

Strategic performance measurement system, organizational learning and service strategic alignment

Impact on performance

Yuliansyah Yuliansyah

Department of Accounting, University of Lampung, Lampung, Indonesia, and

Johnny Jermias

Beedie School of Business, Simon Fraser University, British Columbia, Canada

Abstract

Purpose – Considering the significant contribution of service sector of the whole contribution of the economics, this study aims to investigate the impact of strategic performance measurement system (SPMS) on sustainability strategic outcomes in the industry through organizational learning and service strategic alignment.

Design/methodology/approach – Using a survey study, 158 usable data were analysed using SmartPLS.

Findings – The results show that service strategic alignment and organizational learning mediate the relationship between SPMS and performance for product differentiation companies. For cost leadership companies, the results indicate that there is no mediation of service strategic alignment and organizational learning on the relationship between SPMS and performance.

Research limitations/implications – This study first provides evidence that SPMS improves performance through service strategic alignment and organizational learning for product differentiation companies in which innovation is crucial to thrive and succeed. Second, it introduces to the literature the characteristics of SPMS.

Originality/value – New insights of implementation of SPMS in improving companies' performance in Indonesian financial institutions are provided.

Keywords Strategic performance measurement system, Service strategic alignment, Organizational learning, Service sector, Strategic outcomes

Paper type Research paper

1. Introduction

The purpose of this study is to investigate the mediating effect of organizational learning and strategic alignment on the relationship between strategic performance measurement system (hereafter SPMS) and performance. While previous studies have focused their investigations on manufacturing sectors (Brown and Blackmon, 2005; Brown *et al.*, 2007; Chenhall, 2005; Decoene and Bruggeman, 2006; Kathuria *et al.*, 2007; Skinner, 1969; Ward *et al.*, 2007), we investigate this relationship by exploring the characteristics of SPMS in the service sector, in general, and the financial sector, in particular in Indonesia.

The service sector has unique characteristics, which are different from those of the manufacturing sector in terms of intangibility, inseparability of production and



consumption and perishability (Auzair and Langfield-Smith, 2005; Lovelock and Gummesson, 2004; Zeithaml *et al.*, 1985). In addition, the service sector in Indonesia faces an extremely intense competition both from local and foreign competitors. In the banking sector, for example, there are unusually large numbers of banks operating in Indonesia. Dwityapoetra (2012) reported that as of March 2012, there were 120 banks in Indonesia consisting of 30 state-owned banks (4 own by the central government of Indonesia and 26 owned by the provincial governments), 56 private domestic banks, 23 foreign banks and 11 sharia banks (banking system that is consistent with the principles of the *Shari'ah* (Islamic rulings) and its practical application), with a total of 13,453 number of offices.

The banking sector in Indonesia was severely affected by the 1997/1998 monetary crisis resulting in the closure of 16 banks. Since this crisis, the Indonesian Government has made a strong commitment to restore public trust in the country's financial system by emphasizing on proper management of financial institutions (Rhodes *et al.*, 2008). The other sectors such as insurance and financing sectors have also experienced a tight competition with the average growth of 15 per cent in the past three years (IFSA, 2011).

Despite its unique characteristics and its significant contribution to the national economy, no previous research on SPMS in the service sector in Indonesia can be found in the literature. Ittner *et al.* (2003) suggested that researchers need to examine the unique characteristics of the SPMS in the service sector, and investigate how the SPMS and other factors contribute to improve firm performance.

Based on the same data set as that of Yuliansyah *et al.* (2016) and Yuliansyah *et al.* (2017) with different focus and objectives, we find that organizational learning and service strategic alignment mediate the relationship between SPMS and performance for product differentiation companies. For cost leadership companies, the results indicate that there is no mediation of organizational learning and strategic alignment on the relation between SPMS and performance. Rather, the results suggest that SPMS in terms of strategic and operational linkages directly affects performance of cost leaders.

This study contributes to the existing SPMS literature by providing an evidence that SPMS improves performance through organizational learning and strategic alignment in the service sector for product differentiation companies, in which innovation is crucial to thrive and succeed. The results suggest that top management should design SPMS attributes, organizational learning and strategic alignment that put more emphasis on the achievement of differentiation strategy. For cost leadership strategy, our results indicate that both organizational learning and service strategic alliance do not mediate the relationship between SPMS and performance. Rather, the results suggest that SPMS in terms of strategic and operational linkage directly affects the outcome. The result is consistent with the view that cost leaders should focus on improving the operational aspects of the organization, which are consistent with the cost leadership strategy to improve efficiency.

The remainder of the paper is organized as follows. Section 2 discusses the related literature to develop the hypotheses. Section 3 describes the sample, research design and ways to measure the variables used in this study. Section 4 presents the results of the statistical analyses. Section 5 discusses the main findings, the limitations of the study and directions for future research in this area.

2. Literature and hypothesis development

Companies implement SPMS to communicate their strategy to various stakeholders through the use of financial and non-financial measures (Ittner *et al.*, 2003). The measures are selected to represent the companies' key success factors (Kaplan and Norton, 1996a; Kaplan and Norton, 1996c). SPMS provides managers and employees with useful information to

help them choose actions that are beneficial for the companies (Otley, 1999). Waterhouse and Svendsen (1998) argued that effective performance measurement systems should be designed to take into account human learning. Managers and employees should be able to learn from the performance measurement systems about the connections between their actions and outcomes enabling them to challenge the underlying assumptions about the connections and make necessary changes to improve companies' performance (Argyris, 1994).

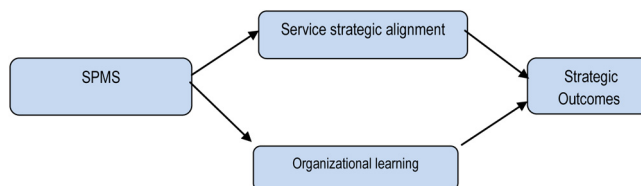
2.1 Hypothesis development

Before we explicate the hypotheses one by one, we argue that that strategic alignment and organizational learning are considered as mediators of the relationship between SPMS and strategic outcomes; both are prominent factors in achieving goals. Supporting his argument, Porter (1996, p. 73) suggested that strategic alignment is "not only to create a competitive advantage but also to the sustainability of that advantage". Similarly, organizations can maintain sustained competitive advantage because alignment creates focus and coordination across even the most complex organizations, making it easier to identify and realize synergies (Kaplan and Norton, 2005). As most strategic objectives in the service sector are executed at the lower level of organization, alignment between functional units across boundaries and organizational objectives is a crucial issue for success (Kathuria and Porth, 2003). Given its importance, the construct "service strategic alignment" was developed from Chenhall's (2005) manufacturing strategic alignment.

