The influence of efficiency pursuing on business streamlining 2.0

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Abstract
Purpose – The purpose of this study is to develop and validate the business streamlining (BS) model proposed in 2017.
Design/methodology/approach – This study/paper develops and validates the qualitatively generated BS model, a conceptual model of service sourcing relationships, by testing it quantitatively. A survey was sent to chief executive officers, chief purchasing officers or facility managers in 764 private or public companies in Sweden with an annual turnover exceeding € 10m. The categories were tested and analyzed by means of factor analysis.
Findings – The BS model for managing service sourcing processes was confirmed to be significant overall, meaning that it is applicable irrespective of service sourcing context. The efficiency pursuing (EP) was found to have an interlinking role that calls for a revision of the BS model. Furthermore, the four categories tended to load pairwise.
Research limitations/implications – Although this cross-sectional study confirms the relevance of the BS model for managing service-sourcing processes, further studies should examine both the relative significance of its categories in different service-sourcing contexts and why the four main categories tend to pair.
Practical implications – The results support that the model is flexible and adaptable to a wide range of service-sourcing circumstances. Irrespective of the relative complexity of facility management (FM) sourcing processes, the categories can be adapted to fit the service sourcing context. Thus, it can be used as a tool to analyze and facilitate strategic decision-making.
Originality/value – The paper validates that the BS model can represent the dynamics of different service-sourcing processes, regardless of the complexity of the context.

Keywords Business streamlining, Sourcing efficiency, Management tools, Service sourcing, B2B services, Service purchasing, Supply management, Facility management, Business services

Paper type Research paper

Introduction
In light of the growing service economy (Ellram and Tate, 2015), as well as globalization and trends of specialization and externalization (Busi and McIvor, 2008), the relative importance of service sourcing (Ellram et al., 2004, 2007; Fitzsimmons et al., 1998; Haensel and Hofmann, 2018) has grown in the past few decades. Typically, service sourcing was viewed as less important than the sourcing of goods (Smeltzer and Ogden, 2002), and compelling evidence shows organizations lacking expertise in service sourcing resulting in half their outsourcing relationships being abandoned prematurely (Li and Choi, 2009). However, the attitude and attention toward service sourcing are gradually changing (Heinis et al., 2022), as specialization on core processes is necessary to keep competitive. Thus, there is growing recognition of the need for organizations to develop and improve service-sourcing practices (Ellram and Tate, 2015; Haensel and Hofmann, 2018; Heinis et al., 2022; Jensen, 2017).

The sourcing of services is generally considered to be more complicated, complex or just different from purchasing goods (Axelsson and Wynstra, 2002; van der Valk and Rozemeijer, 2009) and therefore associated with major challenges, uncertainties and high risk of failure (van der Valk and Wynstra, 2012). Depending on the type of business, the impact and ongoing value, complexity and risk may vary from being less important to a vital part of core business processes (Ellram and Tate, 2015; Price, 2004; Vitasek, 2016). Consequently, externalization can often be regarded as a strategic decision that can lead to positive effects throughout the entire organization, such as improved financial performance, a heightened focus on core competencies and an increased ability to respond to environmental changes (Gilley and Rasheed, 2000). However, gaining the efficiencies sought by outsourcing has been proved to be harder than most firms expect (Lahiri, 2016). Thus, dealing with perceived inefficiencies associated with the...
procurement of services and evaluating the reasons that lead to these inefficiencies is a challenge not only for practitioners but also for academics (Heinis et al., 2022).

The business streamlining (BS) model (Molin and Åge, 2017) was developed by using grounded theory (Glaser, 1978, 1998; Glaser and Strauss, 1967) as a flexible framework to address the challenges of sourcing services efficiently. Integration is crucial to consider when buying business services (Haensel and Hofmann, 2018); the BS model integrates four main subprocesses that are central for the successful sourcing and ongoing life-after-purchase management of the uncertainties surrounding complex service sourcing projects. Thus, BS is the core process describing the ongoing management of four different subprocesses found to be central in the dynamic management of service sourcing. The relative importance of these four areas is context-dependent and more or less emphasized depending on the nature of the sourcing project and different stages of the ongoing contract management. In turn, each subprocess contains several subsubprocesses.

Although the BS model was generated in the context of large facility management (FM) contracts encompassing several service areas, it was argued that the processes depicted by the model are general, based on theoretical generalization of grounded theory. Thus, because the flexible and dynamic nature of the BS model, it was assumed that the four main processes supporting BS are likely to be applicable in any kind of purchasing processes of business services. This, however, had not yet been tested quantitatively.

Therefore, the purpose of this study is to develop and validate the BS model. In other words, the research question is: to what extent can the four underlying processes of BS be confirmed quantitatively? The remainder of this paper is organized as follows. The next section presents a brief review of the four processes of the BS model and the generation of hypotheses. This is followed by an explanation of the study’s methodology. We then present the results of the study and analyze whether the hypotheses can be supported or not. The paper concludes with a summary of the major conclusions, implications and contributions of the study.

**Literature review – business streamlining**

The BS model (Molin and Åge, 2017) was originally developed because the lack of an integrated model depicting the main concerns of actors managing the initial stages (specification, selection and contracting) as well as ongoing post-contract purchasing processes in major FM services contracts, encompassing an array of different business services. It was developed by use of grounded theory (Glaser, 1978, 1998, 2001, 2006) to capture the dynamics of the entire service sourcing process, including ongoing life-after-purchase processes.

