collaborative evaluation of IT outsourcing projects might thus increase the generation of innovation in general, while strengthening the role of the regeneration phase in particular.

While synthesizing theoretical and empirical views concerning innovation in IT outsourcing projects, we foster the development of an integrative approach to steer the relationship between the client and the provider in outsourcing business and show the coherences between outsourcing and innovations. Our study is therefore a first step towards better understanding of one of the most important issues in outsourcing – the links between outsourcing and organizational innovativeness [22].

6. Conclusion

Through the identification and assessment of factors affecting the generation of innovation in IT outsourcing, we advance the understanding of this phenomenon based on theoretical and empirical insights. Assigning the factors to Cullen et al.’s [10] outsourcing life cycle model, we strengthen practitioners’ awareness of the variety of influences that need to be considered in order to foster innovation. The categorized overview of factors thus serves as a checklist for IT outsourcing projects. We recognize two major limitations to our study, which may provide directions for further research. First, as with every literature review, we restricted our search to a specific set of journals. Although we believe that the investigated 19 top IS, software engineering, and management journals, the decade the review covered, as well as the subsequent forward and backward search, provide a representative overview of the pertinent literature, further research could extend the review by including additional journals and covering a longer timeframe. Second, we only conducted ten expert interviews and all of the interviewees were employed in the financial or telecommunication industry. Based on this sample, it is not feasible to derive general conclusions pertaining to the importance of the individual factors. Thus, at this point, we only state propositions about the factors’ importance.

Further research might broaden this examination by interviewing more experts or conducting quantitative surveys. The factors we identified during the literature review, combined with those named during the interviews, provide an ideal starting point for in-depth investigation of single phases or individual factors. Building on our findings, future research should finally aim to develop a process model to guide (1) decisions concerning the selection of IT outsourcing partners, and (2) the collaboration along the entire IT outsourcing life cycle.

7. References


