

Client Co-Production in Knowledge-Intensive Business Services (KIBS): Case Study Analysis

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Abstract: Purpose: This paper aims to explore the topic of client co-production in knowledge-intensive business services (KIBS). The paper first sketches a theoretical background and reviews previous studies on factors affecting successful client co-production in such companies and then examines these factors via case study research among a small KIBS company and its five customers. Methodology: The paper is based on an in-depth analysis of literature devoted to client co-production in KIBS firms and on the results of case studies analysis. The authors explore theoretically and empirically the perception of factors behind a successful client co-production process of a KIBS company from the point of view of both customers and service provider. The examination resulted in the clarification of what a successful client-KIBS firm cooperation should look like and what kind of actions KIBS firms should undertake to provide it. Findings: As the analysis shows, to perceive client-KIBS firm cooperation as successful, customers on one hand expect immediate effects that would justify and compensate their time and money investments (e.g. new clients or brand recognition) and on the other hand, some of them anticipate positive changes in the long term, which tangible form is associated with the newly obtained knowledge and, more importantly, a developed and written strategy. Among the factors that influence the co-production process one can list teamwork, trust, communication and knowledge flows. Research limitations: Research results are limited to one KIBS company operating in Poland and its five customers. As such, they are not conclusive for the whole KIBS sector and for KIBS firms functioning in other countries. Research implications: The findings of both literature review and case study analysis indicate that there are several outcomes that are expected from the point of view of a KIBS customer when selecting the service of a KIBS company. Practical implications: The paper examines the relation between a client and a KIBS company and explores the factors influencing the successful outcome of this relation. The paper provides guidelines how this type of relation should be handled by managers or owners of KIBS firms. Originality/value: The paper contributes to the literature on KIBS firms, especially in the scarce area of their cooperation with customers. The paper also suggests further research possibilities in this area.

Keywords: service co-production, KIBS firms, case study, Poland

1. Introduction

Close cooperation with customers is one of the characteristics of KIBS companies most frequently mentioned in the literature (Bettencourt *et al.*, 2002; Lehrer *et al.*, 2012). High degree of service personalization forces involvement of clients in service production process, increasing interdependence of parties in a common goal of value generation (Vargo and Lusch, 2008). As den Hertog (2000) stated, the quality of final result of service depends largely on the nature of interaction and the level of communication between the two parties. During the co-production process, both companies exchange information while looking for solutions for encountered challenges, increasing their respective knowledge bases. According to Bettencourt *et al.* (2002), the nature of co-production is complex, unstructured and of emergent nature and it has not been clarified yet which factors determine the successful outcome of the cooperation between KIBS firms and their customers.

The aim of this paper is to fill this research gap by first clarifying what is understood by a successful cooperation between a KIBS company and its customer and second, by examining what factors influence this successful cooperation and service co-production.

The paper is structured as follows. The next section presents a brief review of the literature on service co-production and potential factors that affect it and concludes with a model proposition. The third section describes the research methodology and the study characteristics. Section four presents the main findings of the empirical investigation, while the last section discusses and summarizes the major results, and illustrates possible implications for research and management.

2. Service co-production by KIBS companies and their customers

Service co-production is the extent to which a customer is engaged in the production and delivery of a service (Ordanini and Pasini, 2008). One can expect that in case of knowledge-intensive business services, the co-production process will be somehow connected with the knowledge exchange and factors influencing it. For example Bettencourt *et al.* (2002) highlight the necessity of knowledgeable ability not only from the KIBS firm, but

also from the client. KIBS performance depends largely on communication of needs by customer, which sometimes requires additional codified technical knowledge or tacit knowledge of daily practices or social dynamics in client's own company. However, in many cases of using KIBS, client responsibilities generally tend to reach further than just expressing the problem.

According to Martinez-Fernandez and Miles (2006), there are two types of relationships that service companies may have with their customers: "jobbing" and "sparring". The first one refers to pre-ordering of a defined solution by the client firm without much interaction after initial expression of requirements, while the second one involves more of a debate over consumer's problem resulting in a knowledge transfer coming from the service company. The information exchange between KIBS firm and their clients is considered by the authors to be constant like in "sparring" relationship. In their opinion, knowledge acquired from the client is combined with KIBS company's own understanding based on professional experience. In the end, those are service-givers that formulate the solution, which could be familiar with the "jobbing" relationship. Some clients tend to prefer "sparring" approach which gives them more control about the project, but some also may like the low-effort service-taker position in the relationship. Researchers also underline, that due to the nature of such relationship and knowledge exchange necessities it creates, clients are more inquired to trust KIBS provider with strategic information.

