“Shared service centre (SSC)— analysis of factors that influence standardisation.

A business model for multinational companies”

Author’s names and affiliations

Gustavo Porporato Daher
Professor of Accounting
Universidad Autónoma de Madrid
Paseo Riomonte, 35 – Galapagar (28420) – Spain

gporporatodaher@gmail.com
+34 650318678
Abstract

**Purpose:** This research aims to describe the factors that influence standardisation of SSCs, adapting a previous model to a specific approach for private multinationals companies and proposing a generalist business model.

**Methodological approach:** inductive case study approach is used, investigating six diverse SSC set-ups of leading private multinational companies, replicating Janssen and Joha (2014) research.

**Findings:** the 12 factors identified by Janssen and Joha were challenged based on the case studies findings, modifying seven, discarding three and proposing three new factors. After correlating these factors, nine are to be considered the most relevant. A model of the influence of these factors to the level of standardization is included as a guide for practitioners.

**Research limitations:** factors that shape SSC are wide enough not to categorise them. A sample of six diverse cases is informative enough to allow theoretical generalizations.

**Practical implications:** practitioners could evaluate current and future SSC set-up through actions that lead to achieve higher or lower levels of standardization.

**Originality/value:** improves a prior attempt defining factors that influence standardisation of SSC structure, validating and generalising findings on standardization.

**Keywords:** SSC; shared service centre; business model; standardization; multinational companies; case study.
1- Introduction

Large organizations have been questioning during last decades the distinction between core and non-core activities (Prahalad and Hamel, 1990), hence trying to define who the core and peripheral workers are (Atkinson, 1984). These organisations have been challenging if support functions were part of the value chain to be supported with own resources. Functions such as IT, finance, procurement, human resources that were located within business units or head office have been unbundled to be integrated into a new reporting unit that lays outside the divisional line hierarchy. Shared Service Centre (SSC) model was put in place typically at lower cost location, maintaining the management and control within the organisation’s own hierarchy (Herbert and Seal, 2014). There is a coincidence that a SSC entails a kind of organisation that concentrates resources and skills in a consolidated unit specifically designed to provide shared services to the corporate group (Forst, 2001). SSC are being established in private and public organizations to achieve higher level of efficiency (Knol et al., 2014), making SSC phenomenon more complex and less feasible to compare. Despite their expanding presence, they are rarely discussed in the academic literature (Cooke, 2006; Sako, 2006) and there is an absence of in-depth studies (Howcroft and Richardson, 2012).

The primary driver of SSC set up is to reduce costs of support functions, mainly through labour arbitrage and scale benefits. SSC could be set up onshore and/or offshore, as an affiliated entity or outsourced to an external provider and they should be viewed less as a phenomenon of cost saving and more as a challenge of organization redesign (Wang and Wang, 2014). Nevertheless, some aspects of the motivation, deployment and results of SSC implementation are still uncertain (Zhang et al., 2012). There is a need to advance the understanding of SSC with further research focused on drivers, reasons and factors that impact the structure and organization.

Standardization of SSC processes is a primary objective of SSC organisation to achieve full efficiencies. The lack of this characteristic could cause SSC to work in a less effective mode (Ulbrich and Borman, 2012) and could obstruct leveraging SSC capabilities (McIvor et al., 2011). Despite the existence of broad agreement in literature that SSC delivers benefits to the organizations (Farndale and Hoeksema, 2009, Redman et al., 2007), it is not so clear what the constituent elements of a SSC are. It is important to understand and explain the factors that influence the level of standardisation of a SSC, as its future development depends on the generation of benefits to the organisation. Practitioners should understand the factors that standardise SSC since its inception, to benefit of cost savings and service enhancements (Richter and Brühl, 2016).

This research aims to explain SSC standardisation requirements, grounded on business model concept and based on a preliminary research conducted by Janssen and Joha (2014), enhanced in terms of scope, characteristics and size of case studies. The three case studies of the preliminary work were restricted in terms of ownership (governmental entities), size (small and medium municipalities), scope (IT function) and geography (one country), while the six case studies analysed in this paper operate in a private context, with an international background, big volume of transactions, comparable among them due to the influence of Finance function and the locations that provide support to business units, countries and functions around the world. The purpose of
this research is to generalise the conclusions found in preliminaries works, building a general framework on which practitioners can evaluate SSC standardisation characteristic.

2- Shared Service Centre and Business Model

Shared Service Centre

Transaction cost economics (TCE) has been an influential theory to examine the economic impact of the setup of a SSC. While this perspective has been dominant, some scholars studied the impact that a SSC may have on other relevant parties (Robertson, 2010) utilising stakeholder theory. According to TCE, the existence of companies is validated by the search of profits and efficiencies (Williamson, 1981), pursuing actions that will lower transaction costs. SSC can be studied through the lens of TCE as it responds to a strategic decision of achieving efficiencies and savings, while it allows firms to concentrate in their core competencies (Prahalad and Hamel, 1990). Standardisation fits in the concept of efficiency that TCE stands for, as it is an essential element to increase productivity and minimise the cost of transactions. Williamson (1981) remarked that standard economic models is complemented with some form of opportunism. SSC is built upon standard process rules while looks for opportunities to achieve efficiencies. If TCE logic is used to evaluate business processes, the organisation will identify processes that SSC can benefit of and generate cost savings to the company (McIvor et al., 2011).