Organizational learning, in the service sector, is also a key for the organization to succeed. "Product" in the service sector is a kind of action, experience, performance or promise given by equipment or people rather than being an object which can be taken away (Cloninger and Oviatt, 2007; Parasuraman *et al.*, 1985; Patterson and Cicic, 1995; Spohrer *et al.*, 2007). Organizational learning is considered a fundamental organizational element to achieve long-term competitive advantage (Ireland *et al.*, 2003; López *et al.*, 2005; Sinkula, 1994; Slater and Narver, 1995) in terms of providing excellent service quality. Hence, following Chenhall (2005), we propose that SPMS has a positive effect on enhancing strategic outcomes through organizational learning and service strategic alignment. Therefore, the model and proposed hypotheses are shown in Figure 1.

2.1.1 Strategic performance measurement system, service strategic alignment and strategic outcome. Service companies often fail to achieve their goals because of their inability to align their strategy with the companies' internal resources (Dyer, Kale, and Singh, 2001). Researchers (Heskett *et al.*, 1994; Meuter *et al.*, 2000; Roth and Van Der Velde, 1991; Thomas, 1978) argue that enhancement of information technology (IT) and human capital are considered as two major factors that need to be aligned with companies' strategy to achieve their goals. IT is regarded not only as a tool to increase employee efficiency but also as a significant interface in the interaction between the company and its customers through self-service technologies (Meuter, Bitner *et al.*, 2005; Weijters *et al.*, 2007). IT is particularly

Figure 1.
A structural model
examining the effect
of SPMS on strategic
outcomes



crucial for companies' success in the banking sector characterized with intense competition and rapid technological changing to improve service reliability for their customers and also to anticipate the rapid global changing of market competition (Yuliansyah *et al.*, 2016). Alignment of IT with organizational strategy allows the company to maintain a sustained competitive advantage by providing more effective, more reliable and faster service to customers (Adam Jr and Swamidass, 1989; Weijters *et al.*, 2007).

In addition, in the service sector, especially in financial institutions characterized by high-contact customer businesses, management of human resources is vital in strategic alignment. Such management includes effective recruiting of new members of the organization to be placed in the right position based on organizational purpose (Iglesias, 2009; Schneider *et al.*, 2003), active encouragement of employees to enhance knowledge and skills consistent with the organizational objectives by learning and training (Canel *et al.*, 2000), the ability of senior managers to co-ordinate with lower-levels employees about products, market acuity and service process interaction and management of these interactions across functions (Chenhall, 2005; Kathuria *et al.*, 2007), as well as how the organization could create internal service quality that affects the improvement of the working atmosphere for the customers (Brady and Cronin Jr, 2001; Heskett *et al.*, 1994).

As services are intangible, the process of producing and consuming a "product" cannot be separated; in other words, production and consumption of a service product occur simultaneously (Yuliansyah and Khan, 2015; Zeithaml *et al.*, 1985). One of the problems in the service industries is the difficulty in achieving standard outputs. This is because the interaction from one employee to another, as well as the same employee overtime, may vary with each transaction (Heskett *et al.*, 1994). Another problem is that employees, as an uncontrollable organizational resources, have a significant influence on the level of service quality (Zeithaml *et al.*, 1985). Thus, to solve the problem, standard operational procedures (SOPs) are required to control the quality in the service sector. With those standards, though some employees have different ways in presenting service, they are still in "the service standard framework" outlined in the SOPs.

Finally, one of the most important strategic alignments is a link between corporate and functional areas working together in the achievement of the desired organizational objectives (Brown *et al.*, 2007; Chenhall, 2005; Decoene and Bruggeman, 2006; Ho *et al.*, 2014; Joshi *et al.*, 2003). Without this bottom-up linkage, the work of the organization will not be achieved and will become uncompetitive.

Although the relationship between SPMS and service strategic alignment has not been found explicitly in the literature, Chenhall's (2005) study in the manufacturing sector provides insight of the relation between SPMS, strategic alignment and strategic outcome. Gaining insights from Chenhall's findings, we predict that the effect of SPMS on strategic outcome will be mediated by the service strategic alignment. SPMS translates business strategy into multiple financial, operational and strategic measures, and provides guidelines for managers and employees to take actions to reach the overall business objectives (Franco-Santos *et al.*, 2007; Kaplan and Norton, 1996c, 2008; Li, Gu, and Liu, 2009; Lohman *et al.*, 2004).

Balanced scorecards (BSCs) as one example of SPMS were designed as processes to align organizational strategies (Kaplan and Norton, 1996b). When BSCs were used, strategic alignment was created through cascading-down processes and translating business strategy into operational measures and activities. This process is known as a top-down or vertical alignment (Decoene and Bruggeman, 2006; Franco-Santos *et al.*, 2007; Kaplan and Norton, 1996b; Van der Stede *et al.*, 2006; Wouters and Sportel, 2005). Furthermore,

successful vertical alignment occurs when employees achieve the targets based on agreed key performance indicators (KPIs) (Decoene and Bruggeman, 2006).

Kaplan and Norton (2006) and Ho *et al.* (2014) noted that strategic objectives will be effectively assessed if top management can communicate effectively its strategy with lower-level management. Furthermore, this alignment may focus on coordination across even the most complex organizations, making it easier to identify and realize synergies (Kaplan and Norton, 2005). We argue that integrative SPMS enables companies to provide a mechanism for the improvement of organizational coordination (Lockamy and Smith, 1997) and enable companies to provide comprehensive information to identify, measure and communicate information regarding functional linkages (Chenhall, 2005). Furthermore, to ensure the effectiveness of top-down alignment, SPMS can be used to monitor, detect and drive continuous improvement of the problems that exist during implementation of the organizational strategy (Cadez and Guilding, 2008; de Haas and Kleingeld, 1999; Lohman *et al.*, 2004; Van der Stede *et al.*, 2006). Similarly, the relation between SPMS and service strategic alignment can also be seen from the characteristics of SPMS that enable organizations to provide better communication of the companies' decisions both vertically and horizontally (Chenhall, 2005).

One example of strategic alignment in the service sector is the alignment between organizational strategies and human resources. In the service sector, particularly in the financial institutions, human resources are the crucial element for the successful achievement of organizational objectives (Liao *et al.*, 2009)[1]. Furthermore, SPMS has a role as a device to steer and motivate human behaviour to successful realization of organizational objectives (Burney *et al.*, 2009; Kaplan and Norton, 1992; Lillis, 2002; Malina and Selto, 2004; Otley, 1999; Van der Stede *et al.*, 2006). Thus, according to de Waal (2003, p. 689), positive outcomes are generated by better strategy alignment of employees and better motivation, which indicates that causal relationships exist between performance system design, management control use, managerial and employee behaviour and performance.

Strategic alignment is used by organizations to ensure that all internal resources are consistent with the overall organizational outcomes (Porter, 1981, 1991). Alignment among organizational departments may improve operational effectiveness by creating pressures and incentives (Porter, 1990). Furthermore, this improvement of operational effectiveness may lead to reducing costs and increasing differentiation (Porter, 1996). Supporting this argument, Gates and Lengevin (2010) pointed out that that a combined differentiation and low-cost strategy can be fruitful if top management can facilitate employees to be more innovative and to manage costs. Lack of alignment makes organizations weaker in competition with their rivals in the market place (Skinner, 1969).