This complex co-production relation between KIBS firms and their clients is influenced by many factors. Foremost important factor of successful co-production is quality of communication, which consists of several dimensions, such as "communication openness", defined as willingness for clear and honest information sharing by the customer (Bettencourt *et al.*, 2002). Introduction of complex knowledge-intensive solutions to a company often requires intimate knowledge of client's business processes, strategic goals or market conditions. Some business owners may be reluctant to share delicate data with KIBS company in fear of losing competitive advantage if the information spreads. It is therefore important for KIBS firms to encourage communication openness through pointing out the potential benefits from cooperation and by discussing the confidentiality issues openly with customer. Another dimensions of fruitful communication can be clearness in expressing expectations or mutual understanding or an ability to participate in a respectful dialogue. Another factor of successful co-production connected with communication is the quality of teamwork. Individuals of both firms team up temporarily creating an organized unit to which some managerial principles and methods may apply. An especially important aspect is the establishment of leadership in such a team. This will usually become a responsibility of a KIBS company, and a leader could be selected from one of their front-line employees or knowledge angels, who tend to accumulate major part of firm's knowledge base. No matter how selected, as Bettencourt *et al.* (2002) suggest, a leader of co-producing team should be able to perform certain tasks like: motivating partners, envisioning the project in a compelling way, paying frequent attention to clients and keeping them informed about progress and, importantly, dealing with team conflicts in a careful manner (remembering supplier-customer relationship ethics). Co-production oriented team building could also be a beneficial tool in optimizing co-production. Proper selection of experts that also match authority levels with client's representatives can enforce teamwork Bettencourt *et al.* (2002) and smooth teamwork is one of the aspects that leads to better customer motivation and capability for innovation (Kuusisto, 2008).

Proper employee-customer relationship management (e.g. team building efforts) may also lead to improvements in another dimension that is crucial for co-production outcome, that is quality of knowledge flows. KIBS providers generate value through absorption, recombination and transmission of knowledge. They operate on business services market, but their customers may come from any market. That means they may or may not have adequate knowledge to come up with relevant solution for problem specified by client. If they do, because for example they have already worked with a company with similar profile, they can offer a modelled solution transferring knowledge one-way to the customer. However, in many cases, clients will also have to educate KIBS provider with industry or enterprise-specific knowledge, making the flow reciprocal.

Multitude of types of knowledge flows makes assessing and optimizing their quality a task that may require individual efforts. For instance, introducing or changing tangible knowledge flows such as reports, manuals, drawings or audio/video recordings is a matter of organizational or technological decision. Intangible, tacit, human-embodied flows are harder to capture, but at least as important as the other according to den Hertog (2000). To amend them, KIBS company may first correctly detect them and then transform the intangible into tangible (by e.g. recording a meeting or writing down a contract). Other practice could be co-production oriented



team building and constant recomposing, which helps with transforming the routines and practices into collective knowledge easier to codify (Leiponen, 2006).

The last factor, bonding the three mentioned ones (communication, teamwork and knowledge flows) is trust. The significance of this factor is highlighted in the literature (Scarso and Bolisani, 2011, 2012). In the perspective of KIBS, trust is necessary for persuading a client to share his knowledge, especially tacit one. It may therefore influence both communication, teamwork and knowledge flow characteristics.

All the above mentioned factors were compiled into a model presented in Figure 1. Trust serves here as a foundation for three other factors which contribute to successful co-production process.

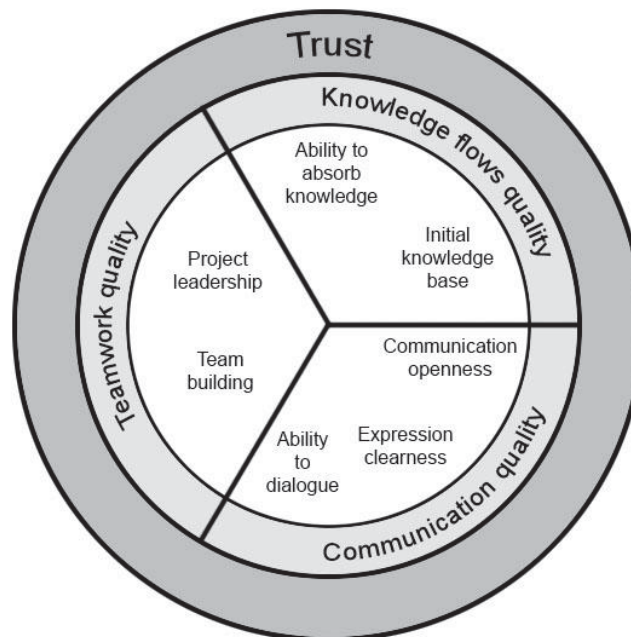


Figure 1: Factors affecting successful service co-production between a KIBS firm and a customer