SSC can be observed as a kind of sourcing arrangement (Janssen and Joha, 2006) that have created a variety of models. A typical structure would involve a single organisation centralising its business services making back office operations function as a business within a business (Lacity et al., 2008). SSC can be a semi-autonomous unit charging fees to internal users based on performance indicators included on service level agreements. Strikwerda (2014) listed the differences between shared service centres and central staff departments, while Janssen and Joha (2006) determined the distinction between a central department, a SSC and outsourcing. Walsh et al. (2008) distinguish five models of SSC arrangements in the non-profit sector, while Schulz et al. (2009) identify seven classification criteria for SSC. Some studies examined SSC in industries such as healthcare (Gupta et al., 2008), finance and accounting (Bangemann, 2005), entertainment and media (Schwender and Leet, 2008), financial sector (Fahy et al. (2002), medical surgery (Sando, 2008) and higher education (Miskon et al., 2013). Aguirre et al. (1998) identified six key principles that could characterize any SSC model while it is suggested that SSC may have different configurations (Niehaves and Krause, 2010). Janssen and Joha (2014) postulate that SSC could be viewed as an umbrella embracing a range of business models. The benefits of a SSC organization were categorised by Reilly (2014) as monetary and quality related; less measurable aspects as strategic focus, flexibility and recognition were also identified. Knol et al. (2014) mentioned that SSC can deliver both, transactional services and complex, knowledge based processes. Baldwin (2001) determined that the motives of a company to establish a SSC include four dimensions, emphasising the complexity of reasons behind the rational of establishing a SSC. Sako (2003) highlighted that a company can appropriate the benefits of standardisation of processes and services implementing a SSC. Seal and Herbert (2013) argue that moving towards SSC model is driven by imitation with other firms.
SSC have been studied from different perspectives although topics are highly fragmented. Richter and Brühl (2016) classified SSC literature in four perspectives and seventeen major research areas. Research area “critical success factors” counted for 24% of literature, showing the interest of research body. Although most of the factors are split in the literature, standardisation is highlighted as both, a success and a failure factor (in case of lack of it). There is a high concentration of studies focusing on public administration (71%), while 65% of studies were performed on European companies, particularly the Netherlands (29%). Richter and Brühl (2016) conclude that SSC related factors evaluated in the literature ought to be enhanced with further research on private companies, expanding geographical scope of the firms evaluated.

**Business Model concept**

The business model concept is essential to any organization (Magretta, 2002), as it provides means to understand, design, analyse and manage strategic choices among functions, business units and stakeholders (Pateli and Giaglis, 2004). Timmers (1998:4) defined a business model as “an architecture for the product, service and information flows, including a description of the various business actors and their roles, and a description of the potential benefits for the various business actors and a description of the sources of revenues”. Afuah and Tucci (2000) described a business model as the method a company gets and uses its resources to offer higher value to customers.

Business model is emerging as a unit of analysis offering a holistic approach to explaining how companies do business and create value (Amit and Zott, 2001), utilised for e-business firms and sporadically with traditional business (Hedman and Kalling, 2003). Even though business models have been present in the economic behaviour (Teece, 2010), the concept has been gaining relevance once internet businesses came to life in the mid-1990s. Zott et al. (2011:1023) revealed that business model has been employed to address or explain “… (2) strategic issues, such as value creation, competitive advantage, and firm performance ...”. SSC business model could be understood as a strategic decision aiming to create value (services and tasks), competitive advantage (quality) and firm performance (cost savings). Value creation mechanisms go beyond the mere reconfiguration of the value chain (Porter, 1985). Amit and Zott (2001) propose four potential sources of value creation through business models: novelty, lock-in, complementarities and efficiency. SSC model can reinforce these value drivers enhancing their effectiveness. Shafer et al. (2005) challenged the definitions, due to its youthfulness and associated research (Osterwalder et al., 2005), and its origin from different disciplines (Shafer et al., 2005; Pateli and Giaglis, 2004). Scholars interest has shifted from definition and identification of the constituent elements (Chesbrough and Rosenbloom, 2002), towards generic models (Hedman and Kalling, 2003). This research seeks to highlight the relevance of the standardisation factor to generalise conclusions across SSCs in private multinational companies, utilising Al-Debei and Avison (2010) business model framework.
3- Research methodology

The research is based on six case studies that identify the factors influencing the standardisation level attained as a measure of their service transformation level (Su et al., 2009). A preliminary work from Janssen and Joha (2014) listed several factors that influence SSC degree of customisation. The aim of this paper is to evaluate, challenge and extend these factors using an inductive case study approach for theory building as outlined by Eisenhardt (1989).

Previous case research is useful in this investigation as the existing body of knowledge is scarce and SSC model should be studied in the context they occur (Yin, 2014). Content analysis was utilised in this research, as it is the method that permits a systematic and objective way of describing and quantifying SSC phenomena (Krippendorff, 1980). Yin (2014) detailed four aspects that a case study should address: construct validity, internal and external validity and reliability. Data was collected through questionnaires, structured interviews with high level managers, reports and companies’ public information, ensuring data was triangulated and constructs validated. Al-Debei and Avison (2010) business model and Janssen and Joha (2014) factors were sufficiently challenged and modified ensuring internal validity. Cronbach’s alpha score was calculated to ensure validity of the questionnaire, while the correlation among factors were evaluated individually and grouped. External validity was achieved on the variety and relevance of cases selected that allow making generalisations from the theoretical business model framework. The case study protocol, designed on factors originally selected by Janssen and Joha (2014), was updated during the research, providing the required reliability as it ensures that data procedures can be repeated, obtaining similar results.

