

Relationship between Strategy and Management Control Systems : Case of a Privatized Telecommunication Company in Sri Lanka

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Abstract

This study focused on the case of a partially privatized telecommunication company in Sri Lanka in order to examine the relationship between strategy and management control systems (MCS). A retrospective longitudinal perspective spanning over 11 years was used in this study. Data collection was based on three sources : a documentation review ; interviews with the top management ; and a questionnaire administered among senior and middle level managers. The study found a two-way relationship between strategy and MCS in which strategy initiates MCS and MCS facilitates the successful implementation of strategy.

Keywords : Strategy, Management Control Systems, Organizational Performance, Strategic Change, Privatization Process

1 . Introduction

Over the past few decades, there has been a growing interest in researching the importance of achieving a fit between an organization's management control systems (MCS) and its strategy. These literature falls into two research categories : empirical-based and case-based research. Empirical research findings suggest that, consistent with contingency theory, there appears to be particular MCS configurations or designs which enhance performance depending on the strategy pursued by organizations. Case study research augments this argument by stressing the use of MCS as well as the design of MCS, which is of primary importance in strategy implementation (Tucker et al., 2006).

Today, the organizations are operating in a highly competitive environment, in a dynamic world. Organizations are likely to experience ever more complex challenges in the new millennium because of changes in global economies, competition and nature of knowledge (Drucker, 1997). Ability of the management to anticipate and respond to opportunities and pressures for change is critical for organizational survival (Abernethy and Brownell, 1999). For this task, MCS can play an important role in organizations that are undergoing a strategic change. A number of researchers (Dent, 1990 ; Argyris, 1990 ; Chenhall 2003) has provided strong theoretical support

for the idea that MCS can serve an active role in shaping organizational change. However, there is little broad-based empirical research examining how these systems are used in organizations facing strategic change and with what consequences (Shields, 1997). Further, there is a dearth of researches which has adopted a broader approach in examining key constructs of MCS and strategy. Many researchers considered only one aspect of MCS and strategy in building the relationship between strategy and MCS. Further, the need for more research on facilitating the role of MCS in achieving strategic change has been emphasized in the literature (Dent 1990, Shields 1997, Kober et al., 2007). In addition, there is a lack of research which uses a longitudinal perspective in examining this relationship. Most of the research in this area has focused on cross-sectional analysis which is not a robust test of causality. Therefore this paper tries to fill this gap by adopting both a broader approach and a longitudinal perspective, in order to identify the relationship between strategy and MCS over three time periods in an organization facing strategic change by focusing on a partially privatized telecommunication company operating in Sri Lanka.

2. Prior Literature

Traditionally, MCS were considered to be formal control and feedback systems used to monitor organizational outcomes and correct deviations from preset standards of performance (Anthony, 1965). Now, the role of MCS to foster flexibility and support organizational change or strategic change, innovation and organizational learning is also recognized (Simons, 1990; Knights and Willmott, 1993; Chenhall and Langfield-Smith, 2003; Bisbe and Otley, 2004).

Early studies in contingency research have found that there is a match between a company's strategy and its MCS (Govindarajan and Gupta, 1985; Miles and Snow, 1978; Miller and Friesen, 1982; Simons, 1987). These studies have proved useful in recognizing that there are systematic differences in the MCS of companies pursuing deferring strategies. They have highlighted the importance of achieving a fit between a company's MCS and its strategy to enhance performance (Dent, 1990; Langfield-Smith, 1997; Simons, 1987, 1990). Furthermore, literature on the role of MCS in shaping organizational change has developed (Knights and Willmott, 1993; Simons, 1994; Abernathy and Brownell, 1999; Chenhall and Langfield-Smith, 2003; and Kober et al., 2007).

There was very little empirical research examining the role that management accounting control systems can play in shaping organizational change. Archer and Otley (1991) and Roberts (1990) found that the accounting system could have a harmful impact in prohibiting strategic change. Archer and Otley concluded that the nature of the MCS was one factor constraining the development of strategies (Langfield-Smith, 1997). This idea also appears in Roberts (1990), who studied the strategic change in large decentralized companies. Roberts' study (1990) emphasized how accounting controls can create a climate that can act against successful strategy formation and implementation processes. However, Knight and Willmott (1993) contrasted with Roberts' findings describing how new accounting control systems can be used to effect strategic change in

an insurance company. Developments in the political and economic climate surrounding the financial services sector forced the company to become more competitive. They were of the view that a new system of budgeting and expense control was a crucial element of the transformation of the company from its 'sleepy' paternalistic traditions into an "aggressive", "competitive" financial services company. They found that the control system played a role in adapting managerial attitudes and behavior to be more consistent with the new strategy and the new competitive environment.

Similarly Simons (1990, 1991, and 1994) presented a series of cases that contributed to a theory explaining how senior managers can use controls to implement and develop business strategy. Simons (1990) focused on the relationship between business strategy and the firms' use of MCS. Simons' research found the importance of the dynamic relationship between formal process and strategy: competitive strategic positioning, management control and the process of strategy making play one upon the other as the firm evolves and adapts over time.

Simons (1991) refined his theory by focusing on how top managers use formal systems interactively in different strategic settings to focus on organizational attention and learning, and thereby shape the formation of new strategies. Simons (1994) extended his earlier work to examine how ten newly-appointed senior managers used formal control systems as levers of strategic change and renewal. These two studies (Simons, 1991 and 1994) represented that senior managers may select and use MCS in strategy formation and implementation, and to stimulate strategic change.

Further, Chenhall and Langfield-Smith (2003) explored how gain sharing systems (i. e. formal performance measurement and reward system) support in sustaining change and encouraging high performance. They found that, continued use of gain sharing as the formal reward system was inconsistent and that more open flexible social controls may have been more suitable to developing personal trust and cooperative innovation. Simons (1990) supports in this regard stating that open and flexible MCS are more appropriate for organizations facing urgent needs for high levels of strategic change.

Further, there is very little research examining the interactive role of MCS in shaping organizational change. Simons (1991, 1995) defines two different styles of use of MCS; a diagnostic and an interactive style of use. Simons (1994) differentiated between 'diagnostic' and 'interactive' controls, and argued that controls did not merely constrain and monitor activity (i. e. diagnostic function) but could also be used interactively to maintain and shape patterns in organizational activities. Simons (1994) showed how formal control systems, if used in an interactive manner, could overcome organizational inertia and manage emergent strategies.

Abernethy and Brownell (1999) extended Simons' arguments and explored how organizations use Management Accounting Control Systems (MACS) to facilitate and support the strategic change process. They argued that when strategic change occurs, there was a higher level of uncertainty in the organization, and senior managers required more sophisticated communication and information channels to cope with the uncertainty. They found that budget use moderates the

relationship between strategic change and performance, and the relationship between strategic change and performance is more positive when the style of budget use is interactive compared to when it is diagnostic. Further, Henri (2006) found that an interactive use of performance measurement system (PMS) fosters the four capabilities (market orientation, entrepreneurship, innovativeness and organizational learning) by focusing organizational attention on strategic priorities and stimulating dialogue.