Similarly, Chenhall and Langfield-Smith (1998b) asserted that competitive advantage cannot be sufficiently achieved unless the company can link all strategy outcomes with functional processes and information systems. This is because alignment requires the same commitment among individuals at various levels to support the organizational goals and objectives regardless of their individuals roles in the organization (Kathuria *et al.*, 2007). Hence, strategic alignment is a crucial factor in achieving the strategic outcomes including allocation of resources to support the organizational goals (Papke-Shields and Malhotra, 2001).

Strategic alignment is important in implementing, as well as formulating, strategies (Joshi *et al.*, 2003; Kathuria *et al.*, 2008; Kathuria *et al.*, 2007). Strategy is effectively implemented when lower-level activities and operations are consistent with the plans formulated by the upper levels executives (Chenhall, 2005). Chenhall (2005) argued that

vertical alignment is successful when lower-level achievement is consistent with organizational objectives.

The importance of lower-level units or employees in service organizations increases the need for vertical alignment to ensure that all lower-level employee activities are congruent with the service-oriented objectives (Roth and Van Der Velde, 1991). Using a sample of companies in the service sector, Smith and Reece (1999) found that strategic alignment was positively associated with the desired organizational outcomes. Kaplan and Norton (2001) argued that to achieve organizational strategy, an organization should align the strategy with its human resources and IT. In the service organization, there are two important service delivery approaches: people-based and equipment-based (Bagchi-Sen and Kuechler, 2000; Thomas, 1978). One example of attributes of service strategic alignment is a long-term technology development to support business objectives. In service sectors, particularly in financial institutions, alignment between IT investment and business outcomes becomes a critical element because IT does not only make it easier for employees to deliver the services but also makes customers feel comfortable performing “virtual” office transactions both to financial institutions and third parties without physically visiting the real financial institution office (Henderson and Lentz, 1995; Payne *et al.*, 2000). In this way, satisfactory IT and business strategies can improve performance (Broadbent and Weill, 1993; Sabherwal and Chan, 2001). IT provides a benefit to the organization by improving efficiency, reducing costs and generating higher service quality to customers (Bardhan *et al.*, 2010; Froehle and Roth, 2004).

McFarlan (1984) suggested that IT alignment enables changes to business strategies from differentiation strategies to low-cost strategies. Similarly, based on a study conducted in an Australian service company, Daniel and McDermott's (2008) reported that companies pursuing a low-cost strategy benefit from the alignment of business strategy and technology. Furthermore, Bergeron *et al.* (2004, p. 1015) argued that management should envision the potential competitive uses of IT to implement the firm's business strategy in terms of product/service differentiation and innovations.

The preceding discussions indicate that the use of SPMS improves strategic alignment leading to better strategic outcomes. Hence, the following hypothesis will be tested:

- H1. The effect of strategic and operational linkages on strategic outcomes will be mediated by service strategic alignment such that strategic and operational linkages increase service strategic alignment, leading to higher differentiation outcomes.
- H2. The effect of internal aspects of employee on strategic outcomes will be mediated by service strategic alignment such that internal aspects of employee increase service strategic alignment, leading to higher differentiation outcomes.
- H3. The effect of strategic and operational linkages on strategic outcomes will be mediated by service strategic alignment such that strategic and operational linkages increase service strategic alignment, leading to higher low-cost outcomes.
- H4. The effect of internal aspects of employee on strategic outcomes will be mediated by service strategic alignment such that internal aspects of employee increase service strategic alignment, leading to higher low-cost outcomes.

2.1.2 Strategic performance measurement system, organizational learning and strategic outcomes It is important for an organization to accumulate knowledge through organizational learning (Wouters and Wilderom, 2008). To enhance performance, SPMS

should be designed to facilitate learning by managers and employees (Ferreira and Otley, 2009; Kloot, 1997). Kloot (1997) recognized that the association between SPMS and organizational learning is both recursive. Furthermore, empirical evidence shows that SPMS has a positive effect on organizational learning (Chenhall, 2005; Hall, 2011; Kloot, 1997). For instance, Chenhall's (2005) study demonstrates a positive relation between integrative SPMS and organizational learning. Likewise, Kloot (1997) examined the association between management control systems and organizational learning. Her finding shows that management control systems, more specifically performance measurement systems, and organizational learning are closely related.

In the service context, SPMS has a positive relationship with organizational learning. Unlike manufacturing with mechanized production processes, the service sector is highly dependent on people in delivering service (Mia and Patiar, 2001). Furthermore, serving customers in the service sector is more complex because of the inseparability from production and consumption, intangibility, and the fact that service is a result of actions and performance (Auzair and Langfield-Smith, 2005; Edvardsson *et al.*, 2005; Parasuraman *et al.*, 1985; Winata and Mia, 2005). Customer satisfaction is not merely generated from the results of service delivery but includes the transfer of psychological attributes, perception and expectation between the service providers and the customers (Khatri *et al.*, 2010; Oliva and Bean, 2008). Based on this consideration, learning is required in almost every case, to satisfy the needs and wants of customers.

To ensure that learning has been successfully achieved, evaluation is needed to measure the progress of learning. SPMS can act as a coordinator, monitor, detector and source of feedback to pursue learning. As a coordinator, SPMS helps decision makers to focus their attention on organizational objectives and to integrate employee knowledge in solving problems (Atkinson, Waterhouse, and Wells, 1997; Grant, 1996). As the main objective in the service sector is providing high-level service, SPMS facilitates the essential element of strategic learning by being able to "articulate the organizational vision, clearly define operational terms, and communicate a holistic model that links individual effort and accomplishment to business units' objectives" (Kaplan and Norton, 1996c p. 84). Moreover, SPMS also facilitates a basis of learning to successfully obtain the organizational strategic outcomes (Chenhall, 2005).

Furthermore, organizational learning supports all members of an organization to have better knowledge and understanding, identify problems and determine solutions for organizational improvement (Fiol and Lyles, 1985; Huber, 1991; Kloot, 1997). An improvement can be obtained if the organization can regularly monitor service implementation and respond quickly to problems of service delivery. SPMS facilitates the monitoring of implementation of organizational goals, detecting problems and continuously improving existing practices (Atkinson *et al.*, 1997; Kaplan and Norton, 1996c; Olsen *et al.*, 2007). The ability of SPMS to continuously improve the existing activities, will, in turn, promote organizational learning (Grafton *et al.*, 2010). Likewise, SPMS is useful for promoting learning through monitoring operational goal achievement (Kaplan and Norton, 1996b).