Miles and Huberman (1994) defined a case as “a phenomenon of some sort occurring in a bounded context”. Case study selection was done considering similarities and diversity of nominated SSC and based on convenience sampling ensuring that a wide range of SSC organizations were covered. The six companies selected for the research were identified in international conferences, allowing access to SSC executives and data. Structured interviews with SSC responsible lasted approximately one hour; minutes of meetings were transcribed and shared with participants. Questionnaires were designed following Ilieva et al. (2002) indications regarding pages style, responsiveness of the web-site and relevance of the requested items. Questionnaire included seven identification questions, eleven questions on SSC drivers and sixteen questions related to the outsourcing level achieved by SSC. Questionnaires were handed to selected respondents who were asked to return them within the same day (four cases). Electronic questionnaires were submitted to two respondents who replied the following day. Response rate achieved was 100%, as the combined results of six case studies were shared with participants, following Dillman (1991) suggestion.
Case studies

The research encompasses a group of SSC organizations that belong to private multinationals companies. External validity of the research requested to include a variety of cases to generalise findings. Relevance of the sample of companies required to have entities reported in the 2016 Fortune 500 list; there are three companies included in it. A description of each company is covered in this section, pointing out commonalities and uniqueness of each case, while figure 1 shows an overview of their main characteristics.

Table 1. Main characteristics of the six case studies.

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Case 1</th>
<th>Case 2</th>
<th>Case 3</th>
<th>Case 4</th>
<th>Case 5</th>
<th>Case 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industry</td>
<td>Higher education</td>
<td>Alcoholic beverages</td>
<td>Media and TV</td>
<td>Energy supply</td>
<td>Pharmaceuticals</td>
<td>Industrial Technology</td>
</tr>
<tr>
<td>Fortune 500 report</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Annual turnover</td>
<td>Usd 550 million</td>
<td>Usd 1.4 billion</td>
<td>Usd 1.6 billion</td>
<td>Usd 20 billion</td>
<td>Usd 25 billion</td>
<td>Usd 117 billion</td>
</tr>
<tr>
<td>SSC Geographical coverage</td>
<td>National</td>
<td>Regional</td>
<td>Regional</td>
<td>Regional</td>
<td>Global</td>
<td>Global</td>
</tr>
<tr>
<td>Staff working in SSC</td>
<td>36</td>
<td>50</td>
<td>70</td>
<td>150</td>
<td>660</td>
<td>3,100</td>
</tr>
<tr>
<td>SSC governance structure</td>
<td>Centralised in one SSC</td>
<td>Centralised in one SSC</td>
<td>Decentralised in various SSC</td>
<td>Phisically separated, managed as a single SSC</td>
<td>Phisically separated, managed as a single SSC</td>
<td>Phisically separated, managed as a single SSC</td>
</tr>
<tr>
<td>SSC set up drivers</td>
<td>Cost reduction, service improvement, risk management</td>
<td>Cost reduction, manage growth, standardization</td>
<td>Manage growth, standardization, service and control improvements</td>
<td>Cost reduction, manage growth, service and control improvement</td>
<td>Cost reduction, manage growth, standardization, service and control improvement</td>
<td>Cost reduction, manage growth, standardization</td>
</tr>
<tr>
<td>Services delivered by the SSC</td>
<td>Finance, Procurement, Customer Service, Legal, Data analysis</td>
<td>Procurement</td>
<td>Finance, Human Resources, Information Technology, Procurement</td>
<td>Finance</td>
<td>Finance</td>
<td>Most of key functions</td>
</tr>
</tbody>
</table>

Case study 1

University with presence in several European countries runs a SSC that is classified as mature as it was set up in 2009, although both, the administration manager and SSC financial manager consider to be in a “continued learning stage”, managing “a learning SSC”. SSC has a centralised unit, overseeing most of back-office functions of faculties of the university (finance, procurement, customer service, legal and data analysis). While cost reduction is a relevant factor to be considered in the performance of SSC, customer orientation of its services is a key element that allowed SSC to gain a good reputation; the mentality of “service improvement” is constantly remarked to all SSC workers. Finance is main domain performed in SSC with a proportion of staff of 0.7% over total university employees. SSC has achieved a significant degree of standardisation of processes...
and it generates more than 50% of reporting tools of the university including dashboards, scorecards and mails. As SSC manages a high volume of transactions, managers are looking for tools that could further automatize some of main processes within finance function. SSC financial manager reports to university director, indicating the importance and expectations that have been set up upon SSC.

**Case study 2**

Leading beverage company with influence over several countries in South Africa, is an exceptional case as literature generally embraces case studies from Europe. The firm decided to develop SSC in 2016, therefore maturity level has been classified as “initial”. The company focuses on Procurement function as “it represents the core activity of the business”, CFO mentioned. Procurement function is significative measured in terms of number of documents, transactions and volume managed. The objective of SSC responsible, who reports to CFO, is developing the SSC concept aiming to achieve not only cost efficiencies but also accommodate the expected business growth. Although CFO highlighted that “cost reductions are vital for SSC concept survival”, improving SSC performance should be the driver for growth. CFO stated that they will centralise all SSC tasks, teams and controls in just one location, assuming it will not be possible to decentralise in the future. The initial SSC staff represented 1% of total company staff but it is likely to be increased in short/medium term. The company has high expectations on the standardisation possibilities that a SSC offers, looking for internal processes management together with tools developed by external suppliers.