The model attempts to encompass different factors of successful cooperation between KIBS companies and their customers and aims to organize these factors into larger categories while displaying trust as a common ground or foundation lying beneath them. Inside the circle there are exemplary factors that were mentioned in the literature. They were grouped into three categories of factors – teamwork, knowledge flows and communication. All these three factors may influence each other at the same, business practice-oriented level – for example, better communication practices may enable overcoming barriers in knowledge flows. In the outside part of the circle there is trust, representing the most abstract and intangible of all factors. Its influence may be expected to be less acknowledged and less perceptible. For example, a customer might feel a negative impression while communicating with a given KIBS provider, which could be labelled as a communication quality problem, but in fact it may be caused by a general, yet unspoken lack of trust on either side.

3. Methodology

To examine the above model of factors affecting successful service co-production between a KIBS firm and a customer, the authors applied case study methodology. Case study methodology allows for making observations and gathering information on new phenomena (Yin, 2009) and service co-production among KIBS firms can be considered as such (Lehrer *et al.*, 2012; Scarso and Bolisani, 2012). The case study approach is also suitable given the descriptive and exploratory nature of the research and the potential complexity of the investigated issue (Leedy and Ormrod, 2005).

To test the proposed model, the following questions were asked:

Q1: What services have you received from the KIBS firm?

Q2: How would you describe a successful cooperation with a business service company like the KIBS firm?

Q3: How would you describe the factors that are important to you when cooperating with business service companies like the KIBS firm?

The study used semi-structured interviews with key informants who were expected to be knowledgeable about knowledge issues in the company, i.e. either the owner or the general manager of the enterprise. The cases have been elaborated by using information provided by key informants in the companies. The interviews lasted 30 minutes on average and the interview data was recorded and subsequently transcribed with care (Meyer, 2001). In addition, for the purposes of triangulation, the transcribed interviews were analysed along with the observational field notes and other information available, e.g. history of cooperation with the KIBS firm (Suter, 2012). A total of six semi-standardized interviews were conducted, five of which were carried out with KIBS firm's clients and the last one was granted to the owner of the KIBS firm, as a counterview. While the number of respondents was limited due to time and availability constraints, some previous qualitative researches on KIBS companies were able to deliver sufficient results (e.g. Nunes and Ananasingh (2005); Bishop et al. (2008); Bolisani, Scarso and Zieba (2016)). The composition of interviewees was chosen in accordance with their availability and characteristics, such as area of business, size of the company and the types of services received. Two of five client companies can also be qualified as KIBS, other two as knowledge-intensive services (KIS) which operate on B2C markets and one is a manufacturing company. An overview of the characteristics of the examined companies is presented in Table 1.

Table 1: Characteristics of the case companies

Company	Size and type of company	Area of business
A	Small KIS (B2C)	Financial advice to private investors
B	Small manufacturer	Designer clothes and related products for children
C	Medium KIBS	Management software solution supplied to certain public institutions
D	Micro KIS (B2C)	Private tutoring for matriculation examination for high school students
E	Small KIBS	Internet search engine optimization for businesses
F	KIBS firm offering its services to companies A-E	Business consulting

4. Presentation of findings

In this section the findings of the study will be presented. For the clarification of companies, the notation from Table 1 will be applied. The first question concerned the range of services received from the KIBS firm. As one can see in Table 2, there is a variety of serviced that the examined companies benefited from the KIBS firm, ranging from using knowledge materials to solid consulting experience.

Table 2: Range of received services

Company	Range of received services
A	User of knowledge materials Frequent seminar attendance Regular consulting experience Video production services taker
B	User of knowledge materials Frequent seminar attendance Regular consulting experience
C	Strong consulting experience Purchaser of advanced, customer-tailored implementations
D	Partner in video course production & publishing programme for aspiring educators
E	User of knowledge materials Frequent seminar attendance Wide usage of ready solutions Limited consulting experience

The second question concerned a successful cooperation with a business service company like the KIBS firm.