The aim of learning for an organization is to provide a better way to achieve the overall organizational objectives at an individuals, team, department and organizational level (Marsick and Watkins, 1999; Nevis *et al.*, 1995). Feedback systems produce learning, as unsatisfactory results by an employee can provide an opportunity for the supervisor to help their subordinate improve their performance. When the organization detects unsatisfactory results from employees, then learning becomes one approach for the supervisor to suggest to the employees to improve their performance. SPMS acts as a detector to evaluate how far

organizational learning has been obtained by an employee based on the results of their activities. Kaplan and Norton (1996a) proposed that SPMS facilitates learning through the measurement of KPIs in the learning and growth perspectives as a fundamental step in achieving overall corporate objectives. Hence, we propose the following hypothesis:

Management and resources-based view literature agrees that organizational learning improves organizational capabilities to maintain a competitive advantage in the market place (Dodgson, 1993; Hult, 1998; Hult *et al.*, 2000). Organizational learning helps companies enhance both internal efficiency and innovativeness (Yeung *et al.*, 2007). Learning has benefits for the organization in terms of quality improvement, business excellence, improved employee behaviour and developing new knowledge and skills (Crossan *et al.*, 1995; Garvin, 1993; Huber, 1991; Sher and Lee, 2004; Slater and Narver, 1995). Companies benefit from organizational learning by their ability to improve service quality, creating new markets and decrease costs incurred through ineffectiveness, inefficiency and wasted resources (Blazevic and Lievens, 2004; Hatch and Dyer, 2004; Webster, 2004). If operational costs are reduced, the organization may offer lower costs to customers and/or higher service quality.

In dynamic markets with high environmental uncertainties, learning is a prominent factor to facilitate response to the change of business environment for business adaptation and increase efficiency in changing times (Dodgson, 1993). These dynamic capabilities of learning allow the organization to improve knowledge to maintain a sustained competitive advantage by reducing operating costs, shortening lead times for designing new products (Sher and Lee, 2004) and performing tasks better and faster (Khatri *et al.*, 2010). Previous studies provide evidence of the relationship between organizational learning and the desired organizational strategic objectives (Hult and Ketchen Jr, 2001; Paladino, 2007).

Previous discussions suggest that SPMS increases organizational learning leading to better strategic outcomes. Hence, the following hypothesis will be tested:

- H5.* The effect of strategic and operational linkages on strategic outcomes will be mediated by organizational learning such that strategic and operational linkages increase organizational learning, leading to higher differentiation outcomes.
- H6.* The effect of internal aspects of employee on strategic outcomes will be mediated by organizational learning such that internal aspects of employee increase organizational learning, leading to higher differentiation outcomes.
- H7.* The effect of strategic and operational linkages on strategic outcomes will be mediated by organizational learning such that strategic and operational linkages increase organizational learning, leading to higher low-cost outcomes.
- H8.* The effect of internal aspects of employee on strategic outcomes will be mediated by organizational learning such that internal aspects of employee increase organizational learning, leading to higher low-cost outcomes.

3. Research design

3.1 Data collection

We conducted a self-administered survey of Indonesian financial institutions with a sampling frame of managers in the banking, financial and insurance sector, which are mostly located in Jakarta, the capital city of Indonesia. The initial list of companies for potential respondents was obtained from the website of the central bank of Indonesia and from the website of the Indonesian Capital Market Supervisory Agency. Three pilot tests were carried out to investigate potential problems in term of contents, format, terminology

of the questionnaire, difficulty in answering the questions, and bias or misunderstanding (Holbrook *et al.*, 2006; Morgan, 1990; Urbach and Ahlemann, 2010; Yuen, 2004). In addition, the aim of the pilot studies is to gather feedback as well as to measure reliability and validity of the questionnaire. The sample of the pre-test was mostly chosen from managers working in the financial sectors. The managers were selected because they are more similar with the sample in the main study. Based on the results of the pilot studies, we modify the questionnaire to improve its clarity and understandability.

The questionnaires were sent to 355 companies with 176 responses. After initial screening for completeness, we obtained 158 usable responses, a response rate of 22.25 per cent. The response rate is similar to that reported in previous studies (Henri, 2006; and Hall, 2008). While Hall (2008) considered that this response rate is low, in the Indonesian context, especially in the accounting field, this response rate is favourable as compared to other studies, which usually report a response rate below 20 per cent (Gudono and Mardiyah, 2000). Table AI provides the demographic information relating to gender, age, education, position and type of businesses of our respondents.

Because of the low response rate, we investigate the possibilities of non-response bias (Oppenheim, 1992). To do this, we split the samples into two groups according to the date the responses were received. Based on this procedure, we found 25 early responses and 19 late responses. We use Levene's test and *t*-test to examine whether there are any differences between these two groups. The Levene's test aims to seek the homogeneity of variances of the two groups. The results of these two tests indicate that there is no difference between the early and late responses. Thus, the non-response bias is not a concern in analysing the data.

3.2 Variable measurement

3.2.1 Strategic performance measurement system. SPMS was a self-constructed instrument derived from extensive interview with 14 Indonesian senior executives in Indonesian financial institutions. This questionnaire is generated from Yuliansyah *et al.*'s study (2017). This instrument seeks to explore the important characteristics of SPMS used in the service sector. A sample of question items is "PMS improves communication to company employees". Respondents were asked to rate the importance of the characteristic of the SPMS used in their organization using a seven-point Likert scale anchored by 1 (not important) and 7 (very important).

3.2.2 Service strategic alignment. Service strategic alignment variable is assessed using seven questions developed by Yuliansyah *et al.* (2016). They developed those items based on previous studies (Brady and Cronin Jr, 2001; Chenhall, 2005; Heskett *et al.*, 1994; Reichheld and Sasser Jr, 1990; Schlesinger and Heskett, 1991a, b; Schneider *et al.*, 2003). A sample of question items is "Employee's activities are based on guideline in standard operational procedures".

Respondents were asked to rate the extent to which the strategic alignment describes their organization using a seven-scale Likert scale anchored by 1 (not at all) and 7 (great extent).

3.2.3 Organizational learning. The four items of the organizational learning instrument were proposed by Hult (1998) and Hult *et al.* (2000). This variable was also used by Hult and Ketchen, Jr (2001) and Henri (2006). A sample of question items is "Employee learning is an investment, not an expense". Respondents were asked to rate the degree of emphasis of the referenced activities in their organization using a seven-point Likert scale anchored by 1 (not at all) and 7 (great extent).

3.2.4 Strategic outcomes. The strategic outcomes instrument was designed to establish whether the organizational business strategy was low-cost or differentiation. This instrument was developed by Porter (1980) and has been extensively applied in accounting and management studies (Chenhall and Langfield-Smith, 1998a; Auzair and Langfield-

Smith, 2005). A sample of question items is “Improving the utilization of available equipment, services and facilities”. Respondents were asked to indicate their company’s performance relative to its competitors using a seven-point Likert scale anchored by 1 (well below average) and 7 (well above average).

4. Results

Before assessing structural models, we conducted exploratory factor analysis using SPSS to establish uni-dimensionality. Table AII shows the results of the exploratory factor analyses. We obtain two factors for SPMS (strategic and operational linkages; and internal aspects of employee). Furthermore, we obtain one factor for organizational learning and strategic alignment. Finally, we obtain two factors for strategic outcomes (low-cost and product differentiation).

