

Independent distributors in servitization: An assessment of key internal and ecosystem-related problems

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The Role of Independent Distributors in Servitization: An Assessment of Key Internal and Ecosystem-related Problems

Abstract

Despite a large amount of research into the servitization challenges faced by manufacturing companies, the internal and ecosystem-related problems experienced by independent distributors (IDs)¹ in servitization remain unclear. The purpose of our study is therefore to uncover problems faced by servitizing IDs during transition towards provision of advanced services. We address this gap by means of a longitudinal case study of a packaging equipment ID that has been struggling to servitize over the past eight years. Using an abductive research approach, we identify three overarching groups of servitization problems: (1) conflicting interests of key stakeholders, (2) misalignment between distribution of managerial attention and servitization strategy, and (3) ineffective knowledge management within the ecosystem. To diagnose these problems, we propose a servitization-readiness decision tree that can be used by IDs to pinpoint hindering factors before embarking on a servitization journey. In so doing, we provide a starting point for identifying and describing criteria for assessing IDs' readiness to servitize.

Keywords: Servitization, Independent distributor, Servitization problems, Servitization ecosystem, Manufacturing industry

¹ Independent Distributor (ID)

The Role of Independent Distributors in Servitization: An Assessment of Key Internal and Ecosystem-related Problems

1. Introduction

In servitization, equipment manufacturers rely on direct and indirect distribution channels to extend their market reach (Hakanen, Helander & Valkokari, 2017; Olsson, Gadde & Hulthén, 2013). As the needs of business customers are becoming increasingly more complex, greater pressure is being put on distribution actors to integrate products with advanced services into customized solutions (Gebauer & Fleisch, 2007; Hakanen et al., 2017; Parida, Rönnerberg Sjödin, Wincent & Kohtamäki, 2014). Manufacturers can respond to these challenges by designing advanced service solutions and delivering those themselves, through their own dealers. Alternatively, they can rely on independent distributors (IDs), which is the focus of this paper. In theory, an ID could be a strong driver of the transition to servitization and become a ‘proactive channel partner’ (Kowalkowski & Ulaga, 2017, p. 231). In particular, its role as an intermediary between the customer and the equipment manufacturer places the ID in an ideal position to initiate and lead servitization. In an ecosystem, where the equipment manufacturer operates through one or more IDs, the manufacturer is contingent upon ID’s ability to deliver and install its equipment. Additionally, IDs often train customers’ operators, schedule repairs, provide spare parts throughout the lifecycle of equipment as well as gather and share customer insights. Customer knowledge and ‘closeness’ may therefore be the ID’s key asset (Frazier et al., 2009; Li, Liu & Liu, 2011) that is a prerequisite to its ability to initiate servitization.

However, the literature does not fully take into account such scenarios and continues to focus largely on the capabilities and challenges of equipment manufacturers (Oliva & Kallenberg,

2003; Ulaga & Loveland, 2014; Ulaga & Reinartz, 2011). Studies have regarded IDs as service-centric ‘by nature,’ responsible not only for sales, but also for marketing and for building and nurturing customer relationships (Story et al., 2017). However, IDs, like equipment manufacturers, can face a number of challenges during the transition from a product-centric to a service-centric logic (Benedettini, Neely & Swink, 2015; Ulaga & Loveland, 2014; Valtakoski, 2017). As Kowalkowski and Ulaga (2017) state, “Simply adding ancillary service offerings to the core product portfolio does not change [. . .] the product centric mind-set with no genuine interest in the customer after the sale” (pp. 44–45). The transformation to servitization thus calls for the development of a service-oriented culture, among other things. Otherwise it is likely to fail (Shah et al., 2006). Service-centricity demands that the approach to service provision be changed from reactive – waiting for sales leads – to ‘proactive service management,’ which is aimed at educating customers as well as predicting and preventing problems (Kowalkowski & Ulaga, 2017, p. 47). Furthermore, the service offering has to be co-created with customers and equipment manufacturers. To deliver value-added services, IDs need to get a buy-in, as well as facilitate an increased interaction and collaboration with equipment suppliers (Hakanen et al., 2017; Olsson et al., 2013; Rönnerberg Sjödin, Parida & Wincent, 2016). However, detailed insights into the role of IDs in servitization are scant (Gadde, 2014; Hakanen et al., 2017; Story et al., 2017), which limits our understanding of the main challenges faced by servitizing IDs. Therefore, we attempt to contribute to the servitization literature by exploring the following research question:

RQ: What are the problems faced by servitizing independent distributors during the transition towards provision of advanced services?

To answer this question, we draw upon an in-depth case study of an ID active in selling packaging equipment and providing services for the food and beverage sector in the United Kingdom (UK), which has been struggling to successfully servitize for the past eight years. This ID is a particularly interesting case as they initiated the servitization transition themselves and encountered an array of problems in doing so.

Our paper makes two contributions. First, by empirically examining servitization problems from the perspective of the ID, we find that IDs, like manufacturers, can initiate servitization. During this transition they encounter a number of internal and ecosystem-related problems that differ to those faced by equipment manufacturers and manufacturer-owned dealers. We identify these by using three theoretical perspectives: stakeholder theory (Freeman, 1984; Freeman et al., 2010; Freeman, Harrison & Wicks, 2010), the attention-based view (Ocasio, 1997, 2011), and organizational learning theory (Argyris, 1976) as our sensitizing concepts. This leads us to a categorization of servitization problems into (1) conflicting interests of key stakeholders, (2) misalignment between distribution of managerial attention and servitization strategy, and (3) ineffective knowledge management within the ecosystem. Second, building on these groups of servitization problems, we propose a servitization-readiness decision tree with seven criteria that can be used by IDs to evaluate and improve their servitization efforts.

The paper proceeds as follows. The theoretical section focuses on the role of IDs in the distribution ecosystem and offers an overview of our three theoretical perspectives. The methods section explicates our approach, research design, and data-analysis procedures. We then report our empirical findings and further elucidate the proposed servitization criteria

that form our decision tree. Finally, in the concluding sections, we describe the theoretical contributions, managerial implications, and limitations of our study.

2. Theoretical background

2.1. The role of independent distributors in the servitization literature

Historically, equipment manufacturers were regarded as ‘channel captains’ responsible for distribution arrangements (Revzan, 1961). Under this regime, independent distributors were perceived as a ‘necessary evil’ to support manufacturers’ marketing strategies (Narus & Anderson, 1987; Quinn & Murray, 2005). This notion influenced the development of the servitization literature in so far as servitization initiatives were examined predominantly from the perspective of manufacturers and/or manufacturer-owned distributors (Hakanen et al., 2017; Kindström, Kowalkowski & Sandberg, 2013; Story et al., 2017; Tuli, Kohli & Bharadwaj, 2007). Almost six decades later, independent distributors still receive limited academic attention (Gadde, 2014; Olsson et al., 2013). When referring to IDs, researchers use terms such as ‘industrial distributor,’ ‘middleman,’ ‘intermediary,’ and ‘wholesaler’ interchangeably without clearly defining potential differences and without clarifying their role within the wider servitization ecosystem (Hakanen et al., 2017; Herbig & O’Hara, 1994; Olsson et al., 2013; Story et al., 2017). In this paper, we consider IDs to be industrial “middlemen who buy goods from producers and resell them, along with a variety of associated services, to organizational [business] customers” (Herbig & O’Hara, 1994, p. 199).

The importance of IDs has been constantly questioned in the global supply chain. So far, IDs have been able to justify their role mainly due to their flexibility to adjust to changing

environmental conditions (Gadde, 2014; Olsson et al., 2013). IDs' key competencies are geared toward a local economy, often a single market sector, which they have an excellent knowledge of and in which they have an established customer base. Business customers perceive them as less biased compared to manufacturer-owned dealers because IDs typically carry a broad range of product lines from a number of different equipment manufacturers. This enables them to shift from one product range to another, or combine machines and/or equipment from more than one manufacturer to fully meet their customers' needs. Although, IDs significantly differ from manufacturers and manufacturer-owned dealers (See Table 1), there are significant differences among IDs themselves (Gadde, 2014). While some IDs focus only on marketing and sales of physical goods on behalf of manufacturers, others are developing complex customized solutions. Under a product-dominant logic, the relationship between ecosystem actors is transactional and the goal of IDs is to sell as many products to as many customers as possible (Olsson et al., 2013). In contrast, service-centric IDs prioritize customer retention over acquisition and devote significant amount of time and resources to the development of customized value-added solutions. They invest in relationship-building activities with both equipment manufacturers and business customers (Parida et al., 2014). While service-centric IDs are thriving in the current business environment, their product-centric counterparts face difficulties to remain competitive. An increased pressure is put on distribution channels to integrate products with advanced services, if they want to maintain their role in the supply chain (Gebauer & Fleisch, 2007; Hakanen et al., 2017). This is because the role of IDs is not only to provide additional value for manufacturers (i.e. marketing, international sales and distribution) but increasingly they need to be able to provide more value for their customers. It is evident that ID's role as a mere re-seller of manufacturer's product is shifting to provision of more customer-centric solutions which requires IDs to develop engineering excellence and continuous improvement of the products

and services it offers. Despite a changing distribution landscape, the focus of the research literature on servitization, in relation to IDs, has been centered on equipment manufacturers' capabilities (Chang & Gotcher, 2010; Li, Cui & Liu, 2017; Story et al., 2017) and challenges (Deligonul, Kim, Roath, & Cavusgil, 2006; Nes, Solberg, & Silkoset, 2007) when selling through IDs. For instance, Li et al. (2017) point to a manufacturer's level of absorptive capacity as an important factor in acquiring market knowledge from an ID. On the other hand, Nes et al. (2007) argue that national cultural distance can negatively impact trust and communication between an exporter and a foreign distributor. Furthermore, the authors suggest that the exporter's commitment to the foreign distributor is contingent upon its financial performance.