Thus, research findings of strategy-MCS relationship are ambiguous. Some researches argue that there is a match between strategy and MCS, but they have not clearly established whether MCS is an outcome of the strategic change or whether MCS facilitates the change. However the findings of many studies have supported the latter position. Further some researches argue that there may be a two-way relationship between strategy and MCS (Kober et al., 2007). These findings suggest that more research in this area is required to explore this relationship. Therefore, the objective of this study is to examine the relationship between strategy and MCS in more detail in a broader perspective.

3. Case Study Company

Sri Lanka Telecom Ltd (hereafter referred to as SLT), a leading and a partially privatized fixed telecommunications company was selected as the case company of the study. The author choose this company mainly based on the fact that SLT is regarded as a major fixed telephony service provider operating in Sri Lanka which has undergone significant changes during past two decades, especially pro-competition institutional reforms in concert with clearly visible expansion of telecommunications-based services and the utilization of modern technology.

3.1 Evolution of the company

SLT was the country's first telecommunications company and its history date back to 1858. In tandem with the global pattern, postal, telegraphic and telephone services were managed as a state-owned enterprise on a monopolistic basis in Sri Lanka from the start, and that arrangement lasted until the end of the 1980s when Sri Lanka embarked on a policy of deregulation and liberalization of telecommunications. Even though some telecommunications services were liberalized towards the end of 1980s, SLT continued to enjoy a monopoly in the fixed telephony sector until middle of 1990s.

A major shift of the government policy towards telecommunication activities began in 1996. In this year, the local telecom industry was liberalized ending the monopoly status of SLT. During the same year 'Sri Lanka Telecom Limited' was created as a government owned company and in 1997, Nippon Telegraph and Telephone (NTT) Communications Corporation of Japan (hereafter referred to as NTT) invested in a 35% stake of the company's capital in order to takeover the management under an agreement signed between government of Sri Lanka (hereafter referred as

GOSL) and NTT. Thus, the major transformation process of the company was started in 1997 when the new Japanese management was appointed.

As a general rule, pursuant to the original agreement, NTT nominates up to four members of the board of directors of SLT and the GOSL nominates the other six members including the Chairman. NTT has the power to designate SLT's Chief Executive Officer (CEO) who is responsible for the overall operations of the company and operates under the authority granted by the board of directors. After taking over SLT's management in 1997, the new Japanese management felt the need for a major reorganization in order to face the competition emerging from the newly started private operators. Support for this view the first Japanese CEO stated :

"The need for a major reorganization of SLT, in order to transform it from a government corporation to a private company working in a different business culture was understood very early, and work on this began in earnest" (SLT Annual Report, 1998).

Key elements of SLT's transformation process included the setting up of a clear vision and a business strategy. The process of transformation of SLT from a bureaucratic organization into a flexible private company under Japanese management began with the introduction of a lean and flat organization with horizontal sharing of functions, which replaced the multi-layered and complex entity that existed earlier. Before privatization, the managing director was the executive head assisted by directors, general managers, and deputy general managers. According to first CEO, the multi-layered organizational structure could not be perceived as conducive to functioning in a competitive and rapidly changing business environment (Wickramasinghe et al., 2004). With this background, the first CEO introduced an organization structure directed at avoiding unnecessary delays, rules and regulations and also to facilitate customer oriented employee ethos. The new organizational configuration provided better communication between the CEO and senior managers, while creating a structure for better control and coordination (Dassanayake and Hori, 2005). With this, the top management managed to communicate well the need to change through constant communication and employee training. Another important aim was to eliminate the bureaucracy and enhance flexibility (Business Today, 1997).

Another significant change brought into SLT culture under Japanese management along with cutting bureaucratic red tape was the introduction of target/performance orientation to individual work areas through visible and transparent procedures.

Furthermore, on the HRD front, substantial emphasis was placed on modifying the training centers of SLT and providing training to employees to cope with the changing competitive landscape of the telecommunications sector in Sri Lanka especially since 1996. Training centers were used successfully to communicate SLT's vision and business strategy to all employees. Further, these centers were helpful in changing the values and norms of employees leading to behavioral changes to fit the new business philosophy of customer orientation and continuous improvement.

All in all, the new flat and lean organization structure emphasized sharing knowledge among organizational members in addition to defining clearly their roles and responsibilities. Managers could now share opinions and knowledge with the CEO, who generated ideas for improving day-to-day work, allowing employees to work in a real business environment whilst dealing effectively with contingencies (Wickramasinghe et al., 2004).

Another major concern of Japanese management immediately after becoming the strategic partner of SLT was to design and improve processes of marketing and customer care. Among the various changes introduced under Japanese management, innovations in respect of marketing and the provision of customer care were initiatives that gained and maintained the highest visibility from the viewpoint of customers.

Today, SLT is one of Sri Lanka's largest public quoted companies listed in the Colombo Stock exchange. It leads the telecommunication industry with 71 per cent of the fixed line network (Annual report, SLT, 2006). The SLT group provides a broad portfolio of telecommunication services across the country, with the main activity being domestic and international telephony services. The range of other services offered by SLT includes; internet access, data services, domestic and international leased circuits, frame relay, ISDN, satellite uplink and maritime transmission. Both Mobitel Lanka Private Limited and Sri Lanka Telecom (Services) Limited are wholly owned subsidiaries of the SLT. Mobitel engages in mobile phone operations and the Sri Lanka Telecom (Services) engages in providing data communication solutions.

4. Research Method

To investigate the strategy-MCS relationship over time, the author adapted the case study approach (Yin, 2003). Case studies were undertaken in the past to investigate the role of the MCS in supporting and influencing the strategic processes within companies (Simons 1990). Chenhall (2003) argues that the generation of propositions concerning novel relationships concerning MCS, processes and their contextual setting are often best identified and elaborated by using case study methods. Case studies enable the researcher to explore and study a variety of phenomena through detailed and deep insights, with much consideration given to qualitative data gathered from many actors in individual case sites (Kodama, 2003). This study took the form of a retrospective longitudinal perspective focusing on three time periods of SLT: prior-privatization (1995–1996); immediately after privatization (1997–1999); and post-privatization (2000–2006), which spanned over 11 years.

Moreover, steps were taken appropriately to establish the reliability and validity of the research method by applying methodological triangulation. Methodological triangulation involves the use of multiple qualitative and/or quantitative methods to study the case. If the conclusions from each of the methods are the same, then validity is established (Guion, 2002).

4.1 Data Collection Method

Data was collected through review of documents, interviews with top managers including the CEO, and distribution of questionnaires to senior and middle level managers. Data collection was commenced with a review of documentation, which assisted in establishing a basic understanding of the events in organization's history. A review of archival data led to the identification of three time periods of the organization's operations. This was further helpful in developing certain questions to be asked from top managers during interviews on some important issues, which required further clarification.

Next, separate interview protocols were prepared for the interviews with CEO and senior managers of the company. The interview protocols were constructed based on archival data and prior literature. Interviews with senior management focused on all three time periods identified earlier. The interviews were intended to gather data on historical performance of the business, past and intended business strategy and the directions for the future. Five senior managers were interviewed, which included the CEO, General Manager Corporate Strategy, General Manager Accounts, General Manager Sales, and General Manager New Connections.