BS is the basic social process capturing how actors resolve their main concern in service sourcing processes: to manage their business by streamlining, by making business processes simpler, more effective and/or more productive. In other words, the main purpose of BS is to highlight the sourcing and management processes that need to be considered to establish efficient and productive service sourcing relationships. This is done by managing four interrelated and evolving subprocesses or activities: management tool development (MTD), purchasing organization development (POD), efficiency pursuing (EP) and relationship adaptation (RA). Thus, the BS model offers a broad and integrated view of service sourcing processes, depicting how different subprocesses, which are commonly depicted one at a time in the literature, are integrated and interrelated over time. (Molin and Åge, 2017). Below each subprocess is described and contextualized in relation to various studies.

**Management tool development**

The use of management tools is widely established in business management (Rigby and Bilodeau, 2005) and FM services (Amos et al., 2019). In service-sourcing contexts, the ongoing evolution and improvement of management tools are necessary for cost control and minimization of value leakage in service delivery processes (Ellram et al., 2004), efficient evaluation processes and desired service outcomes (Florea et al., 2022; Haensel and Hofmann, 2018). An essential aspect of service sourcing is the formulation and specification of service-level agreements (SLAs) (Beaumont, 2006) that are often characterized by ongoing modifications throughout the contract period (Molin and Åge, 2017).

MTD consists of three subcategories, which comprise the main types of tools used by buyers of industrial services:

1. contract development;
2. SLA development; and
3. management report development.

The first subcategory refers to the process by which the overall functional contract is developed in a service-sourcing relationship. This development process can be either open or predetermined by the buying organization. A more open contract development procedure can result when the buyer is approached by one or more service providers that are trying to sell their solutions. In such a situation, the contract arises from ongoing interactions and discussions. In more predetermined situations, the buyer formulates requests for a proposal that increases the degree of formalization of the overall contract and its contents.

The second subcategory, SLA development, refers to the process by which the contents of service delivery within the frame of a contract are defined. An SLA usually defines each individual service area within a contract. Thus, each SLA can be viewed as an extension of the overall contract, with the major difference being that SLAs are intentionally formulated to allow for development and revision during the contractual period. A developed SLA typically encompasses brief descriptions of functions, goals, definitions, scope and responsibilities; demands regarding function and performance, materials, quality assurance and quality goals; and contact persons. A less developed SLA may only encompass a broad definition of functional responsibilities that may result in conflicting interpretations.

The third subcategory, management report development, refers to the need for regular reports and/or accounts regarding the performance of service deliveries. These reports can range from informal oral presentations (reports) to formal quarterly
documents, including regularly reported quantitative measures (such as key performance indicators [KPI]) and/or qualitative accounts. The aim of all such reports is to give the buyer an impression of how the service provider performs, but they also provide a way for the service provider to legitimize its performances and provide an overall picture of development efforts. Over time, formal management reports tend to become internal benchmarks from which service deliveries are evaluated (Molin and Åge, 2017).

To sum up, by means of theoretical generalization, MTD and its subprocesses have been found to affect BS. Accordingly, we hypothesize as follows:

H1. The more developed the management tools, the higher their positive influence on BS.

Purchasing organization development
Successful sourcing strategy and practice is dependent on being aware of the organization’s absorptive capacity, i.e. matching development ambitions with the characteristics and abilities of the internal purchasing organization (Schiele, 2007). Firms’ absorptive capacity may depend on organizational structure (Van den Bosch et al., 1999), effective internal knowledge sharing (Jansen et al., 2005), supply chain resilience (Salam and Bajaba, 2022), cross-functional integration and collaboration (Meeus et al., 2001) and the type of relationship (Dyer and Singh, 1998). Thus, there is often an ongoing need to adjust and refine the purchasing organization in dynamic contexts.

Therefore, the second category in the BS model, POD, consists of two subcategories that refer to the gradual adjustments and planned changes of the buying organization, as well as the extent to which the service deliveries are personalized or de-personalized during these processes. The subcategories are as follows:

- adjustment and change; and
- (de-)personalization.

The adjustment and change subcategory refers to the way in which contractual dimensions (described above under the MTD category) require changes within the purchasing organization. There is often a consensus at the top management level regarding the organizational structure. However, there is also a great challenge in implementing these structures at the tactical and operational levels. For example, the top management can presuppose that the buyer and seller organizations should interact on a regular basis. However, it can often be difficult to make such meetings happen, as doing so often requires changes in purchasing organization and behavior.

(De-)personalization illustrates that there may be different views and interpretations regarding what a service contract encompasses. Conflicting interpretations may exist not only between different buying firms but also within the same buying firm. On one hand, a buying organization may choose to assign contacts (buyers) to communicate the buying unit’s needs and priorities on a regular basis. On the other hand, a different buying unit within the same organization may interpret a contract differently. For example, one party may feel that the need for personal interaction is minimal, whereas their counterpart thinks otherwise; this is an example of a depersonalization dilemma (Molin and Åge, 2017).

To sum up, by means of theoretical generalization, POD and its subprocesses have been found to affect BS. Accordingly, we hypothesize as follows:

H2. The more developed the purchase organization, the higher its positive influence on BS.

The BS model (Figure 1) incorporates 4 main categories and 11 subcategories. In all, this means 15 unique category or subcategory names. To enhance readability, we have chosen abbreviations of subcategories that are clearly related to the four main categories (e.g. MTD) by assigning a number (e.g. MTD1) rather than creating 11 more entirely unique abbreviations for subcategories. Thus, MTD encompasses three subcategories: contract development (MTD1), SLA development (MTD2) and management report development (MTD3). POD encompasses two subcategories: adjustment and change (POD1) and (de-)personalization (POD2). EP includes three subcategories: self-evaluation (EP1), economization (EP2) and competence buying (EP3). RA includes three subcategories: formally/informally managed (RA1), buyer maturity (RA2) and variability of importance (RA3).