When asked about the successful cooperation, the customers have provided a more or less homogenous description of the phenomena. All of interviewees began their statements by highlighting their expectation of a measurable and preferably tangible effect resulting from the cooperation with a service company. Interviewees also underline that the promised result should be consistent with earlier agreements in terms of quality and provided or delivered accordingly to the previously agreed schedule, including potential amendments. These conditions were stressed by customers C and E (KIBS companies), but the aspect seemed to be the most important to customer D, working extensively with the company on the development of his video course: *"In my opinion, successful cooperation lies in the fact that the product is made on time, with agreed quality and delivered to the customer within the predefined period, and any amendments (...) are completed on time and as expected"*.

Reliability of the received solution was also mentioned by the interviewees as a part of successful cooperation in the terms of post and in-between service technical support. Company A mentions the explanatory role of customer service: *"There is always "homework", but often it is a lot to handle. But you can always ask, make a call, so there is no problem. Customer's service is always helpful"*, while Company D notices technical staff's role in upgrading his product after it has finished: *"Ongoing customer service is also important to me, as well as contact with technical employees that can help monitor and improve my product with client in mind. My client favours quality."* Therefore, having some kind of guarantee about receiving assistance in case of problems is a tangible effect that may be a part of customer's perception of a successful cooperation as well.

The third question concerned the factors that are important to companies when cooperating with business service companies like the KIBS firm (Company F). High importance of communication when cooperating with a service company was widely confirmed by all interviewees and has manifested itself not only in answers to this question, but, in a way, as a recurring background motif of entire interviews. Clients have mentioned several dimensions that contribute to their perception of role that said factor plays in co-production process. First essential aspect commonly referred to by respondents is the ability of the service provider to engage in an honest and open dialogue with the customer. Company A draws a comprehensive picture of what is important in that area: *"Especially listening to the client, an honest interest in [his] case (...) we talk, analyse the pros and cons – and if the idea is bad, X [The owner of KIBS firm] will explain why and propose something different. If the idea is good, he would tell me, that it is great and that he would not have figured that out himself (...) he does not talk in a "stiff" way, like a shop clerk would do, instead, we discuss things like an entrepreneur with another entrepreneur"*. The essence of feeling expressed here might resound of a rather elusive mix of subjective impressions that seem to be holistically conjugated to a kind of friendly, yet professional relationship between the service provider – an authoritative expert figure and the customer – a learning partner. The keyword here might be *"listening"*, which in the context of all interviews represents an ability and willingness to embrace client's perspective in order to understand him and thus be able to offer him the best solution for his needs. The mentioned *"honest interest"* might also be the right label to generalize this idea in terms of actions expected from the representative of a service company. Some more insights were provided by customer B: *"With X's [The owner of KIBS firm] I appreciate his integrity, he does not dim, cook things up or make fools of people, instead, solutions presented on his seminars are really working. I would say it is a kind of customer relationship building skill. If we are to work together (...) we have to be able to talk."* Again, honesty and *"ability to talk"* were mentioned, similarly to the previous statement of Company A.

Second aspect which was mentioned by the interviewees resolves around service provider's ability to formulate questions. This proactive approach is essential, especially when it comes to learning about client's needs. Knowing what the customer desires as an outcome is vital in creating a service: *"Like X [The owner of KIBS firm] teaches, one should always start with the needs of customer and only then create a product suited for him. To discover those needs, one must communicate – ask about client's expectations, what he cares of, and what should be the final outcome. Just like when we sew a dress, we have to measure everything, so it fits."* (Company B). From the other side, clients also value having their own questions answered properly, reliably and in a timely manner. Although the concern was addressed by all respondents, it was highlighted mostly by interviewees which were using additional services besides consulting – Companies D and E.

