The Impact of Cost Leadership Strategy and Financial Management Control Systems on Organizational Performance in Pakistan's Services Sector

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Abstract

This study gauges the impact of cost leadership strategy and financial management controls on financial performance of firms in Pakistan's services sector. Drawing on a sample of banking, insurance and investment firms listed on the Karachi Stock Exchange, we find that cost leadership strategy and financial management control systems have a significant and positive impact on financial performance. This implies that both factors should be aligned in the long term.

Keywords: Cost leadership strategy, financial control system, organizational performance, services sector.

JEL classification: G21, G30, G39.

1. Introduction

Given how rapidly market environments can change, firm performance may be vulnerable to instability in the face of intense competition and risk. To remain market leaders, organizations must be able to respond quickly to change (Lee et al., 2010). According to Dyment (1987), the existence of tougher markets and heavy competition warrants better strategies for competing in international as well as domestic markets. In the case of Pakistani firms, this entails building better and more efficient control systems and competitive strategies to compete with global rivals. Business strategies depend on two factors: industry position and competition in the overall industry (Porter, 1985). Favorably positioned firm have an advantage over their industry rivals (Liao, 2005).

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Of the different types of business strategies, Snow and Miles (1984) distinguish among defenders, prospectors and analyzers; Porter (1985) highlights focus, differentiation and cost leadership; and Jackson and Schuler (1987) look at cost reduction, quality enhancement and innovation. Porter's generic strategy approach is the most commonly used (Dowling & Schular, 1990; Beaumont, 1993; Huang, 2001), given that it incorporates different patterns of competitor advantage, investment strategies and positioning objectives with respect to competitors (Hofer & Schendel, 1978).

This study examines the extent to which firms' use of Porter's (1985) cost leadership strategy (CLS) affects financial performance in Pakistan's services sector. For firms to remain competitive and enjoy enhanced organizational performance, their CLS and financial management control system (FMCS) should remain aligned. Cost leadership has therefore become an important contingent variable determining overall organizational performance and needs to be matched well with the firm's FMCS (Chenhall, 2003). Generally, FMCS falls within the domain of the management and operational department.

Interest in the enhanced contingent relationship between FMCS and CLS has grown over the last two decades (Auzair & Langfield-Smith, 2005; Cades & Guilding, 2008), especially given highly competitive markets (Simon, 1990; Langfield-Smith, 1997; Kald et al., 2000; Gani & Jermias, 2004). The concept of CLS originates from Porter's (1985) study and involves setting a low cost for products in a competitive industry and utilizing resources efficiently and effectively. CLS produces a cost advantage for the firm through the pursuit of different sources over time, such as updated private technology, privileged access to raw material and gaining economies of scale (Govindrajan, 1988). It also depends on organizational structure (Langfield-Smith & Auzair, 2005). FMCS is a major type of internal control used for implementing different strategies in organizations at a large scale (Hitt et al., 2006). It helps firms manage competition within the market and their overall organizational performance (Farkas & Wetlaufer, 1996).

Organizational performance measures three types of performance indicators: financial performance, market performance and shareholder value performance. In this study, it is measured by different constructs such as returns on investment (ROI), profitability, cash flows from operation, cost control, sales turnover, revenue from new products and market share. Production of earnings and revenue generation through accruals and cash flow affects organizational performance (Dechow, 1993).

However, FMCS and CLS are not practiced effectively in the Pakistani services sector. There is a need, therefore, to investigate the level of performance, especially when low economic growth follows steady growth, such as over the last decade. The application of these strategies is critical to the performance of the organization. If applied successfully and effectively, they can enhance profit margins and promote better resource utilization. The role of such strategies in enhancing firm performance has already been explained in the literature for countries such as the US, China and Japan (Sahadev et al., 2010). This study investigates the extent to which CLS and FMCS are applied in the services sector in Pakistan and their impact on financial performance. Our findings are likely to be useful to financial decision makers.

2. Theoretical Framework

Firms work to gain a better position and earn higher profits by enhancing their turnover ratio and increasing activities using business strategies. These strategies are, therefore, based on customer valuation and are designed to gain an advantage over competitors (Dess et al., 1995). A company's strategy is a sign of how and where it thinks it can gain a competitive edge over its rivals (Liao, 2005).