Efficiency pursuing
Service sourcing represents a source of cost as well as of performance improvement and favorable outcomes depend on meaningful and context-dependent involvement of supply management (Ellram and Tate, 2015). With regard to the pursuit of efficiencies, parties need to agree on how to obtain them (Doran et al., 2005). If improved efficiency as well as value is sought, carefully crafted collaborative agreements nurturing interfunctional cocreation of value seem preferable (Mukhtar et al., 2023; Vitasek, 2016).

The category of EP refers to the constant and continuous aim to create or identify areas of efficiency gains throughout the entire sourcing process. This is true for both buyers and service providers since there is little room for surprises with increased costs. EP consists of three subcategories:

- self-evaluation;
- economization; and
- competence buying.

The subcategory of self-evaluation refers to both the buyer’s and the service provider’s evaluations of their own organizations’ efficiencies or lack thereof. Service providers are under constant pressure to evaluate and follow up on their service deliveries. This may be driven in part by the buyer, who tends to expect regular (often quarterly) management reports that can be used as benchmarks throughout the course of the contract. Typically, the more standardized (bundles of) services bought, the lower the margins, which places high demands on continuous cost control and follow-up.

Self-evaluation may also lead to the buyer initiating internal improvement projects of service management. To obtain the efficiencies sought, it is in the interest of the buyer to find a balance between control and trusting the service provider to independently perform their value-creating activities. Consequently, a buyer educating the organization what employees can expect in terms of the scope of service provision will be likely to avoid unnecessary time-consuming dissatisfaction and inefficiencies.
Economization commonly involves financially based pressures from different kinds of actors. These can include buyer-initiated pressures on the service provider, in which the buyer makes seemingly unrealistic assumptions about what is included in a functional contract (although the buyer is aware of the service provider’s tight margins). However, it can also comprise internal, short-term, owner-related (venture capitalist) pressures on the service provider to produce sufficient results to become an attractive sell-with-a-profit company within three to five years of ownership.

The third subcategory of EP, – competence buying – involves ensuring buying efficiency by acquiring the service provider’s expert competence in performing business services. The buyer is typically preoccupied with developing its own core capabilities and therefore lacks the competence and resources required to develop its internal service functions (Molin and Åge, 2017). To sum up, by means of theoretical generalization, EP and its subprocesses have been found to affect BS. Accordingly, we hypothesize as follows:

\[ H3 \]. The more developed the EP, the higher its positive influence on BS.

**Relationship adaptation**

RA refers to adjusting one’s behavior and communication style, i.e. social exchange, depending on different contexts (Hallén et al., 1991) and evolving relationship processes (Cousins, 2002). In sourcing relationships, the degree of adaptation has been found to depend on whether relationships are characterized by low or high involvement (Gadde and Snehota, 2000) and/or different service sourcing contexts (van der Valk and Rozemeijer, 2009). Thus, this category refers to the process by which relationships are developed, formed and adjusted in dynamic service-sourcing contexts. The dimensions that affect relationship development are represented in this study by the following three subcategories:

- formal or informal purchasing process;
- buyer maturity; and
- variability of importance.

Formal or informal purchasing process refers to the degree of formalization, which affects the way the buyer–provider relationship develops. For example, whereas a private buyer can choose which service providers to approach, the Swedish Law of Public Procurement requires a public buyer to announce any public purchasing projects that exceed a threshold value. As these procurement processes need to be performed by the book, public purchasing relationships tend to be more formal.

The second subcategory, buyer maturity, refers to the level of experience the buyer has with regard to sourcing services (Molin and Åge, 2017). One of the greatest challenges of services purchasing is to formulate specifications (Axelsson and Wynstra, 2002; Fitzsimmons et al., 1998; Jackson et al., 1995), as they affect the development of service delivery standards on which the buyer–provider relationship is built. First-time buyers tend to adopt relatively open specifications, relying heavily on service providers to educate them, whereas more experienced buyers are often more capable of identifying and expressing their needs.

The third subcategory, variability of importance, refers not only to the relative importance of the various outsourced services within a functional contract but also to the different interpretations of importance depending on the different buying units within the same contract. For example, two different buying units within the same buying firm may develop different kinds of relationships with the service provider. While one unit may develop a relationally oriented operational partnership, the other may adopt a more distant, formal and transactional type of relationship. This can result in different attitudes toward the service provider (Molin and Åge, 2017). To sum up, by means of theoretical generalization, RA and its subprocesses have been found to affect BS. Accordingly, we hypothesize as follows:

\[ H4 \]. The more developed the RA, the higher its positive influence on BS.
Method

Questionnaire development
This study set out to validate and develop the BS model (Molin and Åge, 2017) quantitatively. That model served as the underlying conceptual foundation when structuring the questionnaire. However, the respondents were not informed about the model and its role for the formulation and the clustering of questions. On the one hand, it is possible that the questionnaire structure may have affected respondents’ answers since a respondent well acquainted with service-sourcing research may have prior knowledge of the model. On the other hand, the questionnaire was extensive, and a well-structured and logical questionnaire is a precondition. We did not receive any feedback questioning the relevance of the questionnaire, neither in pretesting nor while collecting the data.