<Please insert Table 1 here>

The concentration on equipment manufacturers and manufacturer owned dealers during servitization has drawn academic attention away from indirect distribution channels, which have a similar potential to servitize and thus can “become coordinators of the total supply chain” (Dawson, 2007, p. 318). However, there are several significant differences in the servitization challenges being faced by equipment manufacturers, manufacturer-owned dealers and IDs. For instance, IDs are positioned as intermediaries that operate in a complex ecosystem working with multiple equipment supplier and serving diverse business customers. They build upon their existing resources and combine them with capabilities of their ecosystem partners in order to solve customer problems (Gadde, 2014). Each ID's supplier has different business strategies, management styles and may be from a different cultural background.

2.2. Key servitization challenges and the role of the independent distributor therein

2.2.1. Role of managerial attention during ID's servitization

Transition from selling products to provision of services is significantly influenced by how managerial attention is distributed within the servitizing firm (Gebauer, 2009). Ocasio (1997, p. 202) postulates that “The ability of the firm to adapt successfully to a changing environment is conditional on whether the firm’s procedural and communication channels focus the attention of organizational decision-makers on an appropriate set of issues and answers”. Therefore, with an aim to better understand the challenges that IDs face during the servitization, we draw upon the attention-based view. In essence, attention-based view holds that managerial attention is just as limited as the firm’s physical resources (Ocasio, 1997; 2011). Furthermore, “focused attention both facilitates perception and action towards those issues and activities being attended to, and inhibits perception and action towards those that are not” (Brattström et al., 2018; Ocasio, 1997, p. 190). Shift in managerial attention toward servitization is often triggered by eroding product margins and increasing customer expectations (Gebauer, 2009), which to some extent holds true for all manufacturers, manufacturer-owned dealers and IDs. However, due to their differences, managers in these firms are likely to experience different forces, barriers and obstacles to redirecting their attention towards servitization.

The activities toward which the managers’ attention is distributed largely depends on the structure of the firm (Barnett, 2008). Therefore, the product-centric culture, norms and values that are strongly embedded within organizational structures impact the flow of managers’ attention during the servitization initiatives. Arguably, it is a role of top and middle management to establish and support a service culture and, through incremental

steps, initiate transition (Kowalkowski & Ulaga, 2017; Oliva & Kallenberg, 2003). In essence, managers' attention in servitizing IDs needs to be channeled in a way that allows them to "successfully attend to the relevant issues and answers" pertinent to servitization (Ocasio, 1997, p. 204) and reflect them in firms' long-term goals, strategies, activities, and behaviors. Therefore, in this paper, we use attention-based perspective to examine the residual impact of network's product-dominant logic on the distribution of ID's management's attention during the transition to provision of advanced services. By building upon this literature, we aim to understand not only the impact of attention distribution on IDs' ability to successfully servitize, but also the forces within the wider servitization ecosystem that are likely to shape its distribution.

2.2.2. Impact of stakeholders on ID's servitization success

Simply adding services to the existing product offering will not improve organizational performance (Kastalli & Van Looy, 2013; Parida et al., 2014). The transition to provision of advanced services requires changes in the relationship between stakeholders in the servitization ecosystem, from transactional to more intense collaboration (Baines & Lightfoot, 2013; Kowalkowski, Kindström & Witell, 2011) which could allow deeper penetration, improved quality, decreased costs and enhanced learning (Gençtürk & Aulakh, 2007). Therefore, we complement the attention-based view with stakeholder theory (Freeman, 1984; Freeman et al., 2010; Freeman, Harrison & Wicks, 2007; Freeman, Wicks & Parmar, 2004) to understand how ID's servitization initiatives affect, and are affected by, its relationship with key stakeholders (Freeman, 1984; Stieb, 2008). The basic premise of stakeholder theory holds that value within the ecosystem is created and distributed through collaboration of multiple stakeholders within the network (Stieb, 2008; Sirgy, 2002). Phillips, Freeman, and Wicks (2003, p. 491) argue that "'stakeholder' is not synonymous

with 'citizen' or 'moral agent' as some wish to interpret it [but] rather, a particular and much closer relationship between an organization and a constituency group is required for stakeholder status.” Therefore, for an ID to succeed in its servitization efforts, it must focus on satisfying the interests of those stakeholders who are closest to its operations (Freeman et al., 2007; Mitchell, Agle & Wood, 1997). Freeman et al. (2007, p. 54) claim that it is the role of the central actor to “keep all primary stakeholder interests going in the same direction.” Therefore, when IDs focus on commonalities among stakeholders’ interests rather than addressing their differences the performance of such IDs is often superior to the former (Freeman et al., 2007; Freeman, Wicks & Parmar, 2004).

As stated by Visnijic, Wiengarten and Neely (2016, p. 112) “delivery of complex solutions by a single company would require the company to take on high levels of uncertainty and perform well in a number of different, and often unrelated, product markets.” Arguably, no single organization has all the necessary expertise to find solutions to customers’ complex needs, an establishment of collaborative business networks is being increasingly advocated (Filieri, McNally, O’Dwyer & O’Malley, 2014; Lush, Vargo & Tanniru, 2010). Successful innovation in the distribution channel is dependent upon value-adding partnerships among the key parties (Anderson, Day and Rangan, 1997). It is precisely the joint efforts of the stakeholders within the network that lead to mutual value creation (Grönroos & Helle, 2010; Prahalad & Ramaswamy, 2003). In addition to building strong cross-border relationships, resource commitment together with the ability to integrate, learn, and co-create value will contribute to successful collaboration among stakeholders (Håkansson & Waluszewski, 2013; Kohtamäki, Partanen & Möller, 2013; Möller & Rajala, 2007; Ngugi, Johnsen & Erdélyi, 2010; Opresnik & Taisch, 2015).

For IDs to successfully servitize it needs to create a sufficient value for customers by offering solutions that are fully tailored to their needs and goals (Valtakoski, 2017). In contrast to manufacturers and manufacturer-owned dealers, IDs need to enable the collaboration among the stakeholders to focus on responding to much broader and often more diverse set of stakeholder interests. Furthermore, IDs are not only responsible for addressing customers' needs, but also the needs of their multiple suppliers. This gives the ID an unique position of a central actor (Müller & Seitz, 2012) that plays an essential role in the value co-creation process by catering to and balancing the interests of its core stakeholders to facilitate servitization. We use stakeholder theory to examine how ID can establish this balance within the ecosystem.

2.2.3. ID's role in facilitating learning in the servitization ecosystem

The importance of managing knowledge within the stakeholder networks motivated us to adopt the organizational learning perspective (Argyris, 1976) and examine not only the role that ID plays in network-wide learning, but also the impact it has on ID's servitization success. In brief, the development of value-added solutions requires effective management and sharing of diverse knowledge among all stakeholders in the service delivery network (Parida et al., 2014), especially when a cross-border knowledge sharing between international partners is required (Poon, Evangelista & Albaum, 2005). Given ID's central position in the ecosystem, they must be able to facilitate the effective flows of knowledge in ways that benefit all stakeholders to allow advanced service solutions to emerge. For instance, ID's suppliers are reliant on its provision of customer insights (i.e., changing needs, usage feedback, trends), while ID's customers depend on its ability to share equipment manufacturers' technical know-how with them (i.e., performance-related data, line

extensions, repurposing of machines) (Rönnerberg Sjödin, Parida & Wincent, 2016). Therefore, the knowledge transmitted within the servitization ecosystem depends on ID's ability to not only create extensive knowledge stocks but to successfully establish and manage diverse knowledge flows within the ecosystem (Fahey & Prusak, 1998).