In addition to the interviews and documentation review, the researcher used a questionnaire survey method to collect data. The questionnaire developed was intended to seek the opinions of senior and middle managers of the company. The questionnaire, taking a retrospective longitudinal approach, was designed to obtain information for each of the three time periods pertaining to: strategy type and components of the MCS. Before the questionnaire was distributed among the respondents, it was sent to a board member of the company to get the views on the questionnaire. Based on the comments, the initial questionnaire was modified. With the assistance of Human Resource Section of the company, the final questionnaire was distributed among 70 senior and middle level managers who have been working since prior-privatization period. 57 managers answered the questionnaire and it represented an 81% response rate. Reliability of MCS variable was measured by using cronbach alpha coefficient and it was 0.90.

The first section of the questionnaire focused on strategy type of the organization. Snow and Hrebiniak's (1980) approach for describing the strategy types-Defender, Prospector, Analyzer and Reactor strategies, characterized by the Miles and Snow (1978) typology was used for assessment of organizations' strategic orientation. Respondents were asked to specify, in each three time periods, which paragraph most closely described their organization's approach when compared with competitors in their main marketplace.

The second section of the questionnaire incorporated 35 items on various control system characteristics in place in the organization. Some items were derived from the instruments used by Simons (1987) and Miller and Frisen (1982). Both these instruments focused primarily on financial controls. Therefore, in addition, some more items were included by considering Simons' Levers of Control model (1995), especially to identify the interactive nature of MCS used.

Langfield-Smith (1997) criticized prior studies for focusing purely on financial controls. It was

argued that this was not representative of the breadth of controls used by an organization. Further, omission of clan controls and a wider range of formal and informal controls was also criticized. Roberts (1990) indicated that a complementary mix of formal and informal controls could be used to support a strategic direction. He showed that non-accounting controls could be used to balance competing perspectives (Langfield-Smith, 1997). These studies suggest that there is a need to consider informal controls in the strategic change setting. This is supported by Abernethy and Brownell (1999) who recognized that “alternative non-accounting forms of control may serve an important role where strategic change is occurring”.

Therefore, in this study, in addition to formal controls, informal and non-financial controls were included to broaden the range of controls examined. The respondents were asked to indicate their view on a Likert type scale ranging from 1 to 5 to get the responses for each MCS characteristic for each of the three time periods.

5. Data analysis and results

The main focus of this section is to present the findings of the study and discuss the findings with respect to the research objective.

This study examines the relationship between strategy and MCS over time. The author specifically focused on examining how the organization's strategy evolved as strategic direction changed over time, how the management control systems of the organization evolved as strategic direction changed over time and the match between strategy and MCS. Further, organizational performance was analyzed to examine the impact of change in strategy on change in MCS.

Analysis of data was carried out based on multiple-source evidence: documentation review results; interview results; and questionnaire results. In analyzing the strategy, a major emphasis was given to the interviews with top management since top managers are the main information providers with a sound knowledge on the strategic direction of the company. Further, documentation review too was used to verify the strategy used by SLT in each period. The analysis of MCS was primarily based on the questionnaires distributed among senior and middle level managers as it facilitated the author to have a detailed analysis of MCS used by the company. The performance analysis of the company was primarily based upon the documentation review as it provided concrete evidence about the performance of the company for the time periods concerned.

5.1 Strategy

The documentation review of SLT reveals that there has been a shift in the strategic direction of the company over time. Evidence shows that the change in strategy in SLT was mainly influenced by the decision of the government to privatize the management of SLT in 1997 and consequent approval given for two other private sector players to start operations in the same sector leading to competition within the industry.

5.1.1 Prior-privatization period (1995–1996)

During prior-privatization period, as a public utility, which was organized as a government department, SLT enjoyed a monopolistic power and had an ethos of public service rather than profit seeking. It lacked: the ability to adapt to external competition; effective internal control mechanisms; and a systematic strategy, design or structure. It did not effectively utilize marketing or human relations personnel and did not pay attention to quality consciousness or customer satisfaction (Wickramasinghe et al., 2004). Instead, it sought to maintain its monopolistic power, bureaucratic procedures, and a relatively static range of services and products.

The interviews held by the author with top management also confirmed that prior to privatization of SLT, it had no proper strategy due to the monopoly enjoyed by it. Further, there has been a general reluctance to make decisions within the organization since there was a lot of bureaucratic influence from the ministry. Importantly, managers commented that they lacked a direction during this period.

These explanations support the fact that SLT was a reactor (as defined by Miles and Snow, 1978) prior to the privatization process. In addition to the documentation review and interviews with top managers, the author viewed the perceptions of senior and middle managers on the strategy employed by SLT before privatization, through the questionnaire responses. The results reveal that greater majority (59%) perceived the strategy pursued was reactor during this period, confirming the earlier findings (see Table 1).

5.1.2 Immediately after privatization period (1997–1999)

SLT encountered many problems during its state owned control period mainly due to the bureaucracy and political influence it had. With competition coming into the industry, SLT required a great leap forward with a new vision and a different approach to developing and implementing business strategy. A major transformation of company was started in 1997 when new Japanese management was appointed. While they introduced a new vision and a mission to the

Table 1 : Frequencies of strategic typologies selected by respondents across time periods

Strategy Typology	Prior-Privatization		Immediately after Privatization		Post-privatization	
	Frequency N	% of valid responses	Frequency N	% of valid responses	Frequency N	% of valid responses
Defender	16	31	14	27	5	9
Prospector	—	—	19	36	30	57
Analyzer	5	10	17	33	17	32
Reactor	30	59	2	4	1	2
Total	51	100	52	100	53	100
Missing observations	6		5		4	

company, they changed the existing culture of the company to make it suitable for a private company. A top manager commented :

“They promoted ideas and attitudinal changes and reorientation of personnel at all levels to establish the culture of private sector business within the company.”

During the documentation review, it was evident that the new management had undertaken several initiatives to change the SLT from a lethargic state entity to a dynamic service provider in the telecommunication industry. The process of transformation under new management began with the introduction of a lean and flat organization with horizontal sharing of functions, in contrast to the multi-layered, bureaucratic and complex entity which existed earlier. The reason for introducing new organizational structure was directed at avoiding unnecessary delays, rules and regulations, and facilitating a customer oriented employee ethos. Wicramasinghe et al. (2004) noted that under the new structure, managers had wider spans of control. Organizational roles and responsibilities were more clearly defined and managers' authority over subordinate was limited. The emphasis was now on sharing knowledge and experience rather than enforcing rules and commands. The second Japanese CEO commented :

Another one of our priorities at the time we took over was the structure of the organization. The organization was top heavy with decision making being centralized at the top. Motivation was poor and there was little room for creativity. This has been changed completely and we have tried to motivate our employees by delegating many new tasks and defining their jobs in a precise way (SLT Annual Report 1999).

During the interviews too it was revealed that the old system lacked flexibility and procedures were time consuming. Therefore, a major change in the organizational structure could be witnessed immediately after privatization. One top manager commented :

“Immediately after the privatization, most of the red tape was removed. For example, the regional manager had to sign in 25 different places in a set of papers, to authorize a new fixed line connection. But, after the privatization, it is just a single signature on a single paper. That is the way we have improved the efficiency.”