**Case study 3**

Media and television business entity with a global reach and headquarter based in the USA, is an interesting case as SSC in USA’s multinationals have been scarcely examined (Richter and Brühl, 2016). SSCs were set up seven years ago and is based on a decentralised and autonomous organisation running four locations which have responsibility over a matrixial organisation of countries and processes. European SSC manager mentioned “we run basic tasks within account receivables and the tools we have are also basic”. Global SSC manager, who reports to group CFO, is responsible for finance, human resources, IT and procurement processes. SSCs can be considered mature due to number of staff (7% over total company staff), high volume of transactions performed and seniority of the managers. However, maturity level cannot be correlated to standardisation achieved, which looks somehow elementary. Main concern is building the ability to accommodate the expected business growth, as some of the tools and procedures are not sufficient to reach the expected efficiencies. The firm aims to improve SSCs performance through more standardisation, integration and automation of key processes within finance function. It was mentioned that SSC management is considering the potential merge of some of the SSC centres as an initiative to improve efficiency.
Case study 4

Global gas supplier to consumers’ company based in the Europe, set up its initial SSC eight years ago. The drive for standardisation was highly needed at the time of setting up SSC due to the significant number of countries that were operated. Finance function was selected to start the migration of all local tasks to SSC and expected to deliver more value through initiatives that strengthen the control environment, add more business insight to company management and improve the service level to SSC users. Due to complexity of the processes performed and growing volume of transactions, original SSC was supplemented with three offshore sites. Huge number of transactions performed in the SSC’s together with high specialisation of the staff working at them, make this SSC a mature organisation. SSC manager, who reports to head of finance, is empowered to make most of the key decisions regarding SSC’s structure, procedures and tools. He said that the initiative to set-up a SSC “came from a headquarter strategy mainly defined to reduce SGA (sales, general and administration) costs”, as margins were squeezed by reduced tariffs to consumers due to competition and government restrictions.

Case study 5

A UK based giant in the pharmaceutical industry, sells its products over 100 countries, manufactures in 25 and has major research centres in 10 countries. The challenges for finance function were processing transactions for multiple units spread across the world and SSCs that operated with different software solutions from multiple vendors. Seven years ago, all finance processes were centralised into three sites worldwide. Nevertheless, some key functions such as treasury or consolidation remain centralised in headquarter. The head of SSC services, who reports to global CFO, said, “the company had, as part of this global process, a plan to move all finance roles to either headquarter and to regional centres over the coming years”. He disclosed that the level of standardisation off all SSC sites is quite high, although cost reduction has been a permanent driver in the company as profit margins are under pressure. He also mentioned that the organisation is looking to adopt new tools and technologies that could improve the performance and the control environment of the finance related processes.

Case study 6

Global leader of the industrial technology sector is based in the USA and works in more than 170 countries. SSCs centralise all non-core functions, releasing business units from these responsibilities. The migration of local tasks to SSC’s started seven years ago; in 2013 a complete implementation of SSCs was initiated, providing support to finance function, human resources, IT, procurement, customer service, sales administration, marketing, operations, documentation and real estate management. Five SSCs were developed in different locations worldwide and managed by functions operations leaders, reporting to a global operations leader who revealed that the strategy he follows is “to simplify operations to gain competitiveness and increase the customer focus”. Global finance operation manager mentioned that they perform some nonstandard processes that were fully migrated from local countries, although they were considered as “non-transferable”. SSC’s managers thrive to add more value to business: for instance, a payment service for vendors was deployed, allowing to pay faster while charging financial costs to vendors if they anticipate
funds; vendors improved their cash flows, reducing invoices dispute, SSC released resources and obtained financial gains.

**Cross case analysis of the factors**

The six-case studies described were analysed, finding that SSC organisations have a strong focus on standardisation of processes and procedures as they understand it is a key element that should help developing further SSC capabilities. The purpose of this research is highlighting which factors influence the degree of standardization, in what way and the relevance of such factor. The goal is to define a model that identify the range of standardization of each factor, as its configuration allow SSC to have more standardised procedures and structures that would get the expected benefits.

The four business model dimensions defined by Al-Debei and Avison (2010) are included in the first column of Figure 2. Factors that influence the degree of customisation of the SSC business model identified by Janssen and Joha (2014) (second column) guided the content analysis performed to six-case studies. According to cross-case study recommendations from Eisenhardt (1989), all similarities and differences were listed between six case studies on each of these factors. The way these factors have been configurated by SSC in the six case studies is shown in last six columns of Figure 2.

Internal consistency was measured through Cronbach’s alpha score. The initial analysis gave a result of 0.610 for the 12 factors included in the model. The calculation of correlation of each individual factor in relation to total of the group was evaluated showing a positive and relevant result except for factors four, six and ten. When these three factors were eliminated from the group, Cronbach’s alpha score raised to 0.844. Tavakol and Dennick (2011) state that acceptable values of alpha score should range from 0.70 to 0.95. Statistical data is included in Appendix A for the 12 factors analysis. Appendix B shows the analysis for the nine remaining factors once factor number four, six and ten were excluded from the original list.
Factors influencing the degree of standardization of SSC business model - (in grey, factors that have been changed).