As argued by Harrison and Wicks (2013, p.116), the “multiple sources of information about a particular stakeholder, where available, are better than relying on one source of information.” However, the multiplicity of stakeholders and the complexity of the ecosystem in which IDs operate can make this process rather challenging (Argyris, 1976). For instance, the equipment manufacturer might have insufficient knowledge about the needs of business customers (Valtakoski, 2017) while the end customer or user has limited knowledge about the capabilities and resources of the equipment manufacturer (Kohtamäki & Partanen, 2016; Kohtamäki et al., 2013). Therefore, it is important to understand how the ID's central position within the ecosystem-wide knowledge management influences their ability to servitize.

3. Methods

3.1. Research strategy

Given the limited research literature on servitizing IDs, we adopt an abductive research strategy to allow for an in-depth understanding of this largely understudied phenomenon (Blaikie, 2007; 2010). An abductive research strategy implies an integrated approach to theory, literature, and emerging data (Dubois & Gadde, 2002; 2014), allowing researchers to constantly move “back and forth between a set of observations and theoretical generalisations” (Tavory & Timmermans, 2014, p. 4). Successful servitization requires collaboration with the key actors in the ID's ecosystem. Therefore, our empirical

investigation is aimed at gaining rich, real-life accounts (Charmaz, 2006) by means of an in-depth single case study in which the role of the ID is examined within their servitization ecosystem.

3.2. Research setting and data collection

The case studied is an ID (FoodPak) engaged in packaging machinery for the food and beverage sector (NAICS Code 311 and 312) in the United Kingdom and their rather unsuccessful attempts to servitize over the past eight years. Managers at FoodPak initiated the servitization transition themselves as a response to growing competitive pressures within the home market. FoodPak has 32 employees and employs the largest service team in the sector (15 engineers nationwide). It offers a variety of customized services, ranging from continuous maintenance, 24/7 nationwide support, lean consulting, and preventive maintenance to bespoke full-service contracts. Currently, the company is developing performance-based service contracts for food-packaging companies. Despite these efforts, however, FoodPak sells mainly basic services alongside packaging machinery (predominantly installation, setup, and provision of spare parts) on behalf of equipment manufacturers from Italy, Germany and Switzerland.

Data collection was organized into five stages over a three-year period: exploratory data collection, focus group 1, semi-structured interviews, focus group 2, and a follow-up phase. Table 2 provides an overview of each stage as well as the informants. During the exploratory stage, we conducted five in-depth interviews, which was followed by focus group 1 with selected senior managers. The initial insights gained helped us to understand FoodPak's business practices, servitization strategy, and main problems related to transition. In particular, we saw that FoodPak's failed attempts to servitize spanned firm boundaries,

which led us to conduct a broader, ecosystem-level analysis in subsequent stages. These insights, combined with those culled from the literature, including a number of theoretical perspectives, informed the development of an interview protocol. We then conducted additional 27 in-depth, face-to-face semi-structured interviews with the senior management team, three of ID's customers and two of its largest equipment suppliers. ID's customers were chosen from their database of food sector companies with the aim to gain insights from diverse sub-sectors. We conducted interviews with a small family firm (Biltong producer) as well as two medium-sized companies (premium biscuits producer and pastry bakery) with whom FoodPak has ongoing working relationships. In addition, we identified two main equipment suppliers, whose sales contribute 30 percent to ID's revenue: a large premium Italian equipment manufacturer (~20% of sales) and a medium-sized price-accessible Swiss equipment manufacturer (~10% of sales). Throughout this stage, we also attended ID's sales pitches and quarterly senior management meetings and communicated regularly with most of the informants by email or phone. Focus group 2 was held at the end of the semi-structured interview stage, with the purpose to obtain informants' feedback on emergent findings. At this stage it became clear that, within the ID's ecosystem, the key suppliers and current customer base were the most important actors in FoodPak's servitization initiatives.

<Please insert Table 2 here>

Some of the main factors hindering ID's successful transition can be traced to stakeholder theory (Freeman, 2008; Parmar et al., 2010), the attention-based view (Ocasio, 2011), and organization learning theory (Argyris, 1976). We used these theories as sensitizing concepts to help provide a context as well as a direction for our study. They served as a general sense of reference and guidance (Blumer 1954; Bowen 2006) rather than a 'fixed presentation of

pregiven world' (Sandberg & Tsoukas, 2011, p. 352). They thus enabled us to discover, understand and interpret ID's servitization problems, as well as their relationship with business customers and equipment suppliers. Furthermore, we used sensitizing concepts to 'lay the foundation for the data analysis', in examination of first order categories and development of second order themes that became the building blocks of our framework (Bowen, 2006). For instance, after conducting initial interviews at FoodPak we observed that its relationships with customers and suppliers were influencing the transition. Therefore, to better understand this impact we adopted stakeholder theory which guided our further data collection and analysis, enabling us to uncover more specific servitization problems. Insights from these theories were critical also in follow-up interviews to fill any remaining knowledge gaps. Finally, at the end of our data collection we held two sequential feedback sessions during which we presented our preliminary findings to FoodPak. Throughout these stages, we received valuable comments that helped us to improve the decision tree framework (see Figure 2).

3.3. Data analysis

We adhered to the principles of systematic combining (Dubois & Gadde, 2002) to match theory (sensitizing concepts) with empirical observations (Eisenhardt, 1989; Strauss & Corbin, 1994). Systematic combining allowed us to move back and forth between the data and the literature. Thus, we engaged in a nonlinear data analysis process in which "theoretical framework, empirical fieldwork and case analysis evolved simultaneously" (Dubois & Gadde, 2002, p. 554).

All interviews and focus groups were recorded and transcribed. The edited transcriptions were enriched with meeting notes, emails, and observational notes and then uploaded into

Atlas ti7 software for analysis. The data collection and analysis took place simultaneously. As data was collected over several years it allowed us to grasp and uncover the complexity of the servitization problems faced by FoodPak. The qualitative content analysis enabled us to take a holistic step-by-step approach to data analysis and to reduce complexity of primary data by allowing categories to emerge from the data (Bryman, 2004). The content analysis was organized into three interrelated, connected phases with feedback loops. First, we ‘named’ the data by using provisional line-by-line codes that were converted into more substantive *in vivo* codes concerning internal and ecosystem-related transition problems. These codes constituted the foundation for development of the first-order categories used during the second stage. This stage consisted of comparison, grouping, and in-depth examination of the relationships among first-order categories and codes, to reduce them to the most salient. Memos and relationship diagrams were used extensively at this stage. During the first two stages, two researchers worked independently and 15% of discrepancies in the first-order categories were further investigated and mutually agreed upon during a follow-up discussion. In the third stage we established key second-order themes that form the building blocks of the decision tree framework. The associated first-order categories led to development of the criteria for assessing independent distributors’ readiness to servitize. During all three stages we consulted the literature to test its potential for explaining emerging patterns, explore contradictions, and improve overall validity. Our coding scheme is summarized in Figure 1.

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4. Results

The transition to provision of value-added services can be initiated not only by equipment manufacturers but also by IDs themselves. FoodPak's case clearly demonstrates that, although the transition was initiated internally, successful servitization requires support and active participation by key stakeholders. Therefore, our empirical findings highlight the importance of identifying and addressing internal and ecosystem-related problems faced by an ID during the transition. We identified three distinct groups of servitization problems (based on second-order themes) at FoodPak: (1) conflicting interests of key stakeholders within the ecosystem, (2) misalignment between distribution of managerial attention and servitization strategy, and (3) ineffective knowledge management within the ecosystem. Table 3 presents an overview of the first-order categories, codes, and quotes that led to the development of these themes. The following sections describe FoodPak's servitization problems based on the emergent themes.

<Please insert Table 3 here>

4.1. Conflicting interests of key stakeholders within ecosystem

Perhaps the greatest obstacle in FoodPak's servitization initiatives was the lack of support from its main equipment suppliers which were heavily product-oriented. A vast majority of these suppliers treated FoodPak as a mere reseller of their packaging machinery to the UK market. This was reflected in suppliers' approach (i.e., success measurement based on sales KPIs – key performance indicators) to their global distributors, prioritizing those that were capable of generating more product sales at premium rates. Equipment suppliers imposed their predefined product-centric sales model onto FoodPak to generate more product sales.

For instance, one of FoodPak's largest equipment suppliers presented a clear vision for FoodPak to help them to increase the number of machines being sold in the UK market.