CLS is a strategic move by large corporations to gain a competitive advantage and directly increase their returns and lower the cost of business (Porter, 1985). The literature explains CLS as the interrelated chain of action used to generate services and tangible items at the lowest possible price in comparison to competitors (Hitt et al., 2001). Organizations that have used these strategies successfully include Black & Decker, Texas, DuPont and Wal-Mart (Charlene et al., 2012). Porter's (1985) typology explains CLS as value creation for the customer by maintaining a standardized quality and emphasizing quality enhancement. Aligning its strategy with the organizational control system can enhance a firm's performance (Charlene et al., 2012).

Several studies have observed a link between performance and low cost (Jushon & Parnell, 2008; Koseoglu et al., 2009). Wright (1987) relates cost leadership to market share and profitability. CLS is related to the elasticity of demand in the market, which promotes price concession policies. As demand rises, price policies change. Consequently, higher earnings can be achieved using different cost reduction strategies efficiently, for example, through economies of scale.

There are different categories of FMCS in the literature (Tsamenya et al., 2011). The major categories in the management's control are formal control, informal control, action control, result control, loss control, and financial and nonfinancial control (Simon, 1990; Kald et al., 2000). Financial management control is the backbone of any organization and has a prominent impact on profit and firm performance (Johnson & Kaplan, 1987; Kaplan & Norton, 1992; Otley, 1994). Liao (2005) explains FMCS in terms of ROI, which a decision maker can use to analyze overall firm performance. FMCS consists of different constructs, including standard costing, budgetary control, absorption costing, variance analysis and overhead analysis (Vanderstede & Bruggeman, 1993; Firth, 1996; Collins et al., 1997; Simon, 1987).

Rowe and Wright (1997) note that organizations can enhance performance by adopting a cost behavior approach through short-term ROI, short and long-term financial analyses and knowledge of business operations. Baysinger and Hockison (1989) argue that any firm aiming to enhance profits through better performance must maintain better financial controls. Dyment (1987) notes that FMCS exists worldwide and includes reporting cash expenses, borrowing cash, analysis of financial exchange, dealing with working capital at the lowest financing rates and exchange rate positions. Other financial controls include examining total profits, including net profit, gross profit, receivable turnover in days, cost of inventory in days and capital expenditure to gauge organizational financial performance.

Organizational performance is used as the dependent variable for this study. The organizational performance can be improved by the increased production of earnings and revenue generation through accruals and cash flow (Dechow, 1993). Another way to enhance performance is through cost controls, that is, by managing the firm's expenses. In an environment of higher costs and lower benefits, companies may not always be able to compete. As more product is converted into sales, this increases assets and generates profits, which directly improve the financial position of the organization. The greater the market share, the higher will be the cash inflow. These measures thus affect organizational performance.

As Figure 1 shows, contingency theory is the dominant theoretical framework in analyzing the relationship between CLS and FMCS and how they influence firm performance (Chenhall, 2003; Langfield-Smith, 1997). These studies suggest that adopting a certain strategic orientation can promote firm performance when supported by a given FMCS (Collins et al., 1997; Cooper, 1996).

Figure 1: Theoretical framework
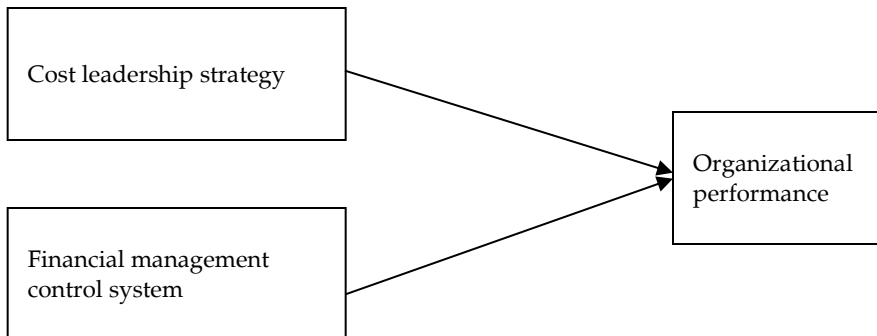
The literature provides ample evidence of the importance of Porter's CLS framework. Govindarajan and Fisher's (1990) study of 145 managers finds that financial control systems lead to higher performance. Therefore, it can be argued that FMCS coupled with low CLS will enhance financial performance in the services sector. Asdemir et al. (2017) argue that financial information generated through a financial management system plays a major role in the link between firm strategy and financial performance. Another study of 106 firms in Ghana and South Africa reveals the positive impact of management control systems on firm performance, where CLS mediates this link (Martí, 2017). Following this argument, we posit that:

- H1: Low CLS positively affects the performance of services sector firms.

- H2: FMCS positively affects the performance of services sector firms.

3. Methodology

This study gauges the impact of two independent variables – CLS and FMCS – on firms' financial performance in the services sector of Pakistan. A total of 32 companies were selected for data collection. The study population included the finance managers of companies with head offices in Lahore and Rawalpindi/Islamabad and listed on the Karachi Stock Exchange (in the banking, insurance and telecommunication sectors).

We apply purposive sampling to the services sector companies representing the study population. Confirmatory factor analysis (CFA) and regression analysis are carried out to check the validity of the structural model and hypothesis, respectively. A questionnaire of 32 items (see the

Appendix) was designed according to the nature of the underlying variables. The CLS measure is adapted from Miller and Dess (1993) and the FMCS measure is based on Firth (1996). Performance is measured in terms of effectiveness, and scale is adapted from Govindarajan (1988), Govindarajan and Gupta (1985), Govindarajan and Fisher (1990), Jermias and Gani (2004) and Cadez and Guilding (2008).

Although the link between CLS, financial control systems and firm performance is well established in the literature, there is little evidence for countries such as Pakistan. Hence, we carry out a CFA to establish the fit of the model with the data (Bakari et al., 2017; Martin et al., 2009). We analyze the factor loadings, AVE and CR to establish evidence of convergent and discriminant validity and report the results of hypothesis testing through a path analysis. Table 1 gives standardized estimates, including and excluding five items under CLS. A construct with a factor loading of above 0.40 is considered significant. The values of the standardized coefficients are CL1, CL2, CL3, CL4 and CL5, respectively. For all five items, the factor loading is above or equal to 0.40, so that all these items were included in the questionnaire and are deemed significant.

Table 1: Factor loadings, AVE and CR values

No.	Items	Factor loading ($\geq$ 0.40)	Decision	Reliability ($\lambda 2$)	Δ= 1 item reliability
Cost leadership					
1.	CL1	0.90	Included	0.8100	0.1900
2.	CL2	0.46	Included	0.2116	0.7884
3.	CL3	0.49	Included	0.2401	0.7599
4.	CL4	0.89	Included	0.7921	0.2079
5.	CL5	0.40	Included	0.1600	0.8400
		$\sum \lambda 1 = 3.14$			$\sum \delta 1 = 2.7860$
AVE of cost leadership strategy = [(0.90)2 + (0.46)2 + (0.49)2 + (0.89)2 + (0.4)2]/5 = 0.44276					
CR for cost leadership strategy = (3.14)2/(3.14)2 + 2.7860) = 9.8596/12.6456 = 0.779686					
Financial management control system					
1.	FMCS1	0.72	Included	0.5184	0.4816
2.	FMCS2	0.86	Included	0.7396	0.2604
3.	FMCS3	0.66	Included	0.4356	0.5644
4.	FMCS4	0.80	Included	0.6400	0.3600
5.	FMCS5	0.68	Included	0.4624	0.5376
6.	FMCS6	0.65	Included	0.4225	0.5775
7.	FMCS7	0.58	Included	0.3364	0.6636
8.	FMCS8	0.75	Included	0.5625	0.4375
9.	FMCS9	0.69	Included	0.4761	0.5239
10.	FMCS10	0.63	Included	0.3969	0.6331
11.	FMCS11	0.81	Included	0.6561	0.3439