Each factor was examined and challenged in the light of the different set of organizations chosen. There were cases in which the factor was relevant, while for some other cases it had to be changed or eliminated, as it did not explain the impact it had on the standardisation perspective of SSC. It was found that seven factors should be renamed while three other factors were found to be irrelevant, suggesting three new elements to be included in the model. The findings for the 12 factors are described below, starting with Janssen and Joha (2014) description followed by the suggested definition.

1- Path dependency: to be replaced by “Ownership of process design and resource allocation”

The original factor aimed to evaluate if the services provided by SSC were new or not. This definition is not useful as SSC of multinationals companies define all processes which are theoretically standards. All SSC replied they are somehow accountable for the design and definition of the processes performed. They also confirmed that all processes are closely and timely monitored through metrics agreed with the business functions. Moreover, four of the case studies are responsible for the definition of SSC roles, responsibilities and reporting lines, being also responsible to apply changes to technology configuration. Hence, SSCs have been classified as “full ownership” in four cases, one is under “shared” category as resources are coordinated with regional organization, and one is “limited” due to the lack of empowerment to manage resources. Case study 5 and 6 reported that there are aspects of the processes that entails a higher customisation, generating significative in efficiencies. Ownership of the procedures definition and the administration of resources impact efficiency and effectiveness; the higher the accountability of a SSC is to define processes and manage resource, the higher process standardisation is achieved.
2- Legal and/or regulatory driver: updated to “Support to non-standard process”

The original definition is quite restrictive, suggesting better to re-phrase the factor evaluating the level of support to non-standard tasks. Four respondents stated that their SSC does not support non-standard processes or domain such. The rationale behind is avoiding customised solutions for any business unit or country supported by the SSC, as it would go against the standardisation principle. Two SSC back some legal and regulatory tasks such as local taxes, statutory reporting, compliance requests and customs statements. Case study 1 confirmed that SSC accountability includes all finance related duties including non-standard tasks, while case study 6 aims to control and standardise some specific responsibilities such as reporting and tax returns.

3- Customer orientation: to be replaced by “Degree of specialization: Function”

SSCs manage the relationship with external and internal stakeholders, keeping track of communications with customers, suppliers, auditors, advisors and authorities. This clarification made by SSCs responsible, disqualify “customer orientation” factor as an element that influence the degree of standardisation. It is suggested a new factor that evaluates the degree of specialization in terms of the functions supported by the SSC, becoming a relevant element to assess the level of standardization achieved. This specialization produce substantial economies of scale as processes are standardized across the function. Three of the case studies replied that they have a high degree of specialization (answer “yes”) per function (finance and procurement). Case study 6 supports most of the back-office functions, however it considers finance practices among the best in the market, giving the company an advantage over competitors.

4- Target segment: to be replaced by “Degree of specialization: Geography coverage”

SSC geography coverage is an important element when analysing this factor. Three of the case studies replied that there is no specialization among the various SSC locations (answer “no”), providing a similar support to the business function irrespective of the country or region involved. It implies that their procedures must be standard to ensure efficiency and effectiveness benefits are achieved. The remaining SSCs have different kind of specialisation regarding the locations of the SSC business operations (answer “yes”). This arrangement does not ensure a full standardisation of the process as SSC must provide the agreed support even if customised specifications are requested. These SSCs request structures with regional clusters that ensure effectiveness and nearness to end users.

5- Strategic importance: updated to “Support to core/non-core functions”

Finance and Procurement functions are defined as core activities for SSC strategy as they are present in five cases. If the function migrated to SSC is core, the opportunities to standardise it are higher. SSC for case study 4 and 5 is only dedicated to support finance function procedures due to the complexity and size of operations, while case study 3 back procurement function (answer “core”). Three SSC provide support to core and non-core functions (answer “both”). SSC executives confirmed that top management support is beneficial to ensure SSC have a standardised environment. SSC managers said that these core functions are more susceptible to be standardised due to the nature of tasks, experience, benchmark and shared best practices among the industry. SSC managers agreed that finance function is the first milestone of the migration to SSC.
Executives also stated that other functions still require a certain degree of customisation due to the nature of business, specificity of the company, customer/supplier’s requests and compliance rules.

6- ICT / business orientation: updated to “Transaction or business oriented”

The original factor evaluated if SSC was driven by ERP (enterprise resource planning) or by business solutions. Findings indicate that every SSC has an IT solution that suits its needs, hence not explaining much what the driver is. Four SSC case studies asserted that technology platform include multiple ERP and non-ERP systems somehow integrated. Full integration of the systems allows SSC managers to focus less on the transactions, traceability and integrity of the data. For case study 1 the integration of the systems was a crucial element that permitted growth of the SSC, ensuring reliability of cross data analysis and reporting quality (answer “business”). Case study 2 is struggling with systems integration, keeping their focus on data integrity (answer “transaction”). Case study 3 and 6 deliver more than 50% of the company reports and analysis (answer “both”). A low proportion of value adding reports and analysis means that SSC is oriented to data management rather than supporting business units. SSCs should concentrate efforts on the support to the business decisions once they ensure data is valid, coherent and reliable. This strategy requires a high level of standardisation of SSC, focusing more on value added tasks and less on data validity.