The first challenge was to construct a questionnaire capturing all categories and subcategories of the BS model as well as making sure that respondents understand the concept of facility management services. FM services include a wide range, specifically 32 different kinds of services as defined by International Facility Management Association (IFMA) Sweden (IFMA, 2016). Therefore, prior to delving deeper into questions related to the BS model, respondents were asked to provide background information, such as the firm’s annual turnover, number of employees, the respondent’s position, etc. To ensure the respondents understood what services the survey encompassed, respondents were asked to specify which particular FM services were sourced among the 32 different ones. In addition, respondents were asked to assess their organization’s buying competence for FM services versus goods, as well as provide information regarding the firm’s experience of sourcing FM services. In total, the questionnaire included 95 questions, primarily asked in the form of a seven-point Likert scale, divided into six sections. Section 1 included background questions covering for example organizational background, respondent’s position and experience, organizational FM-sourcing experience and, organizational service sourcing competence relative the sourcing of goods. Sections 2–5 were built around the four categories of the BS model (see Figure 1): (2) management tool development (MTD), (3) purchasing organization development (POD), (4) efficiency pursuing (EP) and (5) relationship adaptation (RA). In total, 55 questions, three to eight questions per subcategory, were assigned to the 11 subcategories (MTD 1–3, POD 1–2, RA 1–3, EP 1–3), of which 39 questions were subsequently used in the factor analysis. Section 6 encompassed digitalization processes, which were not used in this paper.

To ensure data quality, three control questions were placed strategically in the survey to ensure respondents were attentive (Arampatzi and Burger, 2020). This allowed us an opportunity to assess if the respondents interpreted the questions correctly and that answers were in line with those provided earlier. All responses turned out to be accurate and in line with what would be expected. Furthermore, to reduce response bias, we used straightforward and uncomplicated wording to avoid confusion (Malhotra et al., 2017). Before administering the questionnaire, it was pretested (Malhotra et al., 2017) on a purchasing manager to assess practical understandability and length, and it was scrutinized by a scientific expert on quantitative methods. The purchasing manager confirmed the understandability and logic but raised concerns regarding the lengthiness of the survey. We kept the current format as the alternative of administering two or more questionnaires at different occasions to obtain the same amount of data was deemed too risky from a methodological point of view. The scientist double-checked the survey to remove items least related to the constructs, suggested additional items and checked logic and language.

Sampling and data collection
Following a judgmental (purposive) sampling approach (Leedy and Ormrod, 2015) and using data from retriever, company websites and data from annual reports of each firm, we distributed the survey to a variety of private or public companies in Sweden. The lower inclusion limit was set to companies with a turnover of no less than € 10m and no less than 50 employees, which resulted in 764 unique judicial company names. Inclusion limits were set to exclude the likelihood of including firms with no or limited experience of buying FM services. The survey was sent to respondents holding leading positions, such as chief executive officers, chief purchasing officers or FM managers, which means they have an overall responsibility and knowledge of FM service sourcing in their respective organizations. In some cases, respondents referred the survey to other experts on FM sourcing in their organization.

The survey data was collected through a multistep approach. Prior to sending the survey to the full sample, the researchers conducted four telephone interviews within the sample group to ensure that the questionnaire was understandable. The digital survey was then sent by email to the 764 firms. After 30 days, 32 responses were collected. Following Kumar et al. (2011) suggestion, the managers of each firm that initially did not respond were contacted and offered assistance in answering the survey. After four follow-up reminders, including 22 telephone interviews to complete the questionnaire, an additional 73 responses were received. In total, 105 valid responses were collected resulting in a response rate of 14%. This is in line with some other studies investigating similar organizational phenomena. For instance, Hult et al. (2004) had a 19% response rate, whereas Grewal and Tansuhaj (2001) obtained a 14% response rate and Prajogo et al. (2012) 13.1%. Given the lengthiness of the questionnaire, the time and resources spent on obtaining an acceptable response rate was expected.

Measurement, reliability and validity
To evaluate the BS model, we used factor analysis as the evaluative instrument. First, to examine nonresponse bias, frequency analysis, descriptive analysis and correlation analysis were conducted to investigate the effects of nonrespondents. Following these processes, 48 (out of 95) questions were selected for this study, consisting of nine demographic questions and 39 (out of 55) questions/statements regarding the categories and subcategories of the BS model. Furthermore, demographic variables were used to identify the type of company, position of the respondents, what types of FM services are sourced and experience with FM sourcing, to facilitate the classification of companies in the analysis.

The factor analysis rotated the questions to find commonalities between the underlying subcategories. During this process, factors emerged among those subcategories with the closest touch points, i.e. those forming the strongest factor
loadings whereas rotated in the factor analysis at the same time as scoring acceptable results on covariance, i.e., Cronbach’s alpha. Thus, the analysis was used to estimate/identify relationships when there was reason to suspect that several dependent variables affected the independent variable (Hair et al., 2013). This resulted in ten factors. Table 1 lists the results of factor loadings and Cronbach’s alpha regarding the measurement of factors formed from different BS categories. The reliability of all scales is satisfactory, with α scores ranging from 0.60 to 0.90 (Hair et al., 2013). Questions that influenced quality measurements such as Cronbach’s alpha below 0.60 were removed.

Results and analysis

Hypothesis testing and analyses

The study applied a confirmatory factor analysis (CFA) to simultaneously validate the measures of all variables considered. Table 1 shows the result of this CFA and Cronbach’s alpha phase. The item loadings and overall model fit results were suggested to be acceptable, unidimensional and valid when measures indicated loading paths between 0.6 and 0.9.