Another significant change brought into SLT culture under Japanese management along with cutting bureaucratic red tape was the introduction of target/performance orientation to individual work areas through visible and transparent procedures. One top manager stated :

“After the privatization, Japanese management introduced a target-oriented culture. Be-

fore the privatization everybody got the same salary (for employees in the same grade). But now our salary is decided according to our contribution to the objectives.”

One of the most innovative steps in the field of marketing taken by SLT in 1998 was the opening of Teleshops. They are one stop shops providing a wide range of services and products under one roof. It emphasized the importance that SLT attaches to good marketing of its services. Furthermore, SLT gave priority to network expansion in the entire country and clearing of all waiters for connections. Also, through the introduction of new technologies like Integrated Services Digital Network (ISDN), SLT was able to offer new services like high speed access to the internet, video conferencing, high speed data and image transfer and desktop conferencing (SLT Annual Report, 1999).

The documentation review and interviews with top management provided evidence to support that SLT was pursuing a prospector strategy, immediately after privatization period. Introduction of flexible structures and procedures which facilitate response to and creation of change, focusing on the development of new services and marketing opportunities, broadly defined jobs, and introduction of the result-oriented controls are consistent with the pursuit of a prospector strategy (as defined by Miles and Snow, 1978).

However, according to the questionnaire responses received from senior and middle managers, they seem to have an ambiguity on the particular strategy used by SLT for this period. Their perceptions varied, but a high proportion of respondents selected the prospector (36%) and analyzer (33%) strategies (see Table 1). The doubtfulness of the perception in selecting one prominent strategy may have been caused due to the following reason. During the transformation period, senior and middle managers may not have been aware of the strategic direction of the company clearly, since the organization underwent several changes in this period. Happening of several prominent changes at the same time may have led to lack of understanding and high level of uncertainty among these managers with respect to the exact strategy the company employed. The selection of an analyzer strategy by a fair a percentage may have been influenced by the facts that while SLT introduced several new services, it further enhanced the focus on quality of service simultaneously during this period. These characteristics are attributed to a company employing an analyzer strategy. But the overall changes took place in SLT, as evidenced by the documentation analyses and interviews with the top management, supports the fact that SLT was more employing a prospector strategy, rather than an analyzer strategy.

However, selecting the prospector and analyzer strategies by senior and middle managers suggests that they were aware of the fact that the direction of the company was changing and the company was focusing on competition and innovation.

5.1.3 Post-privatization period (2000-2006)

Documentation review of post-privatization period indicates that SLT continues to adopt a

prospector strategy since privatization while evolving more on the same path. At present, the SLT is pursuing an intensive growth strategy which is consistent with the prospector strategy that focuses on exploring new business opportunities through introduction of new services to improve the current business within the telecom service industry. It could be identified that SLT has streamlined its operations to achieve the excellence in the following key areas.

- Becoming the market leader in telecommunication industry in Sri Lanka both in terms of aggressive network reach and introduction of new technology.

SLT has made substantial investments on developing new network infrastructure especially in the wireless segment (Mobile and CDMA) and in the broadband data services.

This strategy is further proved by the following comments made by the third Japanese CEO :

CDMA technology is a huge leap forward in communications and will broaden access to communications especially for those in remote locations (SLT Annual Report 2005).

Further, SLT's next generation OSS (Operational Support System) helped in retaining their position as the product innovator and the market leader. The CEO stated that OSS helps SLT to quickly deploy the best technologies to deliver the latest products and services to its customers.¹

- Being the Strategic Communication facilitator in the region through enhanced global connectivity.

SLT's investments in submarine cable projects have provided an unparalleled global connectivity which has enhanced Sri Lanka's competitiveness in the global market as a whole.

- Emerge as the fully-fledged integrated telecommunication service provider in the country.

SLT is in the process of evolving its core network into ultra modern Next Generation Network (NGN). These new directions were seen by the CEO in the following manner.

NGN will enhance SLT's capability to deliver IP based services : voice, data and video services making maximum use of existing networks. It will provide greater reliability and enhanced performance (SLT Annual Report 2005).

Apart from above strategy focuses, SLT is currently undertaking research and development activities which are consistent with a prospector strategy. Recently SLT took a step into the future by establishing an innovative Information and Communication Research Network (ICoRN) Laboratory at one of Sri Lanka's prestigious academic institutes, the University of Peradeniya.

In line with documentation review, the comments made during interviews too provided evidence that supports the follow-up of prospector strategy while evolving to new directions. During the interview, the third Japanese CEO emphasized that they focused on improving the customer

¹ [http://www.clarity.com/resources/SLT%20Case%20Study%20V8%20\(APPROVED%20for%RELEASE\).pdf](http://www.clarity.com/resources/SLT%20Case%20Study%20V8%20(APPROVED%20for%RELEASE).pdf)

service, introduction of new services, and improving the efficiency of operational systems in order to face the severe competition coming from the other private sector operators.

During the interviews, some top managers revealed that SLT changed its strategic direction according to the country's requirements, market environment, and competition. Periodically they identify their strategic direction and then change strategies accordingly. The evolution of SLT's strategic direction since privatization has passed through several phases: investment to meet high demand; creation of corporate management; structural strengthening to meet competition; building the image for the market leader; and leading in technology with diversification.

The documentation review and interviews with top management confirm that since privatization up to date SLT uses the development of new services as a major strategy for competing with other companies. Further, it continued to evolve in the post-privatization period by focusing on product innovation, research and development activities, global operations and becoming the industry leader. These attributes confirm that SLT currently continue to focus on a prospector strategy while evolving within the context.

Apart from documentation review and interviews with top management, the questionnaire results (see Table 1) indicated that majority of senior and middle managers (57%) perceived the post-privatization period's strategy adopted by SLT as a prospector strategy. This majority view is consistent with the comments received from top managers during the interviews and documentation review.

5.1.4 Change in strategy over time periods

According to the above analysis it is clear that SLT has changed its strategic direction from a reactor to a prospector over time since prior-privatization period. The third Japanese CEO commented:

In 2006, SLT will complete 10 years as a privately managed company. These past 10 years have been challenging and demanding. More importantly it has been transformative, rewarding and a tremendous learning experience (SLT Annual Report 2005).

Figure 1 depicts the evolution of the strategy of SLT over three time periods concerned.

5.2 Management Control Systems (MCS)

The analysis revealed that there has been a change in the usage of MCS mechanisms over the three-time periods concerned. Further, it was realized from the interviews that apart from the increase in the usage of control mechanisms, there has been an introduction of some new mechanisms too.