7- IT governance structure: updated to “Governance structure: decision making process”

The focus on the IT aspects of a SSC is not enough to understand the drivers that moves SSC to become more standard, but SSC decision-making process is. Four SSC case studies have been deployed to provide support to one main function (finance), centralising most of the key decisions in a group of leaders (answer “centralised”). SSC executives are empowered to define and improve the structure and performance of SSC, ensuring standardisation is kept. SSC can achieve an effective managerial structure with a skilful team of experts that execute most tasks. The decisions should include aspects of SSC resources such as IT, staff, location and distribution of workforce among others. When SSC delivers services to multiple functions (answer “shared”), there were more flexibility in terms of customised procedures, as the function business process owner and regional functional managers have also a saying over the definition of processes and allocation of resources. Factor number 1 and 7 are somehow complementary, as both indicate the grade of empowerment a SSC has in terms of management of resources and authority over processes design. The higher the empowerment and authority are, the more standard a SSC could become, as the decision-making process is consolidated in a limited group of executives that work close to SSC reality and needs.

8- Change strategy: updated to “Change management strategy”

Strategy to implement SSC presents two differing options, big bang and incremental strategy (Wagenaar et al., 2006). Case study 1 standardised processes before moving them to SSC, as they hired most of key staff from local organisation. SSC managers mentioned that lack of skilful resources on technical aspects or change management and uncertainty on the timing of the migration process, made them decide to take the “shift and fix” approach (answer “incremental”). Case study 4 manager stated, “you know when you begin the migration but not when you unplug the
local organisation”. Three organizations decided moving processes to SSC before technologies changes. Case study 3 decided to change the technological platform once all processes were migrated. Case studies 2 and 6 standardised, migrated and changed the technological platforms all at the same time (answer “big bang”). They share the same approach despite their divergences: case study 2 is focused in one function, controlling all aspects of the migration, while case study 6 is a huge and complex conglomerate that cannot accept the incremental way; “early implementation failures are better than late standards”, SSC manager said. There is a higher probability of standardisation across the function and geographies when SSC takes most of initiatives, performing a standard way of execution.

9- Degree of outsourcing: updated to “In house operations and/or outsourcing”

A clearer definition is needed, as SSC managers reported any service or process that could be delivered by a third-party vendor instead of SSC internal resources. In five cases, SSC’s are empowered to outsource to third-party vendors (answer “both”). Case study 1 said that SSC is not allowed to outsource as they do not have the resources to liaise with external suppliers (answer “in house”). Rest of SSC managers revealed they can sub-contract services, mainly non-core activities. Case studies 5 and 6 confirmed they outsourced human resources administrative tasks, such as prospecting, selection, hiring and follow up of candidates and staff. Both companies are evaluating the implementation of a payroll solution provided by an external vendor. The logic behind this factor as an element to evaluate the standardisation of a SSC, is that an external supplier will typically provide standard tools, products, support and services that are shared with other companies, leaving small room to customise engaged services.

10- Integration potential: updated to “Improvement potential: value of the actions”

The potential to expand the level of standardisation of SSC can be evaluated through the expected improvements. SSC executives listed the improvements they expect for coming years, ranking them under low, mid and high value categories. Case study 2 and 3 included low value actions as SSC focus on staff cost reduction, definition of processes and basic control procedures. Case study 4 and 6 listed mid value actions as they included process automation actions, workgroup optimisation and lower infrastructure costs initiatives. Case study 1 and 5 expect high value actions as they will offer new and agile services, implementing continuous improvement culture and business data analysis. SSC managers focus on high value actions when SSC delivers a high level of standardisation. The aspects related to organisation, procedures and controls are substantially more standard when SSC managers try to implement high value actions. These expectations imply that SSC has overcome the basics requirements of standardisation, focusing on tasks that represents higher benefits to the organisation.
11- Economic rationale in terms of a cost and/or non-cost focus

Primary reasons to set up a SSC are cost savings (Sako, 2010) and improvement of effectiveness and skills (Rothwell et al., 2011). Not many preliminary papers have included empirical studies identifying economic motives to set up a SSC (Richter and Brühl, 2016). This paper found that cost saving and ability to accommodate growth (due to organic development or through mergers and acquisitions) are the most commons. Most of case studies have been categorised as “both” due to presence of economic drivers and strategic motives, such as improving service quality and process enhancements. Case study 3 manager mentioned “if we do not bring value to the company business, being cheap is not that important”. Only when processes are relatively highly standardised, they can be delivered in an efficient way. Hence, cost focus enables SSC to pursue higher standardisation as a solid driver aiming for more efficiencies. Non-cost factors also play a significant role, as it was confirmed that goals as capability to accommodate growth and ability to drive business value, indicate that standardisation is embedded in the processes.

12- Business value in terms of transactional and/or non-transactional services

SSC are designed to handle repetitive procedures and tasks that involve managing high volume of transactions. Systems, procedures and staff turnover are main variables to balance achieving the lowest cost per transaction while maintaining the quality standards of the output. Common indicators that quantify and measure the efficiency of SSC are the number of individual documents/transactions and total monetary amount managed. Non-transactional services such as paralegal support or local tax returns provided by case studies 1 and 6, require considerable contact with local managers and experts, involving a combination of broad expertise and customisation (answer “both”). Support to specialised tasks require more resources, generating contradiction between achieving higher standardisation levels and supporting customised tasks. Case study 6 manager said “our aim is to become as efficient as possible, we need to prove it every quarter. However, there is a pressure from headquarter to migrate certain tasks that we cannot say no. We simply have to accept them even if we have to assign more staff”.