The owner of Company F came to similar conclusions regarding communication as the customer interviewees did. He described communication as a *"mathematical necessity"* for the co-production to happen. Client has to

be constantly notified about project progress, current goals and most importantly, tasks that are required from him. Consequences of a lack of communication can be, in the view of company's owner, as severe as losing the client's interest in cooperation: *"(...) even if the client receives a task to do without a strict deadline, in the sense that it is up to him when he will do it, and the service company just waits for him to do it, the interesting situation is that if the firm will not constantly ask him about the progress, it can be perceived as a lack of interest, even though the rules were stated clearly. Unfortunately, clients often forget that the ball is in their court, despite our efforts in recording every meeting for them."* The owner of the KIBS firm also notes, that attention has greater importance in the case of new clients, as more experienced ones usually have a better understanding of their roles, and do not have to be reminded to do their part. They also do not perceive a lack of communication as a lack of interest. Nevertheless, as all six respondents stated, communication remains a vital factor in co-production process.

The first and the most visible characteristic of client's perceptions on team work was the distinction between how it is relevant in smaller versus larger companies. Owners of smaller service companies, which are Companies A, D and E have all noticed or suggested the fact that proper team-related practice can be associated more with larger companies instead of smaller ones. While all respondents have provided some suitable remarks about the topic, it can be noticed that the concept of teaming-up with a service company was rather abstract to them. Company B which represents a slightly larger, but still a small enterprise from the manufacturing sector has reminisced that cooperating with KIBS firm and its owner in fact gave an impression of working as one company: *"[you have to] find a consultant that is good to work with. Like I said, we use the services of F company, because we know that he will make our marketing right. During the consulting session, we operate as one company, sitting by the table with laptops and jointly doing the work."* A completely different perspective was presented by a much larger Company C. Not only would they acknowledge the fact that both companies create a team, but also describe how external consultants meld into their corporate environment: *"During larger projects, service provider representatives are with us four, five days a week for several months. They attend meetings, drink coffee in the kitchen, make conversations, it can be said that whether they like it or not, they meld into our corporate culture."*

As far as knowledge flows are concerned, in general, Companies B, C, D and E were aware of reciprocal knowledge exchange requirement and have agreed that sharing information with the service provider is a crucial part of service development. The two most commonly referred aspects in that matter were: communication of needs by the customer and sharing the (often confidential) information about internal practices of client's company, market information or any knowledge that is necessary for the completion of service. Especially the latter may become cumbersome for some companies that value security, but surprisingly, even Company C took a standpoint of understanding that sharing information may be inevitable if the service is to be performed optimally: *"We are aware of the fact that some information must be shared in order to push the project further. We also understand, perhaps like not many others, that some companies might be afraid of sharing such knowledge. Personally, I believe that it should be treated as the necessary evil. I think it is a matter of right procedures to improve the process and to some extent eliminate the risk. To some extent, but we cannot control everything."* The information that a client might have to share is various and depends on the type of service and range of works. Company E once again brings about an example from their own experience in SEO services: *"The second issue is gathering the information from the client, not only those directly needed for the implementation, like server passwords, but also some general knowledge about his business, his clients and the market he is operating on, so that the service can be adjusted and its quality can be increased."* Somewhat different or boarder point of view is presented by Company D which believes that it is the complementarity of knowledge from both sides in co-production process that makes the service the most valuable: *"[Company F] had knowledge about business, delivering and coordinating services, and my knowledge based on contacts and interests of people at young age. Therefore, it was important for us that we brought all this knowledge to a common base and exchange what is essential from the point of view of my business and the service company."*

Another interesting aspect resounds from the fact that some customers believe that service provider is also partially responsible for client's ability to absorb knowledge. It is expected of him that the knowledge that he delivers with the service will be passed over in an accessible, understandable way, especially in the technical area that the client has no experience with: *"If someone is not familiar with IT, he might blink at X [The owner of KIBS firm] showing how to do something in the website. It is then important, that he is able to explain it in non-technical language. Usually, he is."* (Company B). As it has been said earlier when discussing the role of



communication, asking the thought-provoking questions may be perceived as a positive technique that service provider may use to increase client's likelihood to increase his knowledge pool.

5. Discussion and conclusions

This paper examined the concept of service co-production by KIBS firms and their clients and analysed the potential factors that could affect the successful cooperation between these two.

To realize the aim of the study, it was necessary first to discover and verbalize the perception of a successful cooperation of both the service provider and the clients. An analysis of research results has revealed the phenomena to be of two-faced nature. On one hand, customers desire immediate effects that would justify and compensate their time and money investments. Those tangible effects were described as positive changes in certain business measures such as sales, new clients or brand recognition, but also certain immediate feelings of goal accomplishment and hard work done. On the other hand, some clients may desire positive changes in the long term, whose tangible form is associated with newly obtained knowledge and more importantly freshly developed and written strategy. In the common ground between long-termism and short-termism are practical perceptions of a successful cooperation – the outcome is expected to be created accordingly to the plan, with agreed quality and within the scheduled period.