When analyzing MCS, the author mainly focused on the answers given to questionnaires by senior and middle level managers. The questionnaire process allowed the author to carry out a

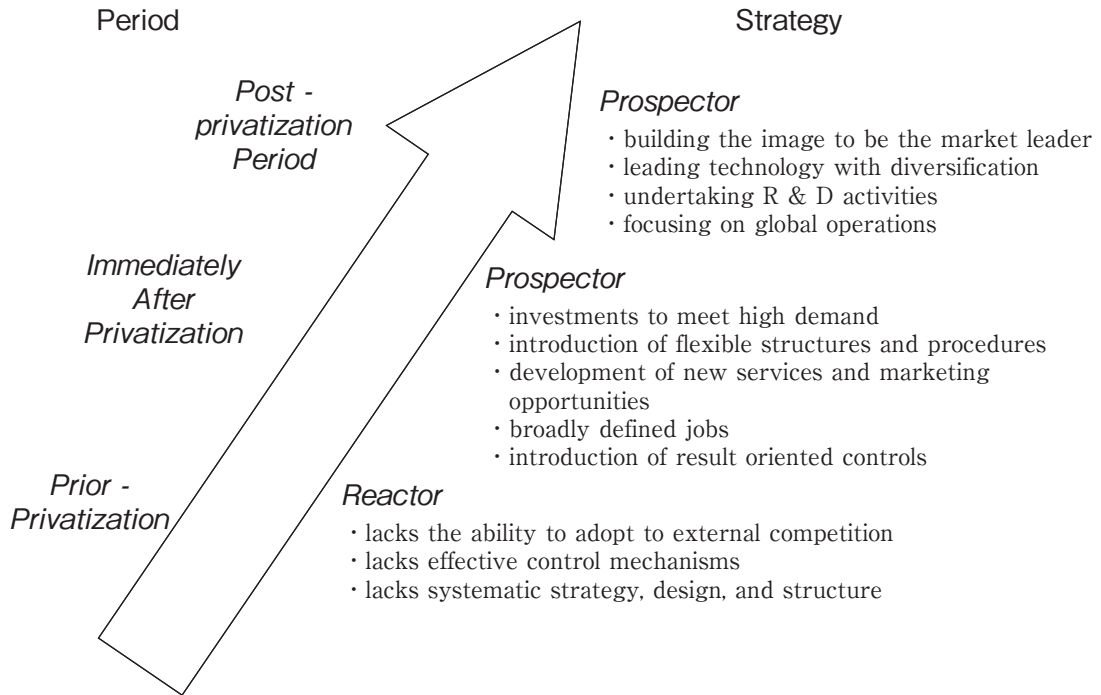


Figure 1 : Evolution of SLT's Strategic Direction

detailed investigation of MCS used. The time constraints restricted the author from using interviews for a detailed analysis of MCS. Accordingly, the interviews with top managers were used to identify general use of control systems adopted during three-time periods concerned. In the questionnaire, the author included 35 items on various control mechanisms. One item (Q34) was excluded from the analysis due to inadequate responses. The balance 34 items were grouped into eight MCS groupings as shown in Table 2. The groupings were done based on the categorization of MCS identified in past research literature and as well as on author's own thinking.

5.2.1 Prior-privatization period (1995–1996)

Before privatization, SLT's MCS fostered inflexible and remote operational controls, inappropriate reward systems, and lax supervision that indulged workers. Wickramasinghe et al. (2004), noted that SLT had established its organizational rigidity over a century of direct government controls, which had become ways to justify delays, inefficiency and ineffectiveness. The first Japanese CEO remarked :

This system is always loyal to rules and not to duty. Everybody is not really producing but wasting their time on paperwork. Nobody creates anything. You can't survive in com-

Table 2 : Management Control Systems Groupings

<p>Result Monitoring</p> <p>(Q1) Formal reports play a major role in the execution of management control systems.</p> <p>(Q2) Management control reports relate outputs produced with inputs consumed (e. g. cost per unit, output per man hour)</p> <p>(Q3) Overall performance in any period is evaluated by comparing SLT's results with those of competitors in the industry.</p> <p>(Q4) Frequent attention to budgets from all management levels.</p> <p>(Q5) Written explanations are submitted to managers in budget reports for changes between current year results, and the results of previous years.</p> <p>(Q6) The trend between last period's actual results and the results of the current period is monitored monthly or quarterly by senior managers.</p>
<p>Cost Controls</p> <p>(Q7) Cost or Profit Centers</p> <p>(Q8) Cost control of operations by analyzing the variance of actual costs from standard costs</p> <p>(Q9) Tight budget goals</p> <p>(Q17) Jobs or activities are monitored by management accounting systems</p>
<p>Bureaucratic Controls</p> <p>(Q10) Procedure/Planning manuals</p> <p>(Q11) Internal financial audits</p> <p>(Q12) Management Controls by normative regulations or procedures</p> <p>(Q28) Proper definition of functions and responsibilities in written forms</p> <p>(Q30) Rigidity of Procedure manuals</p> <p>(Q31) Emphasis on adherence to rules, policies, or plans</p> <p>(Q33) Nature of Organizational structure</p> <p>(Q35) The level of budget participation</p>
<p>Operational Controls</p> <p>(Q14) Cross-examination of controls for maintaining job quality</p> <p>(Q18) More emphasis is placed on operational controls over financial controls</p> <p>(Q32) Evaluation of operating efficiencies (i. e. maximum output for given levels of inputs)</p>
<p>Communication Mechanisms</p> <p>(Q13) Computerized information systems for managerial purposes</p> <p>(Q19) Knowledge is shared at workgroup-, divisional-, or organizational-level.</p> <p>(Q20) Informal relationships such as meetings, Inter-personal contacts in exchanging control information with senior managers</p> <p>(Q21) Formal and/or informal meetings involving personnel at each level of the organization</p> <p>(Q22) Vertical formal and/or informal communications</p> <p>(Q23) Horizontal formal and/or informal communications</p>

Organizational Culture
(Q26) Shared corporate values, beliefs, and norms
(Q27) Commitment to organization's objectives and values
Tailoring of Controls to specific user needs
(Q16) The control system provides the flexibility for managers to respond to new or contingent opportunities, and local circumstances (non-routine decisions).
(Q24) Change or adjustment of management control systems to suit differing individual and departmental needs
(Q25) Degree of detail in control reports received by or submitted to senior managers
Training and Development
(Q15) Management development programs
(Q29) Training personnel for customer satisfaction.

petition.

It can be seen from Table 3 that prior-privatization, the average value of each of the control grouping was below “3” (the average of the five-point scale) indicating that they were only used occasionally and there was a lack of control mechanisms in use. The group of controls that was used most frequently during this period was “bureaucratic controls” (2.89) followed by “results monitoring” (2.70). The high use of “bureaucratic controls” during this period is consistent with the comments the author received during the interviews. This was further confirmed through the documentation review. It was evident that before the privatization, most of the management controls followed state regulations such as the establishment code and financial regulations, and guidelines and circulars issued by the parent ministry. The relatively high level of “results monitoring” was consistent with the impression of following formal controls due to the bureaucratic culture existed in that period. It was evident during the interviews that SLT’s activities were severely influenced by government regulations, officials, and politics. This has obviously led to a bureaucratic culture within SLT before its privatization.

The questionnaire results shown in Table 3 can be reinforced by the documentation review and interviews with top managers. Two previous researchers (Wickramasinghe et al., 2004; Rathnasiri, 2001) too examined the use of MCS in SLT. They too found the bureaucracy, inefficiency, and politics associated with SLT prior to privatization. During this period, government regulations were the main control mechanisms used by SLT. While these controls emphasized hierarchical responsibility, financial accountability, and legal requirements, profits and growth were not of prime focus.