Cronbach’s alphas (see Table 1) indicate satisfactory reliability of all categories of BS (Han et al., 2008). We used the Pearson r correlation between the categories and subcategories of the BS model and Cronbach’s alpha to assess reliability. After that, we conducted factor analysis to control the single effect of different categories and subcategories. Factor loadings below 0.350 were excluded before running a refined factor analysis. In that way, single-item effects of low-factor scoring items were excluded. Eventually, more solid factors emerged during this process (Han et al., 2008).

As shown in Table 1, MTD proved to be a prominent category by being an essential part of four of the six highest factor loadings: F1, F3, F5, F6. Both F1 “Management tool development” and F3 “Control and monitoring” indicate that MTD is highly related to adjustment and changes in the POD. Thus, MTD is closely related to the buyers’ POD.

A similar pattern emerged between RA and EP. The F2 and F4 factors are composed of different subcategories of RA and EP. F2 “Buyer maturity and self-evaluation” supports the notion that for an organization to obtain buyer maturity, there need to be processes of self-evaluation in place. F4 “Relationship adaptation and economization” confirms the tendency of FM-service buyers to lean towards more formal, low-involvement relationships, favoring economically sound contracts, as sourced services are typically noncore. Thus, judging from the four strongest factor loadings (F1–F4), MTD and POD tend to relate strongly together, as do RA and EP.

F5 “(De-)personalization” is the only factor where a clear relationship emerges between more than two categories of the BS model. F5 consists of subcategories of POD2, MTD2 and EP3. “(De-)personalization processes” (POD2) is the most influential category, but it is no surprise that it is related to SLAs proposed by the supplier/provider (MTD2) and competence buying (EP3). Buying hassle-free without the need for interaction means expectations on the service provider to make independent decisions, to propose the appropriate quality and content of SLAs, as well as expectations on the service provider to perform better than if the service was performed in-house. Therefore, these categories should be related.

F6 “Contract development and economization” is highly influenced by MTD, and especially the different aspects related to the subcategory of contract development (MTD1). Although the factor loading of economization is comparably weak, the relationship between contract development (MTD1) and expectation of continuous improvements (EP2) is natural, as such expectations are often formalized in contracts.

Examining F7 “Efficiency pursuing and variability of importance,” in the pursuit of Economization (EP2), or best possible value for money, it is important for buyers to realize that employees of service providers will prioritize deliveries to entities they have a sound and working relationship with. Service provision is reliant on interaction, and although some services may not be critical to the buyer, the result will most often be of more value if the provider feels that the buyer’s representatives care. Furthermore, F8, F9 and F10 provide further support for the single categories of MTD, EP and RA.

Table 2 illustrates the interrelation between the different categories in the factor analysis. Adopting this perspective, EP’s key role for BS as being the glue holding other categories together emerges. EP typically does not score the highest factor loadings but has a distinguished role in BS by being the only category interlinking with all other categories. In addition, EP is the only category linking with RA which further emphasizes the interlinking role of EP in BS.

The role of EP calls for a remodeling of the BS model as outlined in Figure 2. The core process of BS is essentially motivated by obtaining more efficient service-sourcing processes. EP in turn triggers development processes with regard to MTD and POD in the buying organization ultimately affected by the kind of relationship sought where the buyer and service provider ongoingly develop a jointly suitable relationship through RA processes.

Table 3 shows that H1, H2, H3 and H4 are all supported, meaning that the four tested categories of BS (MTD, POD, EP and RA) have been found to affect BS. Furthermore, all categories (MTD, POD, EP, RA) loaded significantly on their corresponding constructs. The four hypotheses were supported, confirming that the main categories (MTD, EP, RA, POD) are relevant and affect the core process of BS. Thus, our findings and the literature (Amos et al., 2019; Cousins, 2002; Ellram and Tate, 2015; Molin and Åge, 2017; Schiele, 2007) support the explanatory power of the BS model.