No.	Items	Factor loading ($\geq$ 0.40)	Decision	Reliability ($\lambda2$)	$\Delta = 1$ item reliability
12.	FMCS12	0.80	Included	0.6400	0.3600
13.	FMCS13	0.86	Included	0.7396	0.2604
14.	FMCS14	0.78	Included	0.6084	0.3916
15.	FMCS15	0.86	Included	0.7396	0.2604
16.	FMCS16	0.57	Included	0.3249	0.6751
17.	FMCS17	0.88	Included	0.7744	0.2256
18.	FMCS18	0.93	Included	0.8649	0.1351
19.	FMCS19	0.89	Included	0.7921	0.2079
20.	FMCS20	-0.80	Excluded		-------
		$\sum \lambda1 = 14.4$			$\sum \delta1 = 7.8996$

AVE for FMCS = 11.1304/19 = 0.5858105

CR For FMCS = $(14.4)2/(14.4)2 + (7.8996) = 207.36/215.2596 = 0.96330$

Organizational performance					
01	OP1	0.28	Excluded		-------
02	OP2	0.41	Included	0.1681	0.8319
03	OP3	0.56	Included	0.3136	0.6864
04	OP4	0.21	Excluded		-------
05	OP5	0.58	Included	0.3364	0.6636
06	OP6	0.21	Excluded		-------
07	OP7	0.97	Included	0.9409	0.0591
		$\sum \lambda1 = 2.52$			$\sum \delta1 = 2.2410$

AVE for OP = $[(0.41)2 + (0.56)2 + (0.58)2 + (0.97)2/4$

CR for OP = $(2.52)2/(2.52)2 + 2.2410 = 6.3504/8.5914 = 0.7391$

Note: CR = $(\sum \lambda1)2/(\sum \lambda1)2 + \sum \delta1$, and AVE = $\sum (\lambda^2)/N$ and $\sum \lambda1$ = sum of factor loading > 0.40.

The value of AVE is near 0.5, implying adequate convergent validity. Construct reliability explains the degree to which the assessment tools produce consistent results. Since the value is greater than 0.7, this suggests higher reliability in the case of the CLS variable. Table 1 gives the standardized estimates or factor loadings, including or excluding 20 items under FMCS. A factor loading above 0.40 is generally considered significant. For the given 20 questions for FMCS, 19 items have a factor loading above 0.40, while one corresponds to less than 0.40 and is excluded from the final questionnaire due to its negative value.

AVE is almost equal to or greater than 0.50 in comparison to the variance, since the construct is greater than the latter due to the measurement error. Since the value of construct reliability is greater than 0.7, this suggests reliability within an acceptable range. The table gives standardized estimates or factor loadings for seven items under organizational performance in the questionnaire, as measured by the CFA. Any item with a factor loading greater than 0.40 is taken as significant. For

four items, the value of the estimate or factor loading is greater than 0.40: these are included. Questions 1, 4 and 6 have a factor loading of less than 0.40 and so are excluded from the CFA survey.

The value of AVE is equal to 0.50 for organizational performance, which implies adequate convergent validity. In other words, the constructs explain more variance in the model than their respective error terms, thus indicating good convergent validity. The value of construct reliability for organizational performance lies in the acceptable range, which implies that the variable is reliable and the assessment tools will produce a stable, consistent result.

The CLS measure, adapted from Miller and Dess (1993), is divided into further constructs to elicit responses in comparison to other leading companies. These include economies of scale, procurement, prices, market share and operating efficiencies. Respondents were asked to compare the firm with the nearest competitor on a five-point scale. A company with a score of less than 3 is taken as exhibiting lower cost leadership in comparison with its competitors. Likewise, an organization with a score of more than 3 is deemed to exhibit better management of cost reduction compared to its competitors.

The FMCS variable is adapted from Firth (1996) and measured on a five-point scale ('used less often' to 'used more often'). Respondents were asked to measure budgetary control and price control elements. Organizational performance is measured using a five-point Likert scale ('very poor' to 'very good') for six items. The average value indicates better firm performance. Organizational performance is measured in terms of effectiveness (Govindarajan & Gupta, 1985; Govindarajan, 1990; Jermias & Gani, 2004, Cadez & Guiding, 2008). The reliability of each variable is calculated using Cronbach's alpha for each item. Organizational performance is a dependent variable and consists of four items, with a reliability value of 0.721. The corresponding values for CLS and FMCS are 0.839 and 0.961 with a total of five and 19 items, respectively (Table 2).