The interviews held by author with top management also confirmed that prior to the privatization of SLT, it had no proper management control systems and there was a lack of accounting

Table 3: Changes in eight MCS groupings across time periods

	Results Monitoring	Cost Controls	Bureaucratic Controls	Operational Controls	Communication Mechanisms	Organizational Culture	Tailoring Of Controls	Training & Development
Prior-Privatization								
Mean	2.70	2.24	2.89	2.23	2.61	2.54	2.45	2.35
Std. Dev.	0.78	0.90	0.66	0.74	0.76	1.04	0.65	1.07
Immediately after privatization								
Mean	3.46	3.31	3.48	3.24	3.62	3.82	3.43	3.73
Std. Dev.	0.60	0.70	0.38	0.64	0.55	0.71	0.57	0.74
Post-privatization								
Mean	4.06	3.89	3.70	3.69	4.20	4.36	3.95	4.49
Std. Dev.	0.50	0.63	0.50	0.68	0.54	0.70	0.70	0.54
Significance of Wilcoxon Signed Rank Test								
Prior-privatization → Immediately after privatization	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Immediately after privatization → Post-privatization	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001

procedures. There were some control mechanisms in place before privatization, but those controls were not perceived as important because of the involvement of state regulations around which the organization operated during this period. Interestingly, some employees were not aware of what SLT was selling. Top managers agreed that there was high bureaucracy during this period. One top manager stated :

“There were lot of bureaucracy, red tape and influence from the politicians. There was no environment for working freely.”

Table 3 further reveals that “operational controls” and “cost controls” had the two lowest average values among MCS groupings during this period (2.23 and 2.24 respectively). From the documentation review, it was apparent that there was no proper link between operations and strategic goals. Further, the operation controls were found to be inflexible and considered irrelevant. Achieving real (physical) targets was beyond their priority and alternately they gave more emphasis on minimizing costs or on maximizing short-run profits. With regard to lower rank for “cost controls” it was evident that before the privatization there was no proper analysis for variances of actual costs from standard costs. Instead, they calculated the department’s aggregate costs and compared them to its budget, since they did not use those variances for any decision making or controlling activities. Wickramasinghe et al. (2004) stated that accounting for devolved managerial planning and control, or auditing for examining efficiency and effectiveness was not

embraced: conventional management accounting was disregarded.

Apart from investigating the MCS used by SLT, the author further investigated on the initiatives for change of MCS. The interviews with top managers revealed that the government acted as the major initiator of changes and SLT had little say on initiating anything on their own. This too reveals the bureaucratic nature prevailed during that period and the consequent inflexibility of SLT to make their own decisions.

The above analysis reveals that the prior-privatization period of SLT has been characterized by high bureaucracy. This can be considered somewhat natural for a government controlled organization, especially being in a developing country. This period is overall highlighted by lack of MCS and as well as low usage of available MCS.

5.2.2 Immediately after privatization (1997–1999)

Immediately after privatization, the first CEO's main challenge was to change the bureaucratic MCS, which SLT had enjoyed over hundred years, which were inappropriate for its uncertain and increasingly competitive environment. Therefore, immediately after privatization, new management, with its absolute power of managing the operations, established profit and growth as performance outcomes. Various management controls were introduced to ensure that these performance outcomes are achieved in a much efficient and effective manner (Rathnasiri, 2001). Changes to organization structure, shift from rigid controls to more flexible procedures and organization, introduction of business planning system with operational controls, and introduction of performance evaluation system could be regarded as substantive changes made by the new management, immediately after privatization. The aims were “to lead Sri Lanka to become the hub of telecommunications in South Asia” and “to anticipate and fulfill the communications requirements of all sectors of the nation, in a service oriented work ethic which will provide total customer satisfaction through the most modern telecommunications facilities” (Vision and Mission, SLT Annual Report 1997). This represented a distinct paradigm shift in SLT's management control systems (Wickramasinghe et al., 2004).

It can be seen from Table 3 that, immediately after privatization period, all control groupings averaged above “3”, indicating that there has been a clear increase in the usage of all control mechanisms over the period before privatization. According to the questionnaire responses, the three control groups that were used most frequently were: (1) organizational culture, (2) training and development and (3) communication mechanisms.

It is not surprising to see that “organizational culture” scored the highest average value (3.82) amongst MCS groupings immediately after privatization since several major organizational transformation programs were introduced during this period with the aim of changing the culture from a government corporation to a more commercial-oriented company. Under the “organizational culture” notable increases could be seen in the items of: commitment to organizational objectives and values; and improvement in shared corporate values, beliefs and norms; indicating that

workers of SLT accepted the new culture of private-sector business within the company.

Table 3 reveals that “training and development” (3.73) became the second most important control immediately after privatization. This can be justified as during this period the new management introduced various training programs for the employees to improve the customer service aspect of the company and also to improve their skills to cope with the modernized environment. It was apparent from the questionnaire results that there was a considerable shift in management development programs and training personal during this period compared to the before privatization period.

Documentation review and interviews with top management also revealed that several awareness programs and training and development programs were introduced by the SLT immediately after privatization period which aimed at changing the existing culture and perceptions of workers, improving employee skills, improving customer services and enhancing marketing activities. Following comments prove in this regard.

Immediately after privatization, the new Japanese management wanted to create a “customer-oriented and customer-friendly” organization with more service. The first Japanese CEO commented :

Since taking over, the new management has given a lot of thought to this area of the company’s business with a view to developing a strong and sustained relationship with our customer base (SLT Annual Report 1997).

The CEO’s idea was confirmed by a top manager during the interviews :

“Immediately after privatization, majority of control systems was aimed to change the attitudes towards the commercial orientation.”

Salih (2000) stated that the privatization process of SLT identified the significance of worker co-operation to ensure a smooth transition. It was also recognized that workers will have to be re-trained and their skills will have to be improved to work in the modernized environment after privatization. The first Japanese CEO remarked :

...we need to extensively train our existing employees and also make several changes in their job structures. We need to give a new face to the way we do business and of course modernize our systems (Business Today, 1997).

As stated above in the CEO’s comments, the new management believed that customer relations of SLT were poor before the privatization and the new CEO took steps to re-train the staff in customer relations. Staff training has received the highest priority in their corporate strategy. In

1999, emphasis was given to developing the management skills of executive staff and the attitudes of support staff. In addition, public relations and customer care training were given to Middle Level, Technical and Non-Technical Staff (SLT Annual Report 1999).

During the interviews, the third Japanese CEO and a few top managers illustrated as to how SLT changed the culture of the organization and the perceptions of workers, and built its customer relations immediately after privatization. The CEO commented :

“Training the staff is very important in this regard. SLT give overseas training to the managers. Also invite overseas presenters to give lectures to the SLT staff. Further, we changed the working environment of SLT. Now SLT workers’ mentality is high. They are proud to be an SLT worker.”

According to some top managers the transformation process took place very smoothly. They are of the view that training programs contributed a lot for this smooth transition. Training has been useful in changing the culture of the organization and also in educating them on new technology. Training programs were successfully used by the top management to convey the message-need to change as they were to face competition from private sector players. It was apparent that the top management had committed a lot to this process. They themselves underwent training and worked as mentors for their subordinates.