However, although it is difficult to evaluate the relative importance of all four categories, the results indicate that H1 (MTD), being an influential factor in F1, F3, F5, F6 and F8 and H3 (EP), being a factor in F2, F4, F5, F6, F7 as well as interlinking with all other categories, have important roles in explaining the core process of BS (see Table 3 and Figure 2). Solely focusing on factor loadings, MTD and POD appear slightly more influential than RA and EP, as there is a clear tendency for POD to form influential factors together with MTD. Furthermore, there is also a clear tendency for the four categories of BS to form close pairs. While MTD and POD tend to relate more closely together, RA and EP show the same tendency. Altogether these observations add further insights into how BS should be interpreted.
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<th>Scale</th>
<th>Item</th>
<th>Cronbach's alpha</th>
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<tbody>
<tr>
<td>F1: Management tool and purchasing organization development</td>
<td>SLA development (MTD2) – Our organization has sufficient competence to formulate sufficiently good SLAs before the procurement</td>
<td>0.886</td>
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<td></td>
<td>Management report development (MTD3) – Our organization expects regular reports including trackable key figures (benchmarks) at management level from our FM supplier(s)</td>
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<td></td>
<td>Management report development (MTD3) – Our organization expects regular tactical-level reports/meetings from our FM supplier(s)</td>
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<td></td>
<td>Management report development (MTD3) – Our organization expects regular operational-level reports/meetings from our FM supplier(s)</td>
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<td></td>
<td>Management report development (MTD3) – We regularly follow up our purchases of FM services with key figures</td>
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<td></td>
<td>Adjustment and change (POD1) – There is understanding within our own organization for what is a good enough FM delivery for what we pay</td>
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<td></td>
<td>Adjustment and change (POD1) – The management (buyer) clearly communicates what expectations the organization as a whole can place on FM deliveries</td>
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<td>F2: Buyer maturity and self-evaluation</td>
<td>Buyer maturity (RA2) – Our organization’s purchasing competence regarding service purchases is equivalent to other types of purchases</td>
<td>0.804</td>
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<td>Buyer maturity (RA2) – Our service purchasing organization is as well developed as other types of purchasing</td>
<td>0.832</td>
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<td>Buyer maturity (RA2) – Our organization has a habit of purchasing FM services</td>
<td>0.816</td>
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<td>Self-evaluation (EP1) – Our organization regularly evaluates our purchasing performance</td>
<td>0.646</td>
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<tr>
<td></td>
<td>Self-evaluation (EP1) – Our organization regularly evaluates our purchasing relationships</td>
<td>0.565</td>
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<td>F3: Control and monitoring</td>
<td>SLA development (MTD2) – SLAs are important to ensure sufficient quality of FM service deliveries</td>
<td>0.832</td>
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<td>Management report development (MTD3) – Continuous follow-up of FM service deliveries is important</td>
<td>0.713</td>
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<td>Adjustment and change (POD1) – Continuous monitoring of FM service deliveries is important</td>
<td>0.828</td>
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<td>Adjustment and change (POD1) – Functioning FM purchasing requires developed competence about FM services within the organization</td>
<td>0.590</td>
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<td>(De-)personalization processes (POD2) – Development of FM deliverables requires regular buyer/seller interaction to be successful</td>
<td>0.718</td>
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<td>F4: Relationship adaptation and economization</td>
<td>Formally/informally managed (RA1) – Formal governance (transactional orientation) of supplier relationships is most effective when purchasing FM services.</td>
<td>0.747</td>
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<td>Economization (EP2) – Business is usually more important than relationship in FM service purchases</td>
<td>0.646</td>
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<tr>
<td></td>
<td>Economization (EP2) – We generally have transaction-oriented relationships with our FM suppliers</td>
<td>0.432</td>
</tr>
<tr>
<td>F5: (De-)personalization</td>
<td>SLA development (MTD2) – We leave it to our suppliers to propose the appropriate quality and content of SLAs</td>
<td>0.707</td>
</tr>
<tr>
<td></td>
<td>(De-)personalization processes (POD2) – Buying hassle-free means that the FM provider delivers independently without the need for interaction</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(De-)personalization processes (POD2) – Functional contracts mean that the supplier is expected to make independent decisions without the involvement of the buyer</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Competence buying (EP3) – We purchase FM services so that the suppliers perform them better than if we performed them ourselves</td>
<td></td>
</tr>
<tr>
<td>Scale</td>
<td>Item</td>
<td>Cronbach’s alpha</td>
</tr>
<tr>
<td>-------------------------------------------------</td>
<td>-----------------------------------------------------------------------</td>
<td>------------------</td>
</tr>
<tr>
<td>F6: Contract development and economization</td>
<td>Contract development (MTD1) – Our service contracts include incentive clauses to promote supplier-driven service development</td>
<td>0.754</td>
</tr>
<tr>
<td></td>
<td>Contract development (MTD1) – It is easy to determine which service development is preferably supplier-driven</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Contract development (MTD1) – It is easy to determine which service development preferably takes place in interaction with the service provider</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Management report development (MTD3) – our management prioritizes FM purchases to a sufficient extent</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Economization (EP2) – We expect continuous improvements and efficiencies from our service providers</td>
<td></td>
</tr>
<tr>
<td>F7: Efficiency pursuing and variability of importance</td>
<td>Variability of importance (RA3) – It is natural and human for service providers to prioritize deliveries to the entities with which they have a deeper relationship</td>
<td>0.657</td>
</tr>
<tr>
<td></td>
<td>Economization (EP2) – Well-developed relationships are a prerequisite for business-related service purchases</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Economization (EP2) – Buying capabilities via functional contracts provides equivalent or better quality than performing them in house</td>
<td></td>
</tr>
<tr>
<td>F8: Specification</td>
<td>Contract development (MTD1) – Detailed and well-specified contracts are essential for effective FM service purchases</td>
<td>0.616</td>
</tr>
<tr>
<td></td>
<td>Contract development (MTD1) – Well-specified contracts are preferable to more comprehensive functional contracts</td>
<td></td>
</tr>
<tr>
<td></td>
<td>SLA development (MTD2) – Well-formulated SLAs for each service area should be specified already when signing (functional) contracts</td>
<td></td>
</tr>
<tr>
<td>F9: Competence buying</td>
<td>Competence buying (EP3) – It happens that we consider in-sourcing FM services</td>
<td>0.700</td>
</tr>
<tr>
<td></td>
<td>Competence buying (EP3) – We have chosen to keep certain FM services in house that work less well to buy</td>
<td></td>
</tr>
<tr>
<td>F10: Variability of importance</td>
<td>Variability of importance (RA3) – The importance of FM deliveries may vary between different units of the buyer</td>
<td>0.740</td>
</tr>
<tr>
<td></td>
<td>Variability of importance (RA3) – The depth and frequency of interaction with the same FM provider differs between different departments in our organization</td>
<td></td>
</tr>
</tbody>
</table>

Notes: Rotation method = varimax with Kaiser Normalization; “Rotation converged in 25 iterations
Source: Authors’ own work
Discussion and implications

The purpose of this study is to develop and validate the BS model. This research gives further support for the notion that contemporary service-sourcing processes “are complex and multidimensional endeavors, in which the actors involved ultimately manage various activities through a process that is best described as business streamlining” (Molin and Åge, 2017). However, three main findings stand out in contrast to the original BS study, and a fourth further confirms the applicability of the model. First, in terms of factor loadings, MTD was found to be the most influential category of BS in this study (see Figure 2). Second, EP is shown to have an important interlinking role. Third, the four categories of BS tend to pair. Fourth, the results support that the BS model is generally applicable to service-sourcing processes because of its dynamic nature. These observations are further discussed below.