"We are manufacturers, sellers and we provide the system. We are not interested in collaboration [with FoodPak], we are trying to be strong in the UK market and this is our main aim. At the moment only around 30% of [FoodPak's] proposals [machine sale proposal] are successful. This is why we are trying to increase our presence in the UK market, as we see a lot of potential there." (Sales Manager, I14)

Due to a limited number of equipment suppliers interested in entering the UK market, FoodPak was dependent on maintaining its contracts with existing suppliers. As FoodPak had a low quote-to-sale ratio, it was low on suppliers' list of priorities. This compounded the problem.

"In comparison to other distributors, we sell less machines and this is reflected in how our [main] suppliers often treat us they prioritize and support distributors who can generate more product sales." (Technical Manager, I9)

The lack of interest on the part of suppliers was further exacerbated by the fact that they did not profit from the service revenues generated by FoodPak. Paradoxically, FoodPak's current revenue model (pricing structure) did not allow suppliers to profit from service contracts – that is, FoodPak largely failed to incentivize suppliers to support its emerging servitization initiatives. This situation led to conflicting interests between FoodPak and its key suppliers, with each pursuing different business goals.

FoodPak served three distinct customer types: startups, small and medium sized businesses, and large international food manufacturers. Although customers' product needs were similar, their service requirements were diametrically different. FoodPak devoted a significant amount of time and resources to selling to large manufacturers. These manufacturers had extensive in-house technical departments capable of undertaking maintenance and repair work; hence, they were not interested in entering into service contracts with FoodPak.

“We struggle to sell service contracts to large companies. They have several technical people on the shop floor and we find it difficult to justify why they should enter into service contracts with us.” (National Sales Manager, I5)

On the other hand, smaller businesses often lack sufficient internal technological skills, but the premium entry prices of ID's service contracts prevented them from signing up for services. These high entry prices were a result of lacking suppliers' interest in supporting FoodPak's servitization initiatives. Without suppliers' support and investment, FoodPak was forced to keep the prices high to recover its rather high investment into provision of these services (i.e., additional training, human resources, time, and investment in technology). With the support from its core suppliers, FoodPak could have decreased the time and investment needed for development of these solutions. By gaining access to necessary knowledge, resources and investment from its suppliers, FoodPak could offer more competitive pricing that would appeal to the underserved market segments (i.e., SMEs and family owned firms).

“Our [main] suppliers have all the resources and the technical ‘know-how’ that we need to develop better services for our customers. But, they rarely share these with us so we often end up ‘reinventing the wheel’ and that costs us extra money”. (General Manager, I1)

In addition, the majority of FoodPak’s service contracts were based on the number of packaging equipment breakdowns yet its customers profited only when machines were operating flawlessly. This creates further conflicts within the network where it is not in ID’s nor suppliers interests to keep the machines in operation for as long as possible. In essence, customers goals and interests are not central to ID’s servitization efforts. Currently, ID’s suppliers only profit from machines/equipment sold. While ID profits from machine sales too, it also generate additional revenue from services (i.e., fixing machine breakdowns, preventative maintenance or regular servicing. However, this additional revenue is not shared with manufacturers of these machines and, therefore, they lack significant incentive to invest in and support ID’s servitization.

Furthermore, besides regular service contracts, ID’s customers were also interested in increasing machine’s utilization by extending its flexibility and modularity. However, this position could not be supported by FoodPak due to its largely transaction-based relationships with equipment suppliers. In essence, FoodPak could not fully support customers’ growing needs because, in order to do so, it would need to integrate and closely collaborate with its diverse suppliers. However, FoodPak kept failing to create the conditions that are necessary for its suppliers to support its servitization initiatives.

4.2. Misalignment between distribution of managerial attention and servitization strategy

Data analysis uncovered a significant conflict between how attention of managers is distributed toward operational and governance related activities within FoodPak. While top management had put transitions plans into place (governance), ID's business functions (operations) and their activities were strongly influenced by both customer and supplier demands. The attention of middle management was directed towards dealing with ad-hoc issues that were deemed important by dominant suppliers rather than ID's top management. This caused significant conflict in managerial focus where day-to-day activities and projects pursued by different functions did not reflect on, and were not connected to the overall FoodPak's strategic vision. This disconnect between what needed to be done and what was actually being done was caused to a large extent by lacking unity between ID's internal functions. Each business function was aimed at individual targets without considering other functions and the wider impact their actions had on FoodPak's servitization initiatives. In essence, each function was acting as a separate entity within a large network and instead of being united by the ID's vision each instead pursued its own agenda by responding to different forces within the wider network. This caused significant bottlenecks at FoodPak where each function was prioritising different projects. Managers of each function tried to implement an incentive scheme as a means of reducing departmentalism. However, the success was very low because the initiative was not aimed at uniting these functions (governance) but rather rewarding them for achieving specific operational goals. For example, the sales function focused on increasing product sales while the engineering function was incentivised to increase the speed at which the quotes are delivered to potential customers. Only the marketing function was concerned with developing customer relationships during all touchpoints. FoodPak's salespeople were the main point of contact with customers, acting as both sales agents and key account managers for existing customers.

However, the sales function's incentive scheme led the sales team to prioritize a potential "big sale" over nurturing its relationship with existing customers. The sales team focused solely on producing quotes and selling machines, as they did not directly benefit from the sales of services. In other words their operational focus and incentives were not connected to the FoodPak's larger vision. Furthermore, FoodPak continued to impose sales-based KPIs on its teams.

"To me, maintaining a good relationship with our customers is key. I am trying to do this but I don't have support from other departments...we [FoodPak] say one thing but we end up doing another." (Marketing Manager, I2)

Another substantial obstacle to transition that we observed at FoodPak was a fear of failure, which was firmly embedded in the organizational culture and management style. Nobody was willing to assume full responsibility, and therefore ID's business functions, when making decisions, often favoured familiar product-centric logic over less familiar service centric logic which further grew the divide between ID's governance and operational focus.

4.3. Ineffective knowledge management within the ecosystem

Almost all informants referred to an outdated CRM (customer relationship management) system that they used sparingly for inserting information on an ad hoc basis. This resulted in a lack of overall understanding of customer needs, beyond the purely technical details required to customize the packaging equipment. Each function collected, prioritized, and separately stored different types of customer information. This created internal "knowledge silos", leading to inefficiencies in managing customers and communicating with suppliers. As a result, FoodPak failed to capture and add value to the overall knowledge stock within

its ecosystem; customers did not benefit from knowledge gathered from suppliers, and vice versa.

Salespeople did not record, codify, or disseminate the knowledge gathered during customer encounters. In this sense, the sales team acted as a gatekeeper for customer knowledge. Essentially, any information beyond technical specification of machinery remained in salespeople's notebooks or minds, even when they moved to other companies. As a consequence, FoodPak failed to become sufficiently acquainted with its customers over time and missed many opportunities to develop a relevant value-added service portfolio. FoodPak's failure to capture and codify this knowledge was due partly to the use of outdated technologies that did not allow for effective knowledge gathering, management, and dissemination (i.e., sharing with ecosystem actors). This climate of "technophobia" was supported by short-term financial targets, a poor understanding of new technologies and their potential, and a cross-functional unwillingness to use such technologies.

Despite FoodPak's transactional relationship with equipment suppliers, some of these suppliers regularly offered training at their headquarters (mainly in Italy) for salespeople and engineers. The sessions, of two to three days' duration, included intensive training in the features and flexibility of existing and newly developed machines. However, FoodPak did not have a codification policy in place to capture and benefit from this knowledge in the long term. Therefore, not only was the knowledge of no benefit for non-sales functions, but it was apt to be forgotten by salespeople and engineers due to information overload. The Account Manager at one of ID's major equipment suppliers expressed the need to increase FoodPak's technical knowledge of their machines as one of their key future plans to help ID to improve their sales.

“We hope that every sales manager and everyone who is in charge of technical issues will be competent to sell our machines. Our aim is to try to teach them with some other trainings so they know everything about our machines. This will be helpful for us, as it will mean we can leave the UK market in their hands and concentrate somewhere else.”

(Account Manager, I15)

5. Resolving servitization problems: Towards a servitization-readiness decision tree

The first-order categories and second-order themes were used as the basis for developing a servitization-readiness decision tree, shown in Figure 2.

<Please Insert Figure 2 here- Two-column fitting>

The purpose of the decision tree is to provide an easily applicable set of hierarchically arranged questions (criteria) to help IDs evaluate their readiness to transition from being product-centric to being providers of advanced services. The decision tree enables IDs to diagnose different types of servitization problems and thereby establish priorities – issues that require immediate attention before the company moves forward with its transition initiatives.