Interviews revealed that at the beginning there was some resistance to change as the new management introduced some radical changes. However, one important factor was the freedom given by the new management for local managers to manage the company. They only provided necessary guidelines. That aspect helped to a smoother transformation process in SLT. Another advantage of NTT management had been the attitude of Sri Lankans towards Japanese as against Westerners. A top manager commented :

“The way that Japanese look at Sri Lankans and our people look at Japanese is not the same as westerners look at Sri Lankans and vice versa. That was one advantage we got here (in the transformation process).”

Analysis of MCS groupings (see Table 3) further reveals that usage of communications mechanisms (3.62) is the third most important control mechanism amongst the eight control groupings immediately after privatization. This is consistent with the increased use of : meetings ; inter-personal contacts ; knowledge sharing at all levels ; and formal and informal communications ; and computerized information systems for managerial purposes during this period. The documentation review and interviews with top managers revealed the types of mechanisms the new management initiated in this respect.

New organizational structure, which was flatter and leaner, promoted more effective and

quicker communication, especially between divisions. Also, it facilitated the CEO to have a better control and communication with senior managers. Wickramasinghe et al. (2004) found that the flatter organizational structure even facilitated a direct contact between the CEO and lower-level managers who often came up with suggestions to improve operations. This was really valuable in a context where the first CEO had a personal interest in improving operations. One top manager commented :

“Communication before privatization was very poor. There was less formal communication and there were lot of informal channels. Formal communication became more prominent after privatization. Today, people trust formal communication.”

In addition, introduction of an annual business planning system to SLT was also another major change which occurred immediately after privatization. The CEO, assisted by the strategic and divisional managers (DMs), introduced a business plan each year. According to Wickramasinghe et al. (2004) DMs checked the weekly targets set to operating managers and reported the progress at the monthly meetings held with the CEO. Discrepancies between performance and targets were examined by the CEO. DMs explained the courses for discrepancies. This process facilitated the CEO to link operations to strategic goals.

The interviews revealed that the introduction of a business planning system enhanced formal and informal face-to-face meetings and discussions of variances and corrective actions required. A top manager commented about the interactive process of preparing an annual business plan :

“All executives get together in a brain storming session. We get the services of a consultant and he explains the market situation ; our strengths and weaknesses ; and world situation etc. Based on that information, we decide our next strategy. Then we call individual divisions to prepare proposals to fulfill that strategy. Whatever the proposals coming out, it has to meet financial constraints. Thereafter, proposals are prioritized and we decide the direction for the next year.”

Another major change that took place immediately after privatization was the introduction of new computerized systems and enhancement of existing ones. As the first CEO was in favor of cost savings over cost cutting (operational controls over financial controls) introduction of computerized systems was intended for cost savings. The introduction of new computerized billing system and computerized inventory control system gave rise to significant cost savings. Before privatization, the only computerized system available was the centralized billing system. After privatization, this system was networked to many regional Telecom offices. Thereby, it was possible to handle the online payment updates and online customer inquiries. This helped in improving customer satisfaction. Moreover, before privatization, the stores and inventory control

were handled entirely manually. This led to bottlenecks that delayed many development projects. After computerization of stores and inventory control, a tremendous improvement in the efficiency of delivery and material handling has been observed. In addition, Administration division and Finance division which earlier depended entirely on manual work, leading to many delays and an overall negative effect on the entire organization, started on major computerization of their activities. The CEO stated that :

Our strategy is to computerize all possible systems, network them and have a complete management information system, improve the quality of service and thereby enhance customer services (SLT Annual Report 1998).

During the interview with the author, the third Japanese CEO commented that integrated computerized systems helped SLT to increase efficiency, improve communication between divisions, and reduce delays.

Returning to the Table 3 “operational controls” and “cost controls” had the two lowest rankings (3.24 and 3.31 respectively) during the period immediately after privatization. Even though these controls obtained lower rankings, it is apparent that there is a significant increase in these controls over the prior-privatization period. Further, during the interviews, top managers too stressed that immediately after privatization the first CEO’s emphasis was on achieving physical targets and he showed little interest in costing issues. They stressed that his approach emphasized more on operational controls rather than on financial controls.

In addition, new management focused on reducing : inefficiency, bad business practices, and indiscipline ; and making the staff more productive through visible and transparent procedures. It is clear from Table 3 that there is a significant improvement in “tailoring of controls” immediately after privatization period over the prior-privatization period. The improvement of “tailoring of controls” was mainly facilitated by the introduction of flexible procedures by the new Japanese management immediately after privatization. The controls were loosely defined. Only, the task to be accomplished was given and the freedom for task accomplishment was established. According to Wickramasinghe et al. (2004) and Rathnasiri (2001), a contingency approach to decision-making to suit local circumstances was allowed after privatization. Earlier, local officials restrained from breaking rules as it was punishable. Under the new management, the CEO came to the rescue of officers who broke rules in good faith to accomplish their duties. He even praised such acts.

During the interviews with top managers too it was revealed that managers got a free hand in decision-making and they were not constrained by existing rules. The top management was behind employees when they broke rules to achieve targets. Another important aspect was the recognition of work by the new management. One top manager commented :

“Now we do have the recognition. If we are innovative or really creative, we have the opportunity to obtain a higher evaluation.”

From the above discussion it was clear that immediately after privatization each of eight management control groupings from “result monitoring” to “training and development” was applied on an above average level as shown on Table 3. Further, Table 3 shows that there has been a significant progress in the level of applying of each of eight control groupings in comparison with prior-privatization period where all the mean values are below average.

5.2.3 Post-privatization period (2000–2006)

It is apparent from the questionnaire results of post-privatization period (see Table 3) that SLT continues to pay greater attention to the same management control mechanisms since privatization while introducing new controls on the same path. According to the Table 3, it shows that many control groupings averaged above “4”, indicating that they were used more frequently. The three management control groupings which topped in the immediately after privatization period continued to remain top in the post-privatization period as well. But the priority had changed to: (1) training and development (2) organizational culture, and (3) communication mechanisms.

The interviews of the author revealed that interactive nature of controls was gradually increased during this period. Further, they mentioned that several new control mechanisms were introduced in this period. This was proved from the comments made by one top manager.

“Earlier only chief executive officer got involved in the strategy formulation. But, little by little, we got the involvement of lower levels in strategy formulation. Now all executives are involved. Next, we want to get the involvement of regional representatives also. If so, the implementation process will be easier.”

When addressing major changes to processes, managerial policies, or technological changes, SLT has moved from a top-down approach to a bottom-up approach over the past several years. At the very beginning of the Japanese management it was a top-down approach because SLT had to undergo major changes and everybody’s views could not be accommodated at the beginning of the changing process. After SLT reached some stability in the new system, it started considering innovative ideas from the bottom layer. As a result, now in SLT, 5S and Kaizen methods are well followed. Organizational culture was changed through 5S and Kaizen concepts. Through the quality circles, workers have to give Kaizen suggestions everyday. So it is clear that in SLT, continuous improvement is encouraged at the level of front-line workers. A top manager commented:

This is the participative method—bottom to top. Lower levels get together, discuss, and

come up with new ideas, and go to the top. Then implementation is done collectively.