Table 2: Reliability of instruments

Variable	No. of items	Cronbach's alpha
Cost leadership strategy	5	0.839
Financial management control system	19	0.961
Organizational performance	4	0.721
Total	28	0.926

4. Results

Table 3 shows that 93.75 percent of the respondents are male. Only two are female, of a total of 32 respondents, possibly because cultural norms, socioeconomic constraints to education and restricted mobility curb their participation in the services sector. The table gives the rate of response by occupation and level of education. There is a high degree of response from managers and chartered accountants, as well as people with management degrees. Most managers and executives are aged 26–40 and 41–55 (near 50 percent each). Only 3.1 percent of respondents are older. The table shows that most managers who responded to the survey have 10–20 years' experience. Of an overall sample of 32 respondents, 29 responses are from the private sector. Public sector responses have a frequency of 9.4 percent, with a total of three organizations. The mean value of the variable is almost 4, which represents the number of finance managers considering strategic decisions important to firm growth and performance.

Table 3: Frequency distribution

	Number of respondents (N = 32)	
Gender	Frequency	Percentage
Male	30	93.75
Female	2	6.25
Qualification		
Chartered accountant	13	40.60
ICMA	5	15.60
PhD	0	0
Others	14	43.75
Age		
25 or under	0	0
26–40	16	50
41–55	15	46.90
56 or older	1	3.1
Experience		
Less than 10 years	16	50
10–20 years	16	50
20–30 years	0	0
Others	0	0
Profile		
Public sector	3	9.40
Private sector	29	90.60
Variables	Mean	SD
Cost leadership strategy	3.8707	0.8145
Financial management control system	4.2500	0.5000
Organizational performance	3.8138	0.8517

Figure 2, a structural equation model (SEM), shows that there is a positive effect of CLS and FMCS on organizational performance. A 1 percent change in CLS results in a 0.71 unit change in organizational performance. A 1 percent change in FMCS results in a 0.397 unit change in organizational performance. Of five questions for CLS, six for organizational performance (OP) and 19 for FMCS, some questions were excluded to improve the overall model. Two questions for CLS, one for OP and four for FMCS were excluded due to the maximum discrepancy between items.
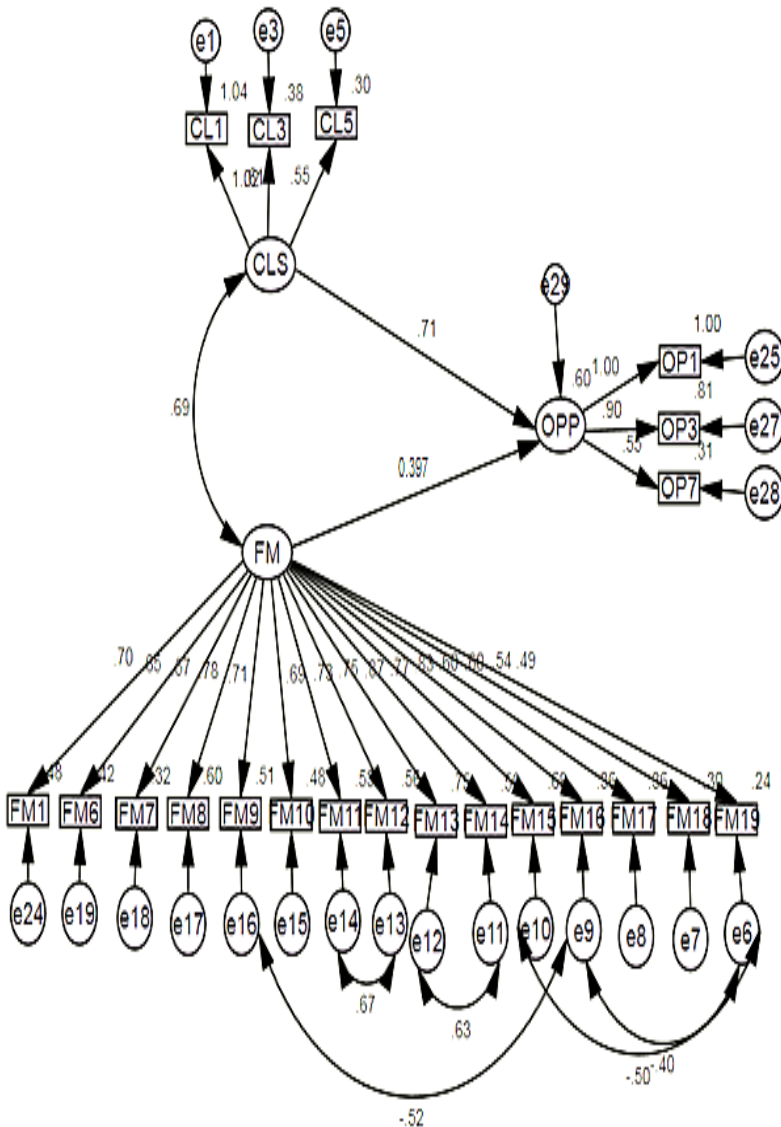
Figure 2: Path analyses for overall model