We applied partial least squares (PLS)[2] to analyse the data. PLS has several advantages as compared to the structural equation model. First, PLS is appropriate to be applied for examining variables that have not been used in the prior study (Urbach and Ahlemann, 2010). Second, PLS requires less restrictive assumptions about measurement scales and is suited to test a small sample size (Chin *et al.*, 2003; Fornell and Bookstein, 1982; Hair *et al.*, 2012a). According to Hulland (1999), there are two sequential processes to analyse data: the assessment of reliability and validity and the structural model.

4.1 Assessing reliability and validity

We assessed the reliability of the constructs by examining the Cronbach’s alpha and composite reliability (internal consistency). Table AIII shows that both reliability indicators (Cronbach’s alpha and the composite reliability) range from 0.750 to 0.961. Thus, the reliability is acceptable (Hair *et al.*, 2011).

Test of validity was conducted in two aspects: convergent and discriminant validity. Testing convergent validity can be done through evaluation of average variance extracted (AVE). Hair *et al.* (2011) suggested that the acceptable AVE should be higher than 0.5. Table AIII indicates adequate convergent validity with AVE values of all variables being more than 0.5.

We also performed a discriminant validity test. Testing discriminant validity can be done by applying two methods: the Fornell-Larcker measure and cross-loading. First, Fornell-Larcker creation assumes that each construct’s AVE should be higher than its squared correlation with any other construct (Hair *et al.*, 2012b, p. 430). In addition, adequate discriminant validity suggested that the diagonal elements should be significantly greater than the off-diagonal elements in the corresponding rows and columns (Hulland, 1999, p. 200).

Table AIV shows that all square roots of the average variance extracted are higher than the off-diagonal elements for both the rows and the columns. Furthermore, measurement validity using cross-loading suggested that “An indicator’s loadings should be higher than all of its cross loadings” (Hair *et al.*, 2011, p. 145).

Table AV indicates that all indicators are greater than all of its cross-loading. Thus, measurement validity using both methods of discriminant validity is adequate. Hence, the results of assessment of reliability and validity are acceptable.

4.2 Assessment of structural model

The structural model can be assessed using coefficient of determinant (R^2). Hair *et al.* (2012b, p. 430) asserted that the acceptable level depends on research contexts. Some authors recommend that the R-squares should be at least 0.100 (Camisón and López, 2010; Falk and Miller, 1992). Table AIV indicates that R-squares of the endogenous constructs are more

than the minimum recommended value. The path coefficients test (β) is assessed using bootstrapping with 500 replacements (Hall, 2008; Hartmann and Slapničar, 2009) to see the significance of the relationship between latent variables. Urbach and Ahlemann (2010, p. 21) argued that path coefficients should exceed 0.100 to account for a certain impact within the model. According to Table AVI, the criterion of validity for the structural model is adequate.

4.3 Tests of hypotheses

Table AVII presents the results of the PLS analyses using the differentiation strategy outcome as the dependent variable. Panel B of Table AVII presents the non-hypothesized path coefficients using differentiation strategy outcome as the dependent variable. The results indicate that the following:

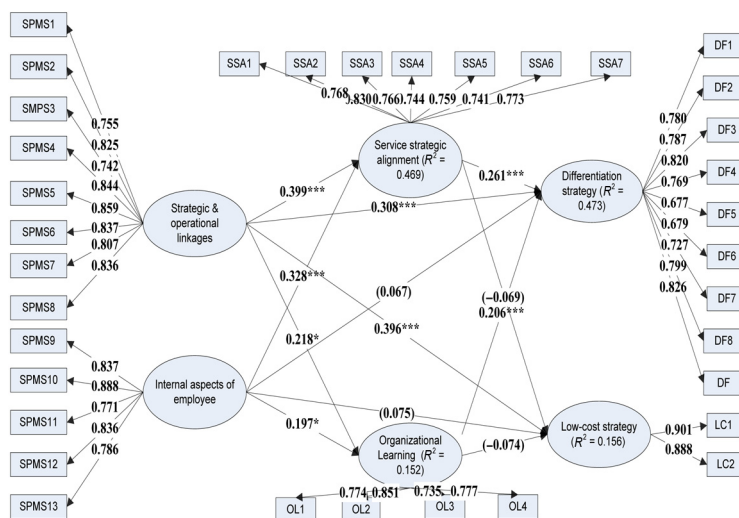
- Path 1 (strategic and operational linkages → differentiation outcome) is positive and significant.
- Path 2 (strategic and operational linkages → organizational learning) is positive and significant.
- Path 3 (organizational learning → differentiation strategy outcome) is positive and significant.
- Path 4 (strategy and organizational linkages → service strategy alignment) is positive and significant.
- Path 5 (internal aspects of employee → organizational learning) is positive and marginally significant.
- Path 6 (internal aspects of employees → differentiation strategy outcome) is not significant.
- Path 7 (internal aspects of employees → service strategy alignment) is positive and significant.
- Path 8 (service strategic alignment → differentiation strategy outcome) is positive and significant.

Figures 1 and 2 show graphically the path involved in testing the hypotheses developed in the previous section.

To test $H1$, we calculate the indirect relationship between strategic and operational linkages and differentiation strategy outcome running through service strategic alignment. The results of this test are presented in Panel B of Table AVII. The results indicate that the indirect effect of strategic and operational linkages on differentiation strategy outcome running through service strategic alignment (path strategic and operational linkages → service strategic alignment → differentiation strategy outcome) is positive and statistically significant ($b = 0.104, z = 1.786, p < 0.05$) [3]. This result supports $H1$.

To test $H2$, we calculate the indirect relationship between strategic and operational linkages and differentiation strategy outcome running through organizational learning. The results of this test are presented in Panel B of Table AVII. The results indicate that the indirect effect of strategic and operational linkages on differentiation strategy outcome running through organizational learning (path strategic and operational linkages → organizational learning → differentiation strategy outcome) is positive and statistically significant ($b = 0.045, z = 1.904, p < 0.05$). This result supports $H2$.

To test $H3$, we calculate the indirect relationship between internal aspects of employee and differentiation strategy outcome running through service strategic alignment. The results of this test are presented in Panel B of Table AVII. The results indicate that the indirect effect of



Note: ***Significant at 1% ** Significant at 5%

Figure 2. PLS model with path coefficients

internal aspects of employee on low-cost strategy outcome running through service strategic alignment (internal aspects of employee → service strategic alignment → differentiation strategy outcome) is positive and statistically significant ($b = 0.086, z = 1.728, p < 0.05$). This result supports $H3$.

To test $H4$, we calculate the indirect relationship between internal aspects of employee and differentiation strategy outcome running through organizational learning. The results of this test are presented in Panel B of Table AVII. The results indicate that the indirect effect of internal aspects of employee on differentiation strategy outcome running through organizational learning (path internal aspects of employee → organizational learning → differentiation strategy outcome) is positive and statistically significant ($b = 0.041, z = 1.648, p < 0.05$). This result supports $H4$.