Our data analysis identified seven core criteria to be met before embarking on servitization journey. We combined insights from our empirical observations, servitization literature and three theoretical perspectives (stakeholder theory, attention-based view and organizational learning theory) to develop draft versions of the decision tree. We then refined and

corroborated emergent versions of the framework through follow-up workshops with FoodPak. We grouped the criteria into three categories: (1) stakeholder alignment, (2) managerial attention to transition, and (3) stakeholder knowledge management. We then derived servitization problems from the ID's inability to meet the identified criteria. In an ideal scenario, an ID must meet all seven criteria in order to be set for a successful transition.

The first criterion is *gaining active support of ID's key equipment suppliers during the transition*. Usually, servitization is initiated by equipment manufacturers (Baines & Lightfoot, 2013). In our case, however, it was the ID that initiated the transition. It was crucial, then, for this ID to achieve a fine balance between the interests of equipment suppliers and its own organizational strategies (Freeman et al., 2010). In contrast to manufacturer-owned dealers, IDs serve multiple suppliers whose strategies often differ from one another. Therefore, the level of support from each will be considerably different. As argued by Mohr, Fisher and Nevin et al. (1996, p. 103), when the equipment supplier imposes a high level of integration and control over its IDs, they will 'surrender to the decision making authority' of the manufacturer. The importance of ID to the equipment manufacturer is likely to increase in cases when it accounts for a greater amount of manufacturer's business in a particular foreign market (Kim, 2001). Given the importance of co-creation between the equipment manufacturers and ID during the process of servitization, all stakeholders will have to make a significant resource and time investment into the transition (Freeman et al., 2010). In particular, IDs are dependent upon manufacturer's provision of an in-depth technical and service training. In the case of FoodPak, its major product-centric equipment suppliers were not willing to support its transition not only because it accounted for a small proportion of their worldwide sales, but also due to FoodPak's failure to introduce compelling incentives for suppliers to benefit from this transition.

Therefore, the second criterion is *to align ID's and its key suppliers' goals and incentives associated with the transition*. Given the critical role played by ID's key suppliers in supporting its transition, it is ID's responsibility to incentivize these suppliers (i.e., revenue sharing) and establish common servitization goals. As argued by Freeman et al. (2010, p. 34), in ecosystems in which stakeholders have diverse interests, the role of the central actor is to “redefine, redescribe, or reinterpret stakeholder interests so that [it] can figure out a way to satisfy both.” If the ID and equipment supplier have a long term relationship, both parties are able to benefit from a deeper account penetration, improved process performance, decreased costs and enhanced learning (Gençtürk & Aulakh, 2007).

Given the ID's central role within the ecosystem, after securing suppliers' buy-in it must ensure that its *goals and incentives are aligned with those of its customers*. This leads to the third criterion in the decision tree. Traditionally, customers perceived IDs only as re-sellers and providers of basic services. Therefore, to achieve alignment, the ID will have to firstly establish itself as a competent and knowledgeable technical expert. Secondly, the ID will need to establish a means of sharing risks and profits with its customers (i.e., result-based pricing) that will lead to pursuit of common goals (i.e., performance-based KPIs). Currently, FoodPak's service revenues come predominantly from attending to machine breakdowns. However, customers aim to minimize breakdowns and achieve higher utilization of the machinery. These conflicting interests have prohibited FoodPak from servitizing successfully. It is imperative that customers' successes and failures become the ID's successes and failures as well. This alignment can be achieved only by working toward common goals. By aligning their goals with those of their customers, IDs are able to move “roughly in the same direction” (Freeman et al., 2010, p. 23) and thus to dynamically adjust to the changing service needs of their customers. In essence, IDs need to develop a

servitization offering that mirrors their customers' goals and strategic objectives (Maignan & Ferrell, 2004). They can do so by treating customers as external stakeholders (Sirgy, 2002) and involving them in their corporate decisions (Plaza-Úbeda, de Burgos-Jiménez & Carmona-Moreno, 2010).

The fourth criterion highlights the importance of *achieving commitment to transition reflected in both ID's strategy (governance) and its existing processes and activities (operational)*. Servitizing manufacturers often develop a separate front-office that is responsible for service provision and managing relationships with customers (Baines and Lightfoot, 2013). However, servitizing IDs need to introduce the service logic across all of their existing departments. In contrast to manufacturers this can create challenges for IDs to channel attention towards servitization initiatives. In the case of FoodPak this was manifested in day-to-day activities and processes (operational attention) that were not congruent with the overall servitization strategy (governance attention). This discrepancy was not only caused by residual impact of FoodPak's former product-centric organizational structure, but also by organizational structure of its dominant suppliers, who were imposing their own vision to increase product sales in the UK market onto FoodPak. Ocasio (1997) suggests that distribution of managerial attention depends upon organizational structure of the firm, however, and as our case demonstrates this distribution is also significantly impacted by the dominant stakeholders within the network.

The fifth criterion points to the importance of *aligning and incentivizing all ID functions to support transition*. It is usually ID's service team and sales team that have primary contact with customers, while technical team communicates with equipment suppliers. This often leads to pursuit of different and often conflicting goals within ID's functions. As a result

they prioritize and promote their own agendas, further hindering ID's servitization efforts. Therefore, the lack of incentives to support unified servitization goals across the entire organization can lead to internal competition (conflicting interests), as clearly illustrated in the case of FoodPak. For servitization to succeed, IDs need to consider all departments as internal stakeholders (Sirgy, 2002), and involve them equally in corporate decisions to establish common goals (Plaza-Úbeda et al., 2010).

The sixth criterion is *ID's digitalization capabilities to collect, analyze and unify data within the ecosystem*. ID's ability to successfully servitize resides in its ability to not only collect data within the ecosystem, but through analysis and unification turn it into actionable knowledge. During servitization, ID is required to develop and maintain expert technical knowledge of the machines they sell and this can only be achieved through continuous learning and access to information from both their core suppliers and customers. Digitalization thus plays key role in enabling ID's successful transition. Therefore, it should be ID's priority to develop and integrate suitable technological solutions to support their stakeholders within the ecosystem. ID's central role within the ecosystem requires it to manage and unify data inflow from multiple diverse sources (e.g., complex network of equipment suppliers present in foreign countries, customers in different industries). In the case of FoodPak this proved to be rather problematic due to several factors. First, there was an internal resistance to adoption of new technology, which prohibited FoodPak to use a common platform and made data unification difficult and labour intensive. Second, many customers were unable to share all necessary data with FoodPak, because the company lacked technological abilities to integrate this data into its existing systems. Finally, FoodPak experienced difficulties to gain access to detailed technical data from its core suppliers because of the transactional nature of their relationship that was reflected in lacking trust

(e.g., misuse of data, knowledge leakage). As argued by Harrison, Bosse and Phillips (2010), transparency increases the likelihood of stakeholders to share information with firm, which is prerequisite for future success and collaboration with these stakeholders.

The last criterion in our decision tree is *ID's ability to facilitate knowledge transmission between equipment manufacturers and customers in real-time*. Given IDs' central role within the ecosystem, it needs to ensure a seamless flow of knowledge among key stakeholders, while eliminating any potential bottlenecks or barriers. To achieve this, IDs need to develop their own communication system that will enable real-time monitoring of performance of the machine in-use and at the same time sharing this information, in different forms, with the equipment manufacturers and customers. This will enable IDs to not only promptly respond to potential issues (i.e., preventative maintenance, performance optimization), but also to add value to their stakeholders by providing them with relevant knowledge. This continuous flow of machines' performance data from multiple customers can simultaneously help equipment manufacturers to improve and innovate their machine offering (Baines and Lightfoot, 2013). In our case, FoodPak was collecting rich customer data from multiple sources. However, it did not share this knowledge with the equipment manufactures due to its inability to unify these insights. Each function within the FoodPak was collecting different set of data from customers using different systems and protocols to do so. This incongruence led to creation of duplicate entries which created significant challenges in unifying these data and thus, directly benefiting from it. As a result, FoodPak only shared transactional data with its suppliers which was insufficient for deriving any actionable insights. Also, as shown in our case, IDs need to be receptive to additional knowledge offered by customers and encourage them to share such knowledge. However, FoodPak's customers could not see the benefits of sharing additional information (i.e., new

product development plans, line extension, additional machine data) with the company. The complexity of the knowledge-sharing process can lead to knowledge-sharing asymmetries among actors in the ecosystem (Bäck & Kohtamäki, 2015). For instance, the customer may be unwilling to share their internal operational knowledge with IDs, as they may use it when dealing with other customers (Valtakoski, 2017).

6. Discussion

Servitization literature by being narrowly focused on servitizing manufacturers (Ulaga & Loveland, 2014; Ulaga & Reinartz, 2011), diverted academic attention from the other actors within the distribution network who can be equally capable of initiating servitization (Kowalkovski & Ulaga, 2017). In particular, servitization attempts initiated by IDs are largely overlooked, and their role in the servitization ecosystem is therefore still poorly understood. This is somewhat surprising, because IDs have played an important role in supporting equipment manufacturers for decades (Hakanen et al., 2017; Olsson et al., 2013).