Table 4 shows that the model is significant as the p-value is less than 0.05, indicating a significant association between the dependent variable OP and independent variables CLS and FMCS. The results also show the direction and magnitude of the relationship through the structural and path coefficient in the SEM, which is used for checking the direct effect on a given dependent variable in a single-group study. The critical ratio gives the significance of the covariance among the variables (CR > 1.96). FMCS is a more important variable than the others, as it has a coefficient of 0.298. The individual variable has a larger positive impact on the dependent variable, as indicated by the standard error.

Table 4: Regression weights and hypothesis testing

IV		DV	Estimate	SE	CR	P-value	Label
CLS	--->	OP	0.710	0.250	3.376	***	H1 supported
FMCS	--->	OP	0.397	0.137	2.897	***	H2 supported
Model fitness index of overall model							
Factors	Values	Factors	Values	Factors	Values	Factors	Values
CMIN	487.99	Df	181	AGFI	0.864	GFI	0.913
Chi-square	2.697	P-value	0.000	TLI	0.896	CFI	0.907
RMSEA	0.097						

Our results prove hypothesis H1: that cost leadership has a positive, significant impact on the dependent variable, organizational performance. Similarly, we test the impact of the second independent variable, FMCS. Table 4 gives the values of different criteria for overall model fit. Most values are in the correct range, including goodness of fit index (GFI), adjusted goodness of fitness (AGFI), Tucker Lewis index (TLI), comparative fit index (CFI), root mean square of approximation (RMSEA) and degree of freedom (0.913, 0.864, 0.896, 0.907, 0.097 and 181, respectively). Since the p-value is lower than 0.05, there exists a positive relationship between the dependent and independent variables. Therefore, the model is acceptable. FMCS emerges as the most influential independent variable, showing how critical it is to financial managers.

We have looked at different demographic variables, including age, qualifications, experience, type of organization and gender. The results of the regression analysis indicate a relationship between the established variables and organizational performance, with a p-value of less than 0.05. This implies that all the identified critical variables have a positive impact on public and private sector firm performance in the services sector.

The results of the correlation analysis show that OP has a significant, positive directional impact through the independent variables. Thus, CLS and FMCS contribute toward OP through their correlational significance. The results imply that these variables are decisive factors in organizational performance. The variables that affect organizational performance also depend on how different factors are recognized, based on the work of an industry or sector, its location and the country where the data is collected.

The rationale for using financial managers as respondents is that they have a direct impact on price and cost adjustment and thus on firm operations and performance. Although cost reduction strategies and FMCS are not as common in the services sector in Pakistan, combining these would enhance overall performance. A deeper analysis of FMCS is especially important for larger firms (Hitt et al., 2006). While firms' performance also depends on the expectations of the management, increasing competition means that cost management is the most effective way of increasing a firm's competitive advantage.