Table AVIII presents the results of the PLS analyses using the low-cost strategy outcome as the dependent variable. Panel B of Table AVIII shows the non-hypothesized path coefficients using low-cost strategy outcome as the dependent variable. The results indicate the following:

- Path 1 (strategic and operational linkages → low-cost strategy outcome) is positive and significant.
- Path 2 (strategic and operational linkages → organizational learning) is positive and significant.
- Path 3 (organizational learning → low-cost strategy outcome) is negative but not significant.
- Path 4 (strategic and operational linkages → service strategy alignment) is positive and significant.
- Path 5 (internal aspects of employee → organizational learning) is positive and significant.
- Path 6 (internal aspects of employees → low-cost strategy outcome) is not significant.

- Path 7 (internal aspects of employees → service strategic alignment) is positive and significant.
- Path 8 (service strategic alignment → low-cost strategy outcome) is negative but not significant.

To test *H5*, we calculate the indirect relationship between strategic and operational linkages and low-cost strategy outcome running through service strategic alignment. The results of this test are presented in Panel B of [Table AVIII](#). The results indicate that the indirect effect of strategic and operational linkages on low-cost strategy outcome running through service strategic alignment (path strategic and operational linkages → service strategic alignment → low-cost strategy outcome) is negative but not statistically significant. This result does not support *H5*.

To test *H6*, we calculate the indirect relationship between strategic and operational linkages and low-cost strategy outcome running through organizational learning. The results of this test are presented in Panel B of [Table AVIII](#). The results indicate that the indirect effect of strategic and operational linkages on differentiation strategy outcome running through organizational learning (path strategic and operational linkages → organizational learning → low-cost strategy outcome) is positive but not statistically significant. This result does not support *H6*.

To test *H7*, we calculate the indirect relationship between internal aspects of employee and low-cost strategy outcome running through service strategic alignment. The results of this test are presented in Panel B of [Table AVIII](#). The results indicate that the indirect effect of internal aspects of employee on low-cost strategy outcome running through service strategic alignment (internal aspects of employee → service strategic alignment → low-cost strategy outcome) is positive and marginally significant ($b = 0.023$, $Z = 1.530$, $p < 0.10$). This result provides some support to *H7*.

To test *H8*, we calculate the indirect relationship between internal aspects of employee and low-cost strategy outcome running through organizational learning. The results of this test are presented in Panel B of [Table AVIII](#). The results indicate that the indirect effect of internal aspects of employee on low-cost strategy outcome running through organizational learning (path internal aspects of employee → organizational learning → low-cost strategy outcome) is negative but not statistically significant. This result does not support *H8*.

5. Conclusion

We use the PLS analyses to examine the mediating effects of service strategic alignment and organizational learning on the relation between SPMS and strategic outcome. Our key findings are that both service strategic alignment and organizational learning mediate the relation between SPMS and differentiation strategy outcome. The significant indirect effects of SPMS on differentiation strategy running through organizational learning is consistent with the results reported by [Chenhall \(2005\)](#). We cannot find evidence that strategic alignment and organizational learning mediate the relation between SPMS and low-cost strategy outcome, except for the marginally significant effect of the relation between internal aspects of employee and low-cost strategy outcome running through service strategic alignment. These insignificant results for low-cost strategy outcome are inconsistent with those reported by [Chenhall \(2005\)](#), that used companies from manufacturing sector. There are several plausible reasons of these inconsistent results. First, the results suggest that in the financial sector, many intermediaries cannot offer low-cost service because of tight regulations

and control from the Indonesian government. This result is consistent with those reported by Goll *et al.* (2008). In their study conducted in air carrier organizations, Goll *et al.* (2008) found that companies operating in highly regulated industry have better performance if they can differentiate their service from other rivals. Based on our interview with 14 senior bankers, they indicated that their companies focus more on differentiation strategy to create and maintain competitive advantage. Similarly, Schneider *et al.* (2003, see: pp. 128-129) and Payne *et al.* (2000, p. 268) asserted that the financial services literature has suggested for some time that banks need to focus on service quality to deal effectively with the declines in market share and to gain shareholder value.

Second, our findings suggest that one of the characteristics of financial institutions is the establishment of long-term relationships with customers instead of short-term deals (Grönroos, 1994), which is influenced by customer satisfaction. In the service sector, customer satisfaction has a significant contribution to increase performance as it can create customer loyalty (Heskett *et al.*, 1994). In addition, customer satisfaction can be achieved if company can provide high service quality for customers (Heineke and Davis, 2007) rather than price competition. High service quality comes at a high cost (Llewellyn, 1998) and not merely by offering low cost (de Brentani, 1995; Yee, Yeung, and Edwin Cheng, 2010). Third, financial institutions also depend on customers' trust. Customers need confidence to give their funds to these institutions. High service quality may enhance trust. Finally, financial institutions require large investments of infrastructure, facilities and knowledge. Continuing investment provides high-quality facilities and technology for employees and for providing excellent service. This investment is not the result of low-cost strategy.

Overall, our study suggests that companies emphasizing organizational learning and service strategic alignment do not create the organizational ability to offer lower-cost price to customers but they can enhance customer satisfaction, which is one of the important key success factors for a differentiation strategy.

The findings of the study suggested that an effective strategic position in the financial institution will contribute to the companies' ability to satisfy their customers. Furthermore, Liao *et al.* (2009) argued that competition on the basis of general service performance may make it difficult for companies in the financial service industry to achieve superior performance. They proposed that the key to superior future performance in the knowledge-intensive industry is knowledge. Knowledge-intensive skills may become rarer and less imitable (Barney, 1986).

The findings of our study are also consistent with a study of the applicability of SPMS in the banking sector conducted by Akdag and Zineldin (2011). They demonstrate that speed of service, speedy decisions, security of funds, trust in the bank by the customer and friendliness and helpfulness of personnel are the most obvious provisions to fulfil the customers' expectations.

The results of this study should be interpreted in light of two limitations. First, our study was conducted in the financial institutions. This sector is highly regulated and very competitive. As such, this sector focuses on establishing a strong long-term relationship with customers for gaining and maintaining competitive advantage. Other sectors may have a different strategic pattern. The second limitation relates to the variables used in this study. We employed an important variable SPMS in the service sector. This variable was developed from the results of semi-structured interviews with Indonesian senior bankers combined with instruments from prior studies. Although the instrument has been examined using PLS and the results suggest satisfactory psychometric validity, more studies are necessary to refine and validate this instrument.

Notwithstanding these limitations, the results provide insight that SPMS is a key model in enabling companies to achieve their strategic outcomes through the integration of strategic and operational activities both in corporate and individual levels. Individual aspects are represented by the last five questions of SPMS. Hence, these characteristics provide insight that the achievement of organizational strategy is also supported by employee satisfaction and motivation as has been represented by the characteristics embedded from the SPMS. Thus, in terms of construct development, the internal aspect of employee of the SPMS construct would provide a fruitful avenue to be used or re-developed for further research by investigating this effect on the employee's performance or managerial performance.

Finally, the result indicates that service strategic alignment has a statistically significant impact on the differentiation dimension of strategic outcomes. This result suggests that service strategic alignment strongly relates to the service quality provided to enhance customer satisfaction rather than a low-cost strategy. Future research might explore the mediating role of other variables such as customer satisfaction and customer retention on the relation between service strategic alignment and organizational performance.