We respond to Story et al. (2017)'s call for future research to provide insights into the role and capabilities of intermediaries in servitization. Our findings suggest that IDs can also initiate servitization themselves. But during the transition they face a number of internal and ecosystem related problems that differ from those of servitizing manufacturers. By drawing on three theoretical perspectives: stakeholder theory (Freeman et al., 2010; Freeman, et al., 2010), the attention-based view (Ocasio, 1997, 2011), and organizational learning theory (Argyris, 1976) as our sensitizing concepts, we were able to group servitization problems that IDs face into three categories: (1) conflicting interests of key stakeholders within ecosystem, (2) misalignment between distribution of managerial attention and servitization strategy, and (3) ineffective knowledge management within ecosystem.

6.1. Contributions to the servitization literature

IDs play a role of the central actor in an ecosystem of multiple equipment manufacturers and business customers. Stakeholders within each of these groups are heterogeneous, each having different needs and goals that contributes to the complexity and uniqueness of every ID's encounter with them. Our case reveals that this poses a particular challenge during the servitization because of the conflicting interests that often prevail among different stakeholders (Freeman et al., 2010). Therefore, for IDs to succeed in servitization they need to be able to align the goals and incentives of all major stakeholders. In essence, ID needs customers who are receptive to its advanced-services offering, and suppliers who are supportive of its servitization initiative. However, suppliers are often reluctant to support ID's transition, unless they can directly or indirectly profit from the service revenue generated by the ID. In contrast to servitizing manufacturers, who retain the design and production authority and have an option of vertical integration of their suppliers and re-manufacturing (Baines & Lightfoot, 2013), IDs are not able to pursue the transition without manufacturer's involvement. Likewise, the likelihood of customers entering into service contracts with IDs depends largely on the perceived added-value of the services.

For customers to benefit from advanced services they need to be willing to become 'co-creators' not just mere recipients of value. This requires them to share their operational data and internal knowledge, which demands a high level of trust towards the equipment suppliers. Trust can only be achieved by increased transparency among stakeholders within the servitizing ecosystem (Harrison et al., 2010). Similarly to IDs, servitizing equipment manufacturers also need to demonstrate the value of their offering to their customers to encourage them to enter service-based contracts (Paiola et al., 2013; Story et al., 2017; Ulaga & Reinartz, 2011).

Further, our analysis suggests that IDs, which resell machines and provide basic services, struggle to shift towards provision of advanced services due to existing residues of a product-centric logic. Although equipment manufacturers face a similar challenge (Brax, 2005; Oliva & Kallenberg, 2003; Valtakoski, 2017), to resolve this issue they commonly establish a front-office department that is responsible for provision of advanced services. They employ project managers, account managers and field engineers along with a matrix-style management that enables them to achieve a balance between the front-office and a back-office that is responsible for production and machine development (Baines & Lightfoot, 2013). However, ID's organizational structure during the transition remains virtually unchanged which leads to conflicts in distribution of managerial attention - trade offs between pursuing the transition and responding to pressing day-to-day issues. Furthermore, our findings suggest that it is not just organizational structure that influences flow of managerial attention with ID (Ocasio, 2011), but to a large extent it is also influenced by a complex network of ID's relationships with its diverse equipment suppliers. In contrast to manufacturers, IDs have to actively manage and orchestrate these relationships. This is mainly because of the extent of influence these often dominant, product-centric suppliers have over ID's choice between timely delivery of the product and development of a long-term service-centric philosophy. In essence, the larger the bargaining power of the manufacturer has over the ID, the more influence it will have on how its managerial attention is distributed.

Traditionally, manufacturers have had a somewhat negative perception of IDs, claiming that they may be favoring competitor's products and are mere order takers with insufficient knowledge of their products (Cespedes & Corey, 1990). Their relationship has been further exacerbated due to physical separation between the place of manufacture and the foreign

market in which IDs operate. This has impacted the amount and quality of data and information shared between IDs, and suppliers leading to significant ‘information asymmetries’ (Kohtamäki & Partanen, 2016; Kohtamäki et al., 2013; Valtakoski, 2017). This can have a negative impact on ID’s ability to effectively manage knowledge within its servitization ecosystem. Our study suggests that for IDs to avoid such inefficiencies, and to deliver advanced service offering, they need to be able to collect, analyze and unify data from their ecosystem actors. But, for stakeholders to benefit from this data, IDs need to be able to transform it into actionable knowledge and share it with these stakeholders in the real time. This finding is in line with prior studies (Rönnerberg Sjödin et al., 2016; Ulaga & Reinartz, 2011) and shows that digitalization capabilities are critical to create an open platform, which enables ecosystem actors to jointly contribute to and benefit from diverse knowledge. However, IDs multiple suppliers usually have their own knowledge management software which adds an additional layer of complexity and associated investment for ID to integrate these often incompatible systems. Therefore, IDs are faced with a challenging task to develop a customised communication strategy to accommodate diverse requirements of its stakeholders to facilitate knowledge transmission within the servitization ecosystem. This is yet another differentiating point from servitizing manufacturers, who develop their own data sharing platform into which their customers and suppliers integrate their information and communication technologies (i.e. remote product sensing technologies, enterprise resource planning system) (Baines and Lightfoot, 2013).

6.2. Managerial Implications

We propose a diagnostic tool for practitioners to help them assess ID's servitization initiatives. This tool responds to Baines, Lightfoot, Benedettini, and Kay (2009)'s call for more prescriptive approaches that help solve specific problems and guide managers in solving practical issues. A practical contribution of our study is the identification and explication of the seven criteria for assessing IDs' readiness to servitize, which are presented in the form of a decision tree. Each criterion is assessed using two dichotomous answers (Yes-No) that help IDs to navigate through the decision tree. Our decision tree enables IDs to better understand critical activities, set priorities, and address key challenges that could hinder their servitization initiatives. It can also be used by other ecosystem actors collaborating with IDs under an indirect distribution channel regime. For example, manufacturers initiating servitization could use the decision tree to evaluate the readiness of their IDs to support their transition.

The decision tree has several implications. Firstly, it is imperative that managers leading the servitization initiatives ensure that ID's goals and incentives are aligned with those of key stakeholders in the servitization ecosystem. By aligning the firm's incentives with customers' goals, managers will not only develop more relevant offerings, but also establish a strategic and mutually beneficial long-term relationship with them. For servitization to succeed, however, managers need to secure the support of key equipment suppliers, with whom IDs often have a transactional relationship. They have to develop mechanisms through which their suppliers will be able to directly benefit from servitization initiated by the ID. This would require them to experiment with different revenue models that are based on profit- and risk-sharing agreements with key equipment suppliers. Furthermore, in order to establish solid foundations for servitization, an ID must reclassify knowledge as a strategic

organizational asset. Managers need to introduce congruent and holistic processes for data collection, unification, as well as diffusion of knowledge within the ecosystem. This will ensure that the ID is able to collect and analyze data from diverse sources and multiple customer touch points. Lastly, since managers play a key role in initiating, managing, and supporting servitization, they need to develop processes and organizational structures that allows for appropriate distribution of their attention to areas that are critical to servitization success. In other words, managers must ensure that day-to-day operations are reflection of their overall servitization strategy (i.e., firms' KPIs and internal measures of success).

6.3. Limitations and future directions

By choosing for our case study ID that has been struggling to servitize, we have been able to uncover key challenges that IDs are likely to encounter during this transition. The primary aim of our study was to examine servitization problems from the perspective of ID. In addition to collecting data from ID's managers, we have also conducted a number of interviews with their customers and equipment suppliers to gain more insights into relationships within ID's stakeholder network. As identified in our study, these stakeholders play important role throughout ID's servitization initiatives. Therefore, we suggest that future studies should focus on uncovering reasons and motivations of various stakeholders for supporting IDs' transition. Because our insights are limited to a single case of the ID that operates in food packaging sector in the UK market, we recommend that future research adopts a more quantitative approach. Future empirical studies could take a confirmatory approach and seek to validate the servitization-readiness decision tree and extend it to include other criteria and more fine-graded categories. Servitization problems experienced

by IDs could differ because of their industry and country context. For example, in some low-technology sectors shift from selling products to provision of advanced services may be relatively new for IDs, as demonstrated by the case of FoodPak. However, IDs operating in high-technology sectors usually have more predispositions for such transition. Hence, we also recommend future studies to investigate the possible impact of these factors on IDs' servitization-related problems using a diverse sample.