The BS model was developed in the context of outsourced industrial service companies involving complex FM contracts encompassing up to 15 different FM service areas or SLAs. The number of such large FM contracts is highly limited in the Swedish market, which means the scope of the survey had to be widened to the sourcing of FM services in general, encompassing a wide variety of contractual types. This requires managerial respondents with overall knowledge of FM sourcing in their respective organizations. Consequently, from a managerial perspective, it is not surprising that the importance of sound MTD is emphasized by respondents.

This research examined the BS model in a general service-sourcing context, meaning that we set no economic, relational or other values for what type of service-sourcing projects to include. Managerial respondents and a general FM service sourcing context indicate that all types of contracts from low to high involvement (Gadde and Snehota, 2000) and of a transactional or relational nature (Vitasek, 2016) contribute to the scope of this research. Consequently, this means answers tend to be managerially and strategically influenced, which are likely to contribute to the high factor loadings on MTD relative to other categories of the BS model.

The management of FM contracts is typically divided into three different levels: strategic, tactical and operational (Atkin and Brooks, 2021). While the original BS model included influences from all three levels, this is a limitation of the current study since managers’ perspectives tend to be strategic. This probably explains why MTD was found to be more influential than other categories (see Table 2). At the managerial level, the actors’ main concerns tend to be focused on solid reports on which to base sound decision-making, whereas it may be more important on operational levels to focus on relationships with service providers affecting daily working procedures. Respondents are likely to answer differently depending on which kind of management positions they hold. Thus, management’s main concern is to manage the service sourcing relationships for the long term, and our results indicate that the most important aspect for management is a solid basis of regular reports supporting decision-making.

Applying factor analysis, the four main categories and their respective subcategories tend to form pairs. While MTD tends to pair with POD (F1 and F3), EP and RA tend to form strong factors together (F2 and F4). Both MTD and POD hold clear development features, which means that each category is likely to directly affect the other during ongoing development.

Table 2 The interrelation between different categories

<table>
<thead>
<tr>
<th>BS-category</th>
<th>Interrelation</th>
<th>By factor</th>
<th>No. of factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>MTD</td>
<td>POD</td>
<td>F1, F3, F6</td>
<td>5 factors</td>
</tr>
<tr>
<td></td>
<td>EP</td>
<td>F5</td>
<td>5 factors</td>
</tr>
<tr>
<td>POD</td>
<td>MTD</td>
<td>F1, F3, F5</td>
<td>4 factors</td>
</tr>
<tr>
<td></td>
<td>EP</td>
<td>F5</td>
<td>5 factors</td>
</tr>
<tr>
<td>EP</td>
<td>MTD</td>
<td>F5, F6</td>
<td>5 factors</td>
</tr>
<tr>
<td></td>
<td>POD</td>
<td>F5</td>
<td>5 factors</td>
</tr>
<tr>
<td></td>
<td>RA</td>
<td>F2, F4, F7</td>
<td>3 factors</td>
</tr>
</tbody>
</table>

Source: Authors’ own work

Table 3 Findings and results

<table>
<thead>
<tr>
<th>Hypotheses</th>
<th>Content</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1</td>
<td>The more developed the management tools, the higher their positive influence on BS</td>
<td>Supported</td>
</tr>
<tr>
<td>H2</td>
<td>The more developed the purchase organization, the higher its positive influence on BS</td>
<td>Supported</td>
</tr>
<tr>
<td>H3</td>
<td>The more developed the efficiency pursuit, the higher its positive influence on BS</td>
<td>Supported</td>
</tr>
<tr>
<td>H4</td>
<td>The more developed the relationship adaptation, the higher its positive influence on BS</td>
<td>Supported</td>
</tr>
</tbody>
</table>

Source: Authors’ own work
Influence of efficiency pursuing
Jonas Molin and Zahra Ahmadi

processes. Thus, MTD and POD can be interpreted as investing in the sourcing “infrastructure,” whereas EP and RA are related to finding and applying efficient cooperative forms in the ongoing management of service-sourcing relationships given the infrastructure. These patterns are in line with respondents stating they work consciously on developing service-sourcing practices in their organizations. For example, F2 “Buyer maturity” is made up of subcategories of RA and EP, which indicates the relatedness between organizations’ buyer maturity and evaluative procedures with regard to service sourcing relationships. Furthermore, organizations generally state that their services purchasing organization is as developed as other types of purchasing, which implies that contemporary organizations have realized the importance and the potential of working professionally with service sourcing procedures. Thus, we found that organizations tend to realize the potential of developing service-sourcing practices, which have been reported to be less developed, structured or focused compared with the sourcing of goods (Ellram and Tate, 2015; Smeltzer and Ogden, 2002; van der Valk and Rozemeijer, 2009). After all, poor service sourcing management is likely to result in unnecessary spending and deteriorating bargaining power, adding to service sourcing complexity and ultimately resulting in greater organizational risk (Ellram and Tate, 2015).