5. Conclusion

This study explains the impact of CLS and FMCS in the services sector. Our results differ from the literature to some extent: while cost leadership and FMCS are highly influential variables, as supported by other studies, other factors such as the top management's decision making strategy, the nature of the sector (private or public) and strategy matching also have a significant impact on organizational performance.

Our purpose was to determine the level of application of CLS and its impact on organizational performance. The results confirm the importance of CLS and FMCS, based on feedback from a sample of financial managers. These factors must therefore be part of the financial decision making process. We also find that demographics have a positive and direct effect on organizational performance. While other studies have also looked at the impact of different management control systems on firm performance, we find that FMCS is the most effective, in line with the literature.

Organizational performance can be hard to measure. Tools used to measure it include key performance indicators (KPIs) and critical success factors, which are slightly different from one another. We recommend using KPIs in this context. The literature also reveals that the misalignment of financial and nonfinancial strategies and lack of technological

enhancement of control systems is a major constraint to organizational performance. We recommend public-private partnerships in the services sector to enable better strategy alignment in the long term. Strategies should also be evaluated properly and alternatives presented.

The study has theoretical and practical implications for the services sector, especially for financial managers who are involved in the firm's organizational capabilities and structure. Our results show how important it is to be oriented toward competitors through CLS, since this affects organizational performance indirectly. The study also helps managers gauge real outcomes versus forecasts. CLS can be used for balancing profits. A better FMCS aligned with CLS will help generate capital for further growth and investment and increase the firm's market share. CLS helps target budget-conscious customers. Efficiency can be enhanced by lowering costs related to the supplier through the vertical integration of outsourcing. More money can then be spent on research and development. Higher investment ultimately results in better organizational performance.

The study has several limitations that future research could address. First, it does not account for any difference in responses between male and female respondents. Second, it is restricted to the services sector, which makes it more difficult to generalize the results. Extending it to different countries would add more variables. Third, the study was cross-sectional. A longitudinal design would allow the results to be more generalized. Fourth, we have used nonprobability sampling. Finally, the study does not look at other managers who may be involved in financial decision making. Future studies could therefore use other sampling techniques, look at business strategies other than CLS and consider different sectors, such as manufacturing.

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Appendix

Cost leadership strategy

On a scale of 1 to 5, compare the following aspects of your company to those of your largest competitor (1 = significantly lower, 2 = lower, 3 = average, 4 = higher, 5 = significantly higher).

Item	1	2	3	4	5
1. Your organization pursues cost advantages in procurement					
2. Your organization pursues economies of scale					
3. Your organization pursues operating efficiencies					
4. Your organization offers high prices					
5. Your organization uses aggressive product pricing to gain market share					

Financial management controls

On a scale of 1 to 5, indicate the extent to which the following aspects are part of your management control system (1 = less often, 2 = less, 3 = average, 4 = more, 5 = more often).

Item	1	2	3	4	5
1. Your organization uses budgetary performance measures					
2. Your organization uses variance analysis					
3. Your organization uses activity-based costing					
4. Your organization uses variable costing					
5. Your organization uses absorption costing					
6. Your organization uses multiple overhead cost pools					
7. Your organization allocates overheads based on multiple activities					
8. Your organization uses multiple service cost pools					
9. Your organization allocates service cost pools based on multiple activities					
10. If standard costing is in place, it is used for budgeting					
11. If standard costing is in place, it is used for control purposes					
12. Your organization calculates standard cost variances					
13. In your organization, all variances are reported to the management					
14. Your organization prepares cash/working capital budgets					
15. Your organization prepares sales budgets					
16. Your organization prepares profits budgets					
17. Your organization prepares production budgets					

Item	1	2	3	4	5
18. Your organization uses product costs when making decisions					
19. Your organization uses product costs when evaluating inventory					
20. Your organization uses product costs when setting prices					

Performance

On a scale of 1 to 5, compare the following aspects of your company's performance to those of your largest competitor (1 = very poor, 2 = poor, 3 = average, 4 = good, 5 = very good).

Item	1	2	3	4	5
1. ROI					
2. Profitability					
3. Cash flow from operations					
4. Cost control					
5. Sales turnover					
6. Revenue from new product					
7. Market share					