While our study focused on uncovering problems faced by servitizing IDs during the transition, offering remedies for these problems is beyond the scope of this paper. Further research is therefore needed to provide guidance on how to resolve the servitization problems presented in our study. In particular, we would welcome research focusing on goal alignment and knowledge sharing among key stakeholders during servitization. Academics can provide more comprehensive insights by integrating stakeholder and organizational learning theories to answer the following questions: What stakeholder engagement strategies can ID implement to gain support from its key stakeholders during the transition? How can ID ensure seamless flow of knowledge within its complex network of customers and equipment suppliers? How would ID's servitization problems differ if the transition was initiated by the equipment supplier? Finally, in the light of our findings, we propose future longitudinal studies to focus on development of a roadmap that will illustrate the process of ID's transition journey towards servitization, from inception to provision of advanced services. This roadmap will provide practitioners with actionable guidance on the necessary steps that need to be taken to servitize successfully.

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Tables and Figures

Table 1 Differences between IDs, manufacturers and manufacturer-owned dealers

Differentiating factors	Independent distributors	Equipment manufacturers	Manufacturer-owned dealers
Role in the ecosystem	<p>Provide services related to sales, marketing, customer relationships, logistics and offer complementary services to the wide range of machines & equipment they distribute on the behalf of multiple equipment manufacturers.</p> <p>Serve a specific market (product segment) where they have an established customer base and excellent knowledge of the market (Olsson, 2013), which offers less risky and costly foreign market entry for the equipment manufacturer (Gençtürk & Aulakh, 2007).</p>	<p>Product design and manufacturing along with selling and installation of their own machines or selling through their own dealers and/or independent distributors accompanied with basic services (Baines & Lightfoot, 2013).</p>	<p>Provide services related to sales, marketing, customer relationships, logistics and basic services on behalf of a single equipment manufacturer- carry a large stock of products and spare parts.</p> <p>Ensure physical closeness to manufacturer's principal customer base with sales depots and repair shops.</p> <p>Expensive, but effective channel for manufacturers to leverage new business and increase customers' switching costs (Baines & Lightfoot, 2013).</p>
Product range	<p>Carry a range of hand-picked product lines from a number of equipment manufacturers (Olsson, 2013).</p>	<p>Develop and manufacture own products (Ulaga & Reinartz, 2011).</p>	<p>Carry product line(s) from a single equipment manufacturer (Baines & Lightfoot, 2013).</p>
Relationship with customers	<p>Able to address the heterogeneity of customers' needs through assortment of product lines they carry (Weitz & Jap, 1995).</p> <p>Perceived as less biased as they do not favor products of a single manufacturer, but rather consider multiple options in attempt to solve customer needs (i.e., combine machines from several manufacturers) (Fein & Anderson, 1997).</p>	<p>Transactional relationship influenced by the 'production and consumption' business model; responsibilities of the ownership reside with the customer (Baines & Lightfoot, 2013, p. 8).</p>	<p>Proximity of maintenance personnel and spare parts enhance customers' perception of dealers reliability (Baines & Lightfoot, 2013).</p>
Knowledge of product	<p>Breadth of knowledge, but lacking depth due to large stock of products from a wide range of suppliers (Cespedes & Corey, 1990).</p>	<p>Comprehensive product knowledge and intellectual property rights of products they manufacture (Ulaga & Reinartz, 2011).</p>	<p>In-depth knowledge of carried product range from a single manufacturer.</p>
	<p>Treat suppliers and business customers as two separate environmental entities (one in</p>	<p>Collaborative communication used to maintain positive relationship with IDs (i.e.</p>	<p>Fostering of shared values and mutual support give dealer an incentive to work on behalf of</p>

<p>Relationship with other ecosystem actors</p>	<p>upstream channel, the other in downstream channel) (Stern et al., 1996).</p> <p>Necessary to maintain a good working relationship with multiple suppliers (Gadde, 2014).</p> <p>Equipment manufacturer's willingness to share exchange risks and responsibilities is reflected in investments made towards building relationship with ID (Zhang et al., 2003).</p>	<p>development of operating systems for ordering and inventory control, provision of training (Skarmeas et al., 2008).</p> <p>Manufacturer-owned dealers as well as IDs help the manufacturer in its understanding of customers' application and usage of their product (Gençtürk & Aulakh, 2007).</p>	<p>manufacturer's product (Mohr et al., 1996).</p> <p>Help financially invested manufacturer to build a strong relationship with business customers at the operational level (Baines & Lightfoot, 2013).</p>
<p>Challenges in collaboration with ecosystem actors</p>	<p>Physical separation between the place of manufacture and foreign market ID operates in is often challenging and costly in terms of interactions and monitoring.</p> <p>Different management styles and practices between international partners complicate cross-border dealings (Poon, Evangelista & Albaum, 2005).</p> <p>Deal with the complexity of serving a range of equipment manufacturers and managing their interests (Zhang et al., 2003).</p>	<p>Equipment manufacturers commonly show a low level of trust to IDs, criticising them for lacking product knowledge and favoring competitor's product range (Cespedes & Corey, 1990).</p>	<p>Success contingent on demand for manufacturer's product on the market and cannot offer alternative products that are from different equipment manufacturers.</p> <p>Often perceived by their customers as biased as they sell only products from a single manufacturer (Mohr et al., 1996).</p>
<p>Power relationships between ecosystem actors</p>	<p>Dependence on equipment manufacturers is largest when a few of them account for majority of ID's business or only a few equipment manufacturers want to supply the market in which ID operates (Zhang et al., 2003).</p>	<p>Dependence is greatest when the availability of competent IDs in a foreign market is limited and control of critical resources is in the hands of IDs (Kim, 2001).</p>	<p>Manufacturers exercise their power to gain dealers' full cooperation through outright ownership or contractual/franchise relationships (Mohr et al., 1996).</p>

Table 2 Informants and data-collection stages

Informant ID	No. of interviews	Informant's position and association	Exploratory data collection stage (mins)	Focus group 1 (90 minutes)	Semi-structured interviews (mins)	Focus group 2 (120 minutes)	Follow-up interviews (mins)	Feedback on preliminary findings 1 (Group/90 mins)	Feedback on preliminary findings 2 (Group/90 mins)
I11	4	General Manager (ID)	115	Y	60; 60	Y	45	Y	Y
I12	5	Marketing Manager/HR Manager (ID)	90; 120	Y	60; 90	Y	60	Y	Y
I13	1	Marketing Assistant (ID)			60	Y			
I14	1	Ex National Sales Manager (ID)	90						
I15	2	National Sales Manager (ID)		Y	80	Y	30	Y	Y
I16	1	Regional Sales Agent (ID)			40				Y
I17	3	Engineering Manager (ID)		Y	90; 45	Y	20		
I18	1	Regional Engineer (ID)			35				
I19	4	Technical Manager (ID)	60	Y	45; 60		30	Y	
I110	2	Service Manager (ID)		Y	60	Y	30	Y	
I111	1	Production Manager (ID's customer) Medium-sized Premium Bakery			45				
I112	1	Business Owner (ID's customer) Medium-sized Cornish Pastry Bakery			40				
I113	2	Business Owner (ID's customer) Small family-owned Biltong producer			45; 60				
I114	2	Sales Manager (ID's major equipment supplier) Large premium Italian equipment manufacturer							Semi-structured interview (45mins) + Follow up (30mins)
I115	2	Account Manager (ID's major equipment supplier) Medium-sized Swiss equipment manufacturer							Semi-structured interview (45mins) + Follow up (30mins)