As far as the factors of successful cooperation are concerned, the perception of communication was in line with assumptions drawn from the previous works on the topic of co-production in KIBS (Bettencourt *et al.*, 2002; Kuusisto, 2008). This factor is perceived as crucial in the process of establishing a mutual understanding of the problem that the client brings to the KIBS firm. Later, during the actual development of solution, good communication practice relies on openness of service provider towards both the ideas and doubts of the customer and an ability to evaluate them in an honest, kind dialogue. Another important aspect is the proactiveness in the contact coming from service company towards the client. Even if the task division is mutually accepted and it is customer's turn to contribute to the process, active communication and interest in the case may enrich the co-production effects and prevent possible slowdowns or even project failure due to service receiver's negligence. Finally, towards the end of cooperation, KIBS company should remain open for the questions, possible amendment requests and post-service assistance.

The general viewpoint on teamwork was slightly different than one proposed in the literature (Bettencourt *et al.*, 2002; Skjølvsvik *et al.*, 2007) in the sense that smaller clients were unable to notice any visible team building practices as they were working with the company one-to-one. However, they were able to notice small-scale effects of co-production, such as feeling of merging into one enterprise together with service provider at time of working on a solution – both small consulting users and a medium enterprise that had the service conducted within their headquarters. Other important topic was the question about the balance of power in team leadership. While smaller clients may enjoy the lead of service provider's front employee (especially, when backed up with structured plan of cooperation), larger firms might want to preserve the control over the project and introduce own management practices. In that case, obedience of chain of command might be necessary for KIBS provider to optimize the team work factor and leave a good impression on the customer.

The role of knowledge flows presented by the respondents was similar to the previous studies (den Hertog, 2000; Leiponen, 2006), although the topic seemed to be considered in a more practical rather than theoretical way. Customers did notice reciprocal flow of information and were able to point out some relevant remarks on the roles of each side. As expected, knowledgeability of service provider was viewed as a must for the cooperation to be successful. Not only does the front-end employee have to be competent, but also he/she must be able to pass along the knowledge in a way that is accessible to the client. In other words, customers believe that their ability to accept new knowledge may partially depend on the service provider himself. On the other hand, clients also believe that the KIBS company representative should have the ability to understand the important information that the other side passes to him. Also, tangible forms of knowledge were appreciated by the respondents, especially a recorded or written strategy. Capturing the interaction to create a knowledge asset can be qualified as a knowledge management practice. Interestingly, not only the KIBS provider may turn to such procedure during an interaction – respondent representing the medium-sized company also admitted to recording the meetings for future uses.

Attitudes towards the role of trust turned out to be of smaller significance than it has been presented in the other studies (Scarso and Bolisani, 2011, 2012). This factor is perceived as crucial at the early stages of cooperation and before – when choosing the service provider. For KIBS clients an important practice is to ask their environment for recommendations. Once endorsed, business service company has it easier to maintain the trust level. After signing a contract and possibly a confidentiality clause, trust becomes (according to the respondents) a factor of secondary significance, at least until it is somehow violated. Lastly, while the research has shown references to trust in the analysis of statements about both teamwork and knowledge flows, the factor seems unrelated to the idea of communication, at least not directly.

To conclude, the study provides managers and owners with valid suggestions about the importance of particular factors in the service co-production process. It presents co-production from two perspectives – of a KIBS company and of its customers and therefore, it shows the verified view and can serve as a guideline on which aspects managers should focus to have a successful relation with customers. From the theoretical point of view, the findings contribute to the better understanding of service co-production, still a much underexplored topic.

6. Limitations and further research avenues

The presented study has several limitations. The first one results from the fact that data was collected in a limited number of companies and the second, that only one person from each company was interviewed, which may reduce the objectivity of the research results. Additional limitation results from the examination of KIBS companies as an object of the study – this fact narrows the applicability of results to other service companies.

There are further research possibilities in the examined area. The first potential topic to explore would be to check which factor plays the most crucial role in the co-production process. Secondly, the examination of a more diversified sample (e.g. larger entities or from other sectors) could give additional insights to the perception of success factors in service co-production. Finally, it would be interesting to examine how the perception of importance of particular factors influence the relations with customers and the level of their satisfaction.

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