Notes

1. See also Widener (2004) who claimed that human capital is often the primary resources for non-manufacturing firms.
2. We use SmartPLS to analyse the data.
3. We calculate the path coefficient for the mediating effect by multiplying the standardized path coefficient of each path involved. Sobel (1982) suggested to use the following formula to calculate the Z-score: $Z = \frac{ab}{\sqrt{b^2s_a^2 + a^2s_b^2}}$, where a and b are the standardized path coefficients of path a and path b, respectively, and s_a and s_b are the standard errors of a and b, respectively. We perform the same procedure to test all the hypotheses.

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Corresponding author

Yuliansyah Yuliansyah can be contacted at: yuliansyah@feb.unila.ac.id

Table AI.
Demographic
information of
respondents

Information about	<i>n</i>	Cumulative	(%)	Cumulative (%)
<i>Gender</i>				
Men	92	92	58.2	58.2
Women	66	158	41.8	100
<i>Age</i>				
<35	51	51	32.3	32.3
36-40	42	93	26.6	58.9
41-45	37	130	23.4	82.3
>46	28	158	17.7	100
<i>Division</i>				
Accounting and finance	51	51	32.3	32.3
General	24	75	15.2	47.5
Human resources	44	119	27.8	75.3
Marketing	15	134	9.5	84.8
Others	24	158	15.2	100
<i>Type of business</i>				
Banking	56	56	35.4	35.4
Financing	32	88	20.3	55.7
Insurance	57	145	36.1	91.8
Others	13	158	8.2	100

No	Factor	Items	Description	Factor loading
1	Strategic and operational linkages (eigenvalue = 7.750, % variance = 59.61)	SOL1	The performance measurement system provides a way to translate business strategies into operational activities	0.710
		SOL2	The performance measurement system provides guidelines for operational action for middle and lower management	0.795
		SOL3	The performance measurement system serves as a vehicle to achieve the strategic result	0.763
		SOL4	The performance measurement system enables the company to monitor the implementation of company's strategies	0.752
		SOL5	The performance measurement system provides useful information for detecting problems in implementing the company's strategies	0.729
		SOL6	The performance measurement system drives continuous improvement of strategic objectives	0.760
		SOL7	The performance measurement system shows how activities of this business unit affect activities of other units within this organization	0.622
		SOL8	The performance measurement system integrates across functional boundaries and link together all business unit activities to the achievement of goals and objectives of the organization	0.639
2	Internal aspect of employee (IAE) (eigenvalue = 1.022, % variance = 7.86)	IAE1	The performance measurement system is available in a fully documented form which provides a record for evaluating performance	0.670
		IAE2	The performance measurement system improves communication among company's employees	0.806
3	Organizational learning (eigenvalue = 2.479, % of variance = 59.42)	IAE3	The performance measurement system enables the company to change organizational behaviour (e.g. motivate employer for rewards systems)	0.872
		IAE4	The performance measurement system provides fairness among employees regarding bonuses, rewards systems or job promotion	0.628
		IAE5	The performance measurement system provides feedback information	0.753
		OL1	Employee's learning is an investment, not an expense	0.763

Table AII.
Factor loading for SPMS, organizational learning, service strategic alignment and strategic outcomes using PASW 18.0

No	Factor	Items	Description	Factor loading
4	Service strategic alignment (eigenvalue = 4.159, % of variance = 59.42)	OL2	Basic value include learning as a key to improvement	0.813
		OI3	Once we quit learning we endanger our future	0.782
		OI4	Ability to learn is the key improvement	0.790
		SSA1	Congruence between functional strategy and the organization's mission are clearly formulated	0.742
		SSA2	Long-term technology developments and trends are screened for consistency with the business strategy	0.818
		SSA3	Senior managers understand how products, market acuity and service process interaction and manage these interactions across functions	0.734
		SSA4	Internal service quality (e.g. reward systems, top-down communication, office lay out) is tailored to improve working conditions	0.740
		SSA5	Employee recruitment is consistently screened the appropriate person fits the position	0.789
		SSA6	Learning and training is consistently held to improve high service quality knowledge	0.780
		SSA7	Employee's activities are based on guideline in standard operational procedures (SOP)	0.789
5	Low-cost (eigenvalue = 5.649, % of variance = 51.36)	LC1	Achieving lower cost of services that competitors	0.885
		LC2	Improving the cost required for coordination of various services	0.859
6	Differentiation strategy (eigenvalue = 1.317, % of variance = 11.97)	DIFF1	Making services/procedures more cost efficient	0.687
		DIFF2	Improving the utilization of available equipment, services and facilities	0.687
		DIFF3	Providing high quality services	0.797
		DIFF4	Providing after-sale service and support	0.662
		DIFF5	Customizing services to customers need	0.708
		DIFF6	Introducing new services/procedures quickly	0.736
		DIFF7	Providing services that are distinct from that of competitors	0.796
		DIFF8	Improving the time it takes to provide services to customers	0.786
		DIFF9	Offering a broader range of services than the competitors	0.771

Table AIII.
AVE, composite
reliability and
Cronbach's alpha

Variable	AVE	Composite reliability	Cronbach's alpha
Strategic and operational linkages	0.663	0.940	0.927
Internal aspect of employee	0.680	0.914	0.881
Organizational learning	0.616	0.865	0.790
Service strategic alignment	0.592	0.910	0.886
Low-cost strategy	0.800	0.889	0.750
Differentiation strategy	0.584	0.926	0.909

Table AIV.
Discriminant validity
of latent variable
correlations

Latent variables	SOL	IAE	Correlations			Diff
			OL	SSA	LC	
Strategic and operational linkages/SOL	<i>0.814</i>					
Internal aspects of employees/IAE	0.770	<i>0.825</i>				
Organizational learning	0.370	0.365	<i>0.785</i>			
Service strategic alignment	0.652	0.635	0.448	<i>0.769</i>		
Low-cost strategy	0.382	0.310	0.069	0.204	<i>0.894</i>	
Differentiation strategy	0.605	0.545	0.461	0.596	0.428	<i>0.764</i>