Figure 1 Data structure and coding process

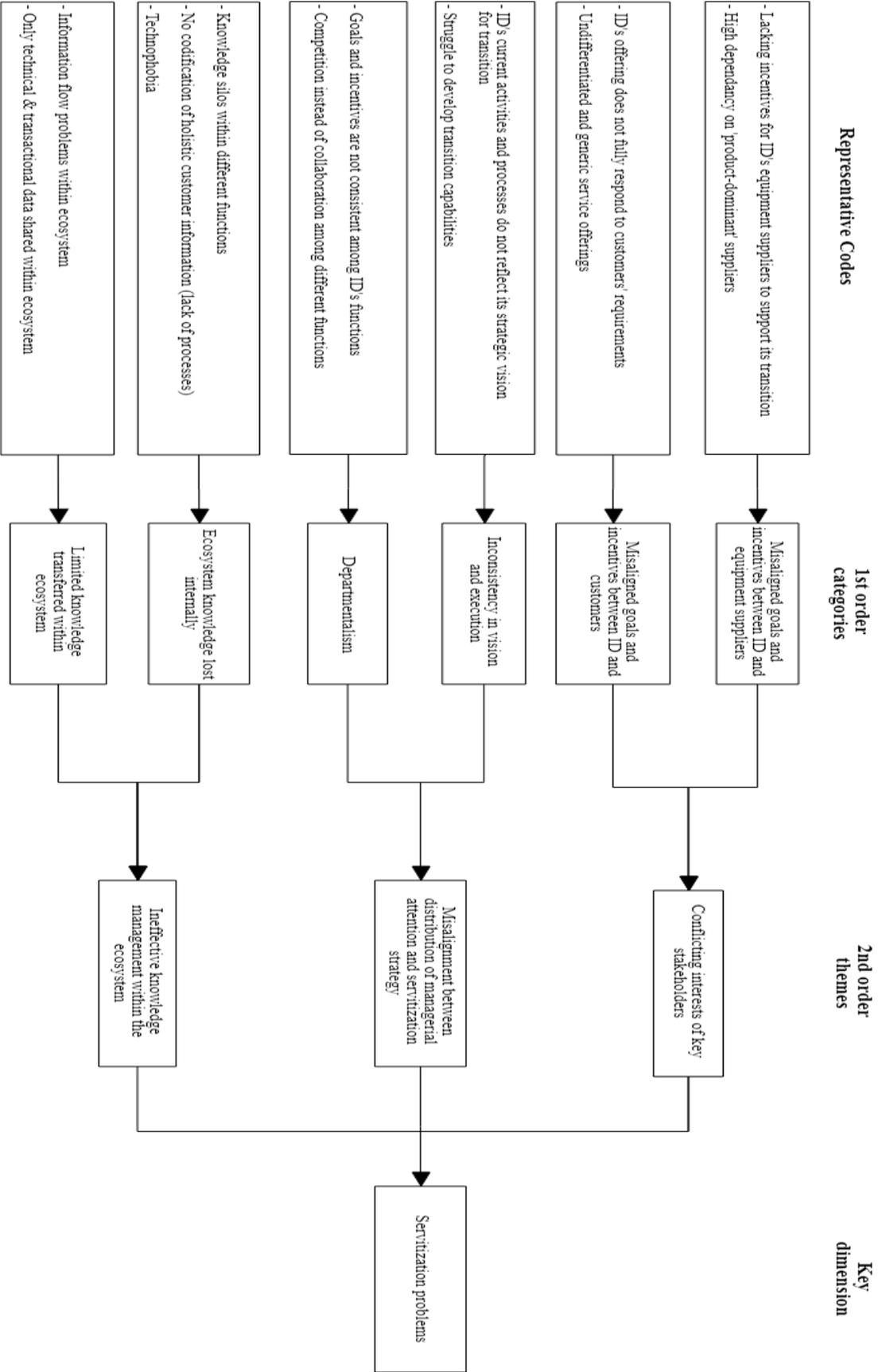


Table 3 Overview of second-order themes, first-order categories, representative codes, and quotes

Second-order theme	First-order category	Representative code	Representative quote	Informant
Conflicting interests of key stakeholders	Misaligned goals and incentives between ID and equipment suppliers	Lacking incentives for ID's equipment suppliers to support its transition	“Like all the Italian suppliers, they want you to sell lots [of packaging machines]. They have this vision of the UK market of being full of fantastic opportunities. They tend not to understand some of the other difficulties with the market in the UK, particularly with the competitors and the growing need for services.”	19
			“They are looking for lots of sales [key partners]. Unless you are turning lots of sales, you would be fairly low on the list of their priorities. The problem is that what they say and what they will do is a bit different. When an engineer needs a manual to go and fix a machine, they haven't got one. When you go over and do the customer demonstrations, you fly over to Italy to do a customer demonstration, but the machine does not work and they have not done anything about it.”	15
		High dependency on product-dominant suppliers	“There are only few suppliers in the market and we are sort of dependent on them, but none of them has any experience in providing or supporting services to the industry. It is difficult to find suppliers in our market who are even partially supporting ‘result-based’ services – leasing instead of selling, pay per hour, and so on.”	I10
		ID's offering does not fully respond to customers' requirements	“The small start-ups are an opportunity for us, but they are also a problem . . . If there is a start-up working in a ‘kitchen at home,’ why are we still trying to sell them a £100,000 system?”	15

	Misaligned goals and incentives between ID and customers		“FoodPak provided us with free one-hour training . . . it was not enough to learn how to operate the machine, it was too much information for such a short period of time, and the instructions booklet that was supplied with it was too technical – I couldn’t understand it . . . additional training was £1,000 a day that should have been included in the initial price.”	I13
		Undifferentiated and generic service offerings	“Within the food packaging market we have three distinct groups of customers: large multinationals, SMEs, and start-ups. While they are interested in similar product solutions, their service needs differ largely. But we still try to sell them the same service contracts.”	I9
	Inconsistency in vision and execution	IDs current activities and processes do not reflect its strategic vision for transition	“It seems to me that the focus is on making a quick sale and getting the quotation to the customer as soon as possible, instead of really nurturing that relationship.”	I6
			“At the company the [main] focus is on selling new machines. We have lots of processes that are in some cases outdated, not relevant to the size of our company. It is not helping, but it keeps people ticking the boxes.”	I9
			“We were looking for a flexible flow wrapper that we could use to pack different products in the future . . . but the salesperson was only interested in making a quick sale.”	I11

Misalignment between distribution of managerial attention and servitization strategy		Struggle to develop transition capabilities	“The process should be standardized, but there are still many employees who do not work towards the same process . . . well, certainly I feel that the packaging was a bit of an island inside FoodPak – with everyone doing their own thing, really.”	I7
			“All my proposals that could facilitate transition were overruled by the Financial Manager for budget reasons. . . . The Financial Department seems to be running the company; we focus on projects that can deliver immediate results and rarely seek customer feedback after the sale.”	I2
	Departmentalism	Goals and incentives are not consistent among ID's functions	“One of the issues we had with incentives schemes was difficulty coming up with one that sort of fits everybody . . . Some engineers wouldn't engage in that at all . . . My job is to fix machines, not to sell machines.”	I1
			“Sometimes when salespeople are under pressure to sell, that can get viewed as . . . I'm trying to make it happen, don't put obstacles in my way – you're there to take obstacles out of my way [referring to salespeople's view of the technical function].”	I1
		Competition instead of collaboration among different functions	“There seems to be a disconnect between the technical projects team, sales, and the service team . . . they blame each other for problems instead of working together on fixing them.”	I1
		Knowledge silos within different functions	“The salespeople don't use CRM . . . they could not only record product quotes within that system, but also append more non-technical information to the customer name. All of that knowledge could be held [and shared] within that system . . . this is how you start losing all those 'nuggets,' so we acknowledge it is not very joined up at the moment.”	I1

Ineffective knowledge management within the ecosystem	Ecosystem knowledge lost internally		“All the time when you have silos of knowledge and info dotted around the company, you’ll never be able to provide that service. . . . We’d have that info and make a note in three months’ time and see how they are getting on. We’re totally failing in sharing that info.”	12
		No codification of holistic customer and production equipment information (lack of processes)	“It’s so critical that customer information is shared and not kept in the salesman’s head, because if that salesman leaves us . . . that’s something that happened to us; we had a couple who moved on and they took that information with them. Knowledge is gone with the sales representative. They don’t deliver any formal reports to the head office.”	14
			“The sales team finds it [CRM] quite difficult to use, so there’s a tendency for them not to use it. It’s a fairly old piece of kit and we tend to use it more as a transactional filing cabinet.”	12
			“The last training I did was excellent . . . there was a lot of educational talk on flow wrapping machines followed by a workshop where we asked questions. Perhaps it was too much to digest, and to be honest I forgot a lot.”	15
		Technophobia	“I’ve been chasing for 7–8 years to upgrade it [CRM]. We’ve had an agreement from MD but it was overruled by the Finance Department.”	12
		Information flow problems within ecosystem	“The biggest reason why the Technical Manager can’t clear it [quote] out within a fixed period of time, which is 2 to 5 days, are the suppliers. They’re not providing the information on time . . . actually, it takes them twice than the industry average to provide a customer quote.”	17

	Limited knowledge transfer within ecosystem		“I had several good ideas [for] how to improve the machine to be attractive to the food industry manufacturer . . . the salesperson wasn’t interested in my suggestions [for] how to improve the off-the-shelf piece of machinery they sold us.”	I12
		Only technical & transactional data shared within ecosystem	“When we sell the machine we ask for the range of products that they want to process on the machine, and we need to know the dimensions, the weight and type of product.”	I5
			“We have open channels with the suppliers. That’s why you have the technical gatekeeper . . . they have regular contact with suppliers to specify the machines.”	I2

Figure 2 Servitization-readiness decision tree