4- Discussion

The comparison of SSC of multinational companies is a complex exercise as the essential aspects of a SSC differ, generating various structures and processes among the organisations. The large volume of transactions handled by SSC is a key element to get benefit from the economies of scale of data handled, permitting the hiring of technical experts and qualified managers. Standardisation process then become fundamental to achieve further benefits (Triplett and Scheumann, 2000), as homogenous environment and practices encourage standardization, leaving room to a stronger focus on other aspects such as costs and quality (Aksin and Masini, 2008). Baldwin et al. (2001) highlighted standardisation of functional processes as one of the main value-added benefit, being therefore a catapult to achieving some further benefits as suggested by Lacity and Willcocks (1998).
The reviewed literature did not include a specific identification of factors that impact the standardisation of SSC, even though it is suggested that the absence of this characteristic could be an obstacle to achieve efficiencies (McIvor et al., 2011) or could prevail SSC to work in a more effective way (Ulbrich and Borman, 2012). There are evidences that research is scarce as Richter and Brühl (2016) mentioned that SSC related factors should be investigated more, widening the scope of location and sector. The preliminary work from Janssen and Joha (2014) identified factors that impact customisation in a holistic way utilising the business model context. This paper enhances their conclusions, applying the findings to build a model that encompass the specific aspects of the factors that impact SSC standardisation. This model has been tested successfully with SSC executives and managers, proving to be meaningful, easy to use, allowing analysis and forecast of SSC evolution (Figure 3).

Strikwerda (2006:2) remarked that SSC follow headquarters guidelines but fails on the announcement that SSC “will not perform statutory tasks nor will it develop policies”. Both statements have been proved false, as some SSC (case studies 4, 5 and 6) perform high value tasks such as tax returns, statutory reporting, analytics, organizing and managing structure, developing own policies and procedures. SSC are set up for non-critical tasks as Schulman et al. (1999) argue. These tasks do not entail managing core aspects of the business hence not risking the continuity of the business in case of SSC failure. Nevertheless, findings of this paper show that SSC are performing value added tasks, as they interact with clients, suppliers and other stakeholders, in clear connection with the core business.

This paper did not intend to categorize the factors that impact SSC organisation from a standardisation perspective, even though some literature suggests that governance structure is a relevant element (Weill and Ross, 2005). The research found some evident relationships between factors. Factors one, three, four, five and seven are highly correlated, as when top management decides which core functions SSC will manage (factor five), SSC tend to specialize on such function (factor three and four), enabling SSC managerial decisions (factor seven) and designing the processes (factor one). An example of de-correlation is seen between factors six and twelve: SSC have the goal to improve their services adding value and becoming business oriented (factor six), but the company wants SSC to handle bigger volume of transactions (factor twelve). Analysing individual and total correlation scores, it was noted that factors four, six and ten presented a negative correlation score (Appendix A). It should be assumed that these factors were not relevant when describing the degree of standardisation of the case studies. A new correlation analysis was performed for the remaining nine factors, reaching consistent scores (Appendix B).

Looking forward, there are some areas of improvement that should impact the structure and organization of SSC, such as process automation and data analysis, both elements included in factor ten. These initiatives could have a higher relative importance over some other factors, as the impact is significative on productivity, efficiency, costs and performance of SSC teams; within this category, the respondents mentioned the potential of RPA tools (robotic process automation).

This paper expands the body of knowledge of SSC business model as it improves the analysis and the understanding of the factors that shape SSC structure and the way these factors influence the degree of standardisation a SSC may achieve. The broad sample of cases allowed to improve SSC
model factors framework, validating and generalising the findings, understanding how each factor influence the level of standardization. The model proposed in Figure 3 should help practitioners, considering that the configuration of these factors could be contradictory in some cases, becoming not a tool to implement SSC but a useful framework to evaluate the potential actions to achieve higher level of standardisation.

![Table 3. How SSC can achieve higher standardization](image)

<table>
<thead>
<tr>
<th>Factors influencing the degree of standardisation of SSC</th>
<th>SSC achieve higher degree of standardisation when:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Ownership of the process design and resource allocation</td>
<td>Proposition (*)</td>
</tr>
<tr>
<td>2. Support to non-standard process</td>
<td>Proposition</td>
</tr>
<tr>
<td>3. Degree of specialization: Function</td>
<td>Proposition</td>
</tr>
<tr>
<td>4. Degree of specialization: Geography</td>
<td>Proposition</td>
</tr>
<tr>
<td>5. Core and/or non core functions</td>
<td>Architecture</td>
</tr>
<tr>
<td>6. Transaction or business orientated</td>
<td>Architecture</td>
</tr>
<tr>
<td>7. Governance structure: decision making process</td>
<td>Architecture/Network</td>
</tr>
<tr>
<td>8. Change management strategy</td>
<td>Network</td>
</tr>
<tr>
<td>9. In house operations and/or outsourcing</td>
<td>Network</td>
</tr>
<tr>
<td>10. Improvement potential: value of the actions</td>
<td>Network</td>
</tr>
<tr>
<td>11. Economic rationale in terms of a cost and/or non-cost focus</td>
<td>Finance</td>
</tr>
<tr>
<td>12. Business value in terms of transactional and/or non transactional services</td>
<td>Finance</td>
</tr>
</tbody>
</table>

SSC have been in place during last decades, mainly initiated by private multinational companies. As per the literature reviewed, main drivers are cost efficiency and standardisation, principally achieved through labour arbitrage and economies of scale. Nevertheless, there are still many uncertainties on the drivers to set-up a SSC and the elements that impact the organisation and structure.