	SOL	IAE	Org. learning	SSA	Low cost	Differentiation
SOL1	0.755	0.576	0.305	0.450	0.251	0.458
SOL2	0.825	0.587	0.256	0.545	0.293	0.432
SOL3	0.742	0.536	0.2334	0.477	0.301	0.374
SOL4	0.844	0.655	0.368	0.574	0.331	0.475
SOL5	0.860	0.680	0.262	0.508	0.358	0.534
SOL6	0.837	0.631	0.339	0.515	0.269	0.527
SOL7	0.8066	0.644	0.304	0.583	0.352	0.551
SOL8	0.837	0.683	0.325	0.573	0.324	0.562
IAE1	0.627	0.786	0.383	0.519	0.130	0.376
IAE2	0.642	0.837	0.278	0.456	0.263	0.403
IAE3	0.637	0.888	0.328	0.582	0.247	0.483
IAE4	0.623	0.771	0.194	0.560	0.371	0.491
IAE5	0.644	0.836	0.327	0.487	0.251	0.476
OL1	0.301	0.254	0.774	0.407	-0.042	0.332
OL2	0.390	0.404	0.851	0.386	0.102	0.419
OL3	0.158	0.180	0.735	0.277	0.099	0.281
OL4	0.259	0.253	0.777	0.322	0.060	0.387
SSA1	0.572	0.511	0.383	0.768	0.274	0.513
SSA2	0.566	0.494	0.337	0.830	0.201	0.547
SSA3	0.576	0.503	0.255	0.766	0.356	0.458
SSA4	0.540	0.496	0.222	0.744	0.148	0.427
SSA5	0.376	0.500	0.343	0.759	-0.007	0.395
SSA6	0.350	0.469	0.429	0.741	-0.091	0.377
SSA7	0.446	0.442	0.486	0.773	0.080	0.447
LC1	0.331	0.257	-0.003	0.113	0.900	0.349
LC2	0.353	0.298	0.131	0.256	0.888	0.418
DIFF1	0.518	0.485	0.371	0.467	0.488	0.769
DIFF2	0.348	0.325	0.272	0.386	0.239	0.677
DIFF3	0.412	0.439	0.415	0.469	0.203	0.769
DIFF4	0.484	0.383	0.349	0.430	0.266	0.679
DIFF5	0.399	0.323	0.3	0.396	0.304	0.727
DIFF6	0.478	0.421	0.266	0.434	0.4358	0.799
DIFF7	0.443	0.454	0.428	0.458	0.346	0.826
DIFF8	0.513	0.435	0.416	0.476	0.240	0.787
DIFF9	0.532	0.448	0.3088	0.556	0.400	0.829

Table AV.
Factor loading using
PLS

Dependent variables	Independent variable				R^2
	Strategic and operational linkages	Internal aspect of employees	Organizational learning	Service strategic alignment	
Organizational learning	0.218 (1.610)*	0.197 (1.450)*			0.152
Service strategic alignment	0.399 (4.213)***	0.328 (3.365)***			0.469
Low cost	0.397 (2.710)**	0.075 (0.529)	-0.074 (0.700)	-0.069 (0.552)	0.156
Differentiation	0.308 (3.364)***	0.067 (0.589)	0.206 (2.851)***	0.261 (2.882)***	0.473

Notes: ***Significant at 1%; **Significant at 5%; *Significant at 10%

Table AVI.
The result of PLS
structural model:
path coefficient, *t*-
statistics and R^2

Path	Standardized path coefficient	t-value (p-value)
<i>Panel A: Non-hypothesized path</i>		
Path 1: Strategic and operational Linkages → Differentiation strategy outcome	0.308***	3.364 (<0.01)
Path 2: Strategic and operational Linkages → Organizational learning	0.218*	1.610 (<0.10)
Path 3: Organizational Learning → Differentiation strategy outcome	0.206***	2.851 (<0.01)
Path 4: Strategic and operational Linkages → Service strategic alignment	0.399***	4.213 (<0.01)
Path 5: Internal aspects of employees → Organizational learning	0.197*	1.450 (<0.10)
Path 6: Internal aspects of employee → Differentiation strategy outcome	0.067	0.589 (ns)
Path 7: Internal aspects of employee → Service strategic alignment	0.328***	3.365 (<0.01)
Path 8: Service strategic Alignment → Differentiation strategy outcome	0.261***	2.882 (<0.01)
Path	Standardized path coefficient ^a	z-value (p-value) ^b
<i>Panel B: Hypothesized path</i>		
<i>H1: Mediating effect</i>		
Strategic and operational linkages → Service strategic alignment → Differentiation strategy outcome	0.104**	1.786 (<0.05)
<i>H2: Mediating effect</i>		
Strategic and operational Linkages → Organizational Learning → Differentiation strategy outcome	0.045**	1.904 (<0.05)
<i>H3: Mediating effect</i>		
Internal aspects of employees → Service strategic alignment → Differentiation strategy outcome	0.086**	1.728 (<0.05)
<i>H4: Mediating effect</i>		
Internal aspects of employees → Organizational learning → Differentiation strategy outcome	0.041**	1.648 (<0.05)

Notes: *, ** and *** denote significant levels based on one-sided tests; ^aThe path coefficient for the mediating effect is calculated by multiplying the standardized path coefficient of each path involved; ^bThe z-score is calculated using the following formula suggested by Sobel, (1982): $Z = \frac{ab}{\sqrt{b^2 s_a^2 + a^2 s_b^2}}$, where a and b are the standardized path coefficients of path a and path b , respectively, s_a and s_b are the standard error of a and b , respectively

Table AVII.
Structural model path coefficients with differentiation strategy outcome as the dependent variable

Path	Standardized path coefficient	t-value (p-value)
<i>Panel A: Non-hypothesized path</i>		
Path 1: Strategic and operational linkages→Low-cost strategy outcome	0.397**	2.710 (<0.05)
Path 2: Strategic and operational linkages→Organizational learning	0.218*	1.610 (<0.10)
Path 3: Organizational learning→ Low-cost strategy outcome	-0.074	0.700 (ns)
Path 4: Strategic and operational linkages→Service strategic alignment	0.399***	4.213 (<0.01)
Path 5: Internal aspects of employee→Organizational learning	0.197*	1.450 (<0.05)
Path 6: Internal aspects of employee→Low-cost strategy outcome	0.075	0.529 (ns)
Path 7: Internal aspects of employee→Service strategic alignment	0.328***	3.365 (<0.01)
Path 8: Service strategic alignment→Low-cost strategy outcome	-0.069	0.552 (ns)
Path	Standardized path coefficient ^a	z-value (p-value) ^b
<i>Panel B: Hypothesized path</i>		
H5: Mediating effect Strategic and operational linkages →Service strategic alignment→ Low-cost strategy outcome	0.028	0.368 (ns)
H6: Mediating effect Strategic and operational linkages→Organizational learning→ Low-cost strategy outcome	-0.016	-0.513 (ns)
H7: Mediating effect Internal aspects of employees→Service strategic alignment→ Low-cost strategy outcome	0.023*	1.530 (<0.10)
H8: Mediating effect Internal aspects of employee→Organizational learning→ Low-cost strategy outcome	-0.015	-0.558 (ns)

Table AVIII.
Structural model path coefficients with low-cost strategy outcome as the dependent variable

Notes: *, ** and *** denote significant levels based on one-sided tests; ^aThe path coefficient for the mediating effect is calculated by multiplying the standardized path coefficient of each path involved; ^bThe z-score is calculated using the following formula suggested by Preacher *et al.* (2007) and Sobel, (1982): $Z = \frac{ab}{\sqrt{b^2s_a^2 + a^2s_b^2}}$, where *a* and *b* are the standardized path coefficients of path *a* and path *b*, respectively, *s_a* and *s_b* are the standard errors of *a* and *b*, respectively.

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