This study confirms the BS model’s relevance in service-sourcing processes. All four hypotheses were supported, indicating that the four main categories MTD, EP, RA and POD (together with their respective subcategories) are all relevant aspects of FM service sourcing, irrespective of organizational turnover, the scope and resources allocated to purchasing organizations or contract value. Consequently, this study supports earlier findings that BS captures the basic social processes and the various activities that need to be managed in FM service-sourcing projects (Molin and Åge, 2017). Furthermore, the relative importance of the four categories may differ depending on the sourcing context. Thus, the results confirm that the explanatory powers of the BS model go beyond large and complex FM contracts, making it applicable in a variety of FM service-sourcing contexts whether simple or complex in nature.

To sum up, the findings reveal different effects of involving the development of management tools, which implies that MTD is viewed as more important or influential compared to the categories of the original BS model, according to the managers we surveyed. MTD is the one category that most significantly affects other categories through its subcategories. However, the study also indicates that all four categories are significant. There may be reason to differentiate among the categories; the degree of impact apparently depends on the type of sourcing project, the stage in the purchasing process and whether interaction takes place on a strategic, tactical or operational level.

Managerial implications
BS 2.0 is a development of the practically derived theory of business streamlining (Molin and Åge, 2017). The BS model outlines the respondents’ main concerns in service sourcing and has proven to be applicable irrespective of the stage in the purchasing process and the complexity of the service sourcing project. Thus, the BS model is a flexible and useful conceptual structure that can serve as a managerial tool that can be applied for different purposes, such as communication, evaluation and development. In terms of communication, the four main categories and eleven subcategories can help structure discussions at the strategic, tactical and operational levels, concretizing the significance and contribution of input of different roles/functions and the importance of integrating these roles for the overall quality of service sourcing processes. Subsequently, the categories and subcategories of the BS model can be used as an evaluative tool in search of strengths and weaknesses, and pinpoint possible (sub) categories in need of either internal or joint development. Thus, the BS model can facilitate joint or internal quality improvement of value-creating activities in service-sourcing processes.

In terms of internal (buyer) development, the categories and subcategories of MTD and POD can serve as useful tools in identifying possible sources for becoming a more knowledgeable buyer of services. For example, MTD can support decisions and evaluations of which KPIs are best suited for facilitating the quality-of-service provision sought. POD is focused on the requirements on the purchasing organization to facilitate and ensure valuable service provision. Furthermore, the BS model supports the management and integration of different roles/functions, depending on the criticality and nature of the service-sourcing project. Thus, becoming more knowledgeable of service sourcing is likely to facilitate productive interaction with service providers in pursuit of mutual efficiencies (EP) enabling relationship adaptations (RA) that are characterized by joint value creation rather than risk becoming naïve beliefs thereof.

Conclusions
BS is a practically derived theory capturing the multidimensional processes characterizing complex FM service sourcing (Molin and Åge, 2017). This study contributes by a revised BS model emphasizing the interlinking role of EP. It also confirms the extended applicability of BS and its usefulness in a wide variety of service-sourcing contexts. When examined in a wider FM service sourcing context, meaning FM service sourcing in general and not only in more complex sourcing contexts containing service bundles, the applicability of the BS model and categories still holds. Thus, the categories of the BS model have proven to be adaptable and adjustable to the context and needs at hand irrespective of complexity. Furthermore, the results imply a growing organizational awareness that service sourcing requires improved purchasing management procedures that nurture ongoing quality improvement/value management processes and involve the different aspects of service sourcing relationships.

The results indicate that the BS model is likely to apply regardless of the complexity of the service sourcing context. The categories can be dynamically adjusted over time depending on context (strategic, tactical, operational) and what stage of the purchasing process is relevant at the time. Thus, although the factor analysis shows that management tools (MTD) are an essential constituent of ongoing service sourcing management, it may also be interpreted as an indication that the relative importance of the model’s categories and their tendency to pair is context-dependent and emphasized, depending on the stage and nature of the service sourcing project.
Theoretical contributions
According to Glaser (1998), a grounded theory is constantly evolving and never complete. This study contributes to the continuous development of the BS model. As was requested, the BS model has been tested quantitatively. This study was also the first attempt to assess the relative importance and relationships of the various categories in different purchasing contexts, resulting in a revised model. The validity of the BS model was tested quantitatively, and its applicability was confirmed in new contexts beyond the sourcing of large and complex (bundled) FM service contracts. Although the BS model has yet to be tested in service-sourcing contexts other than FM services, the results indicate that a strength of the model is its adaptability to varying service-sourcing situations.

Limitations and implications for further research
A limitation when testing this kind of model, which includes four categories and 11 subcategories, is that a relatively large time-consuming survey is required. The option of dividing the survey into two or more smaller surveys was ruled out for methodological and practical reasons. We are thankful to all respondents who completed the survey.

The strong confirmation of H1 emphasized the unique impact of MTD and its subcategories. H2, H3 and H4 provide important lessons for further research in the future. For example, if the same survey were conducted on tactical and/or operational levels, it is possible that the relative importance of categories would be valued differently, i.e. the respondents' main concerns might differ. Thus, the interrelationships between categories of the BS model need to be further researched in different contexts. Furthermore, in this study, the categories tended to pair. More particularly, the external and internal effects of MTD on POD could be researched through mediating and moderating analyses, shedding further light on their interrelatedness in service-sourcing processes.

References