This research show that SSC are a conglomerate of functions, processes and procedures, which structure is influenced by certain factors that outline a more or less standardised organization. A preliminary work (Janssen and Joha, 2014) was replicated changing 10 out of 12 original factors, ensuring conclusions are valid over a broad scope of SSC of leading multinationals companies. The elements that impact the level of standardization of SSC are listed in figure 3 becoming a useful framework for practitioners to analyse current or future SSC set-up, considering that the relevant importance of the factors could change from case to case. Moreover, the design of SSC model should match with management specifications, understanding that the evolution of the factors would have an impact on governance and management of SSC. However, standardisation remains as one of the key aspects that guarantee the evolution of a given SSC in the future.
Future lines of investigation could include the categorization of the factors, as they have a different degree of influence and relevance in the SSC structure. The correlation among factors is another field that should be evaluated, as indications were noted that some factors are somehow linked and influence the rest. Furthermore, it would be of interest to analyse how SSC model, factors and actions evolve over the time.

References


Dillman, D. 1991. «The design and administration of mail surveys.» Annual review social (17) 225-249.


Krippendorff, K. 1980. «Validity in content analysis.» Computerstrategien für die Kommunikationsanalyse 69-112.


Seal, W. and Herbert, I. 2013. «Shared service centres and the role of the finance function.» *Journal of Accounting and organizational change* (9:2) 188-205.


Ulbrich, F. and Borman, M. 2012. «Preventing the gradual decline of shared service centers.» *18th American conference on information systems*. Seattle.


Appendix A

Correlations and descriptive statistics

<table>
<thead>
<tr>
<th>Factor</th>
<th>Mean</th>
<th>Standard deviation</th>
<th>Indiv. vs Total correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.667</td>
<td>0.516</td>
<td>0.743</td>
</tr>
<tr>
<td>2</td>
<td>0.667</td>
<td>0.516</td>
<td>0.594</td>
</tr>
<tr>
<td>3</td>
<td>0.500</td>
<td>0.548</td>
<td>0.980</td>
</tr>
<tr>
<td>4</td>
<td>0.500</td>
<td>0.548</td>
<td>-0.280</td>
</tr>
<tr>
<td>5</td>
<td>0.500</td>
<td>0.548</td>
<td>0.980</td>
</tr>
<tr>
<td>6</td>
<td>0.167</td>
<td>0.408</td>
<td>-0.376</td>
</tr>
<tr>
<td>7</td>
<td>0.667</td>
<td>0.516</td>
<td>0.743</td>
</tr>
<tr>
<td>8</td>
<td>0.333</td>
<td>0.516</td>
<td>0.149</td>
</tr>
<tr>
<td>9</td>
<td>0.833</td>
<td>0.408</td>
<td>0.376</td>
</tr>
<tr>
<td>10</td>
<td>0.667</td>
<td>0.516</td>
<td>0.000</td>
</tr>
<tr>
<td>11</td>
<td>0.833</td>
<td>0.408</td>
<td>0.564</td>
</tr>
<tr>
<td>12</td>
<td>0.667</td>
<td>0.516</td>
<td>0.594</td>
</tr>
</tbody>
</table>

Factor

| 1 | 1,000 |
| 2 | 0.250 |
| 3 | 0.707 |
| 4 | -0.707 |
| 5 | 0.707 |
| 6 | -0.632 |
| 7 | 0.250 |
| 8 | 0.500 |
| 9 | 0.632 |
| 10 | 0.250 |
| 11 | 0.632 |
| 12 | 0.250 |

Individual correlation of Factors

Appendix B

Correlations and descriptive statistics, excluding factors number four, six and ten.

<table>
<thead>
<tr>
<th>Factor</th>
<th>Mean</th>
<th>Standard deviation</th>
<th>Indiv. vs Total correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.667</td>
<td>0.516</td>
<td>0.815</td>
</tr>
<tr>
<td>2</td>
<td>0.667</td>
<td>0.516</td>
<td>0.686</td>
</tr>
<tr>
<td>3</td>
<td>0.500</td>
<td>0.548</td>
<td>0.970</td>
</tr>
<tr>
<td>5</td>
<td>0.500</td>
<td>0.548</td>
<td>0.970</td>
</tr>
<tr>
<td>7</td>
<td>0.667</td>
<td>0.516</td>
<td>0.557</td>
</tr>
<tr>
<td>8</td>
<td>0.333</td>
<td>0.516</td>
<td>0.214</td>
</tr>
<tr>
<td>9</td>
<td>0.833</td>
<td>0.408</td>
<td>0.597</td>
</tr>
<tr>
<td>11</td>
<td>0.833</td>
<td>0.408</td>
<td>0.434</td>
</tr>
<tr>
<td>12</td>
<td>0.667</td>
<td>0.516</td>
<td>0.686</td>
</tr>
</tbody>
</table>

Individual correlation of Factors

<table>
<thead>
<tr>
<th>Factor</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>5</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>11</th>
<th>12</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>0.250</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>0.707</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>0.707</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>0.250</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>0.500</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>0.632</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>0.632</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>0.250</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>