The above idea was further proved by the third Japanese CEO during the interview. He emphasized that his way of thinking is different from the westerners because he is Japanese. CEO is of the view that his task is to coordinate each group in the company while allowing them to discuss, judge and decide limitations. This has clearly led to an increase in the usage of interactive nature of control systems during this period.

Further, currently, SLT has focused more on process-oriented work procedures at operational level. At this level, SLT encourages the ideas of workers for the next improvement. Interviews revealed that SLT didn't expect their employees to be pure followers of manuals. Rather, employees were encouraged to come out with changes to the manuals to improve current processes. One top manager commented :

“Business Process Reengineering (BPR) division of SLT consults each and every division to determine the difficulties they face and the improvements required. In the next revision, we accommodate those new suggestions and new thinking. So this is really a “Process-oriented” process.”

According to the questionnaire results, documentation review, and interviews with top managers, it was evident that SLT focused high emphasis on the same control systems during post-privatization period which they focused during the period of immediately after privatization. Further, it was evident that they have introduced new control mechanisms to reinforce existing systems. Overall it was apparent that the tendency to use interactive controls has increased to a greater extent during the post-privatization period.

5.2.4 Changes in MCS over time periods

According to the above analysis it is clear that SLT has changed its usage of MCS over time since prior-privatization period. Prior-privatization period of SLT is characterized by lack of management control systems and low usage of existing systems. This situation seems to have been influenced by inflexible and remote operational controls and inappropriate reward systems they used, due to the government intervention.

However, immediately after privatization, the new Japanese management installed a clear strategic direction to the company and they further initiated several major changes to transform SLT from a government department to a competitive private company. This period was characterized with: Changes in organization structure; shift from rigid controls to more flexible procedures; introduction of a business planning system with operational controls; and introduction of performance evaluation system.

During the post-privatization period, SLT was taking concrete steps towards becoming a major

player in the regional telecommunications market while strengthening its internal processors, systems, and human resources. It is clear that the priority among MCS of post-privatization period was consistent with that of immediately after privatization period. But there is a clear increase in all control mechanisms used in post-privatization period relative to immediately after privatization period. It is clear that while improving its existing MCS at present, SLT was focusing more on other new control mechanisms such as Kaizen, 5S concept and quality circles to improve its operational efficiency. A major change that could be witnessed during this period was the gradual shift from the use of diagnostic type of control systems to a more interactive type of control systems in SLT. The shift of control systems from a diagnostic nature to a more of an interactive nature in SLT is in line with Simons (1990, 1994) who argued that the manner in which controls were used, and the attention given by management to these controls, could impact on the effectiveness of MCS in supporting different strategies. Therefore, his notion can be considered as valid in Sri Lankan soil led by Japanese way of management thinking.

Apart from this, the statistical analyses of MCS groupings (see Table 3) indicate that the change of all management control groupings are statistically significant ($p < 0.001$) when moving from prior-privatization period to immediately after privatization period, and from immediately after privatization period to post-privatization period.² It is apparent that there has been significant changes (especially in the areas of organizational culture, communication mechanisms, training and development, and result monitoring) in MCS used in SLT since privatization to date. Further, the individual item analysis of MCS too indicated that there was a significant change in most of the variables when they moved from one period to another.

5.3 Change in Organizational Performance over time

SLT's performance analysis was used to examine the relationship between strategy and MCS, which is discussed later in the study. In accordance with the previous research (Gupta & Govindarajan, 1984; Kaplan & Norton, 2001; Chenhall & Langfield-Smith, 1998) the organizational performance was defined as the degree of goal attainment along several dimensions, including both financial and non-financial measures. In this study, the author used several indicators to measure the organizational performance: operational efficiency, market position of the organization, quality of service and customer care, social responsibility and employee stewardship. This analysis was based on published documents of SLT, which provided confirmatory evidences related to these performance measures.

² Statistical tests used in the study were nonparametric tests. Wilcoxon Signed Rank test was used to compare mean differences of a variable between two periods.

5.3.1 Operational Efficiency

SLT's performance in terms of network expansion and modernization, quality of service and customer relations, and internal operational efficiency improved steadily as a result of privatization. Since GOSL being the major shareholder of the company, SLT benefited financially in terms of accessing to low-cost credit from the financial market. Further the entry of NTT facilitated SLT to absorb new technology and management know-how into company's operations. This in combination led to a greater improvement of performance of SLT after privatization. It can be seen from Table 4 that SLT's revenue and profit surged dramatically after privatization.

Commenting on the impressive financial performances recorded by SLT, the CEO has commented that the company's strategic initiatives were well-aligned with the growth segments of the fast changing telecommunications industry (Lanka Business Online).³

The productivity of SLT's highly skilled, nationwide workforce has improved dramatically with the privatization. The number of lines per employee is a key measure of telecommunications productivity and this has improved by 361% in the post-privatization period over immediately after privatization period (see Table 4). Increase in productivity, despite increase in work volume was achieved through application of several productivity concepts (Kaizen, quality circles and business process reengineering etc.) and process integration.

5.3.2 Market Position of the Organization

For decades, SLT enjoyed a monopoly status. But, when SLT was privatized in 1997, the Sri Lankan government opened the telecommunication industry to other private sector companies as well. Naturally SLT lost some market share to the new private sector players. Despite the harsh competition coming from the competitors, SLT has been able to maintain a dominant market share

Table 4 : Operational efficiency

	Prior-privatization		Immediately after privatization			Post-privatization period		
	1995	1996	1997	1999	Growth % (95-99)	2000	2006	Growth % (97-06)
Revenue (Rs. Mn)	9,115	10,418	13,685	18,281	101%	19,605	36,109	164%
Operating Profit (Rs. Mn)	3,904	3,267	4,421	5,088	30%	4,984	11,909	169%
Productivity (DELS* per Employee)	27	38	36	64	137%	75	166	361%

*DELS — Direct Exchange Lines

Source : SLT Annual Reports 1995, 1996, 1997, 1999, 2000 & 2006

³ <http://www.lankabusinessonline.com/index.php> on 2007.2.9

of 71% by 2006. While SLT continues to dominate in the fixed line telephone sector, it emerged as the fastest growing CDMA line provider in 2006. SLT shares the largest network coverage in Sri Lanka. With the acquisition of Mobitel (the mobile arm of SLT), it is Sri Lanka's only integrated telecom service provider. By diversifying into new areas of telecom services, SLT enhanced its sources of revenue, becoming even more secure and solid. SLT continues to remain robust, and for many people it is the most favored and dependable service provider.

5.3.3 Quality of Service and Customer Care

The service quality of SLT has improved remarkably after privatization. For instance, immediately after privatization, new connections given per year increased from 72,457 in 1997 to 143,075 in 1998 and to 133,709 in 1999. Further, the average waiting time fell from seven years to less than one year in 1998. With the introduction of Operational Support System (OSS), SLT has been able to increase the number of fixed line connections (wired lines and CDMA) delivered in each year. The growth of total number of connections given in immediately after privatization period over prior-privatization period was 182% and in post-privatization period over immediately after privatization period was 274% (see Table 5). Also the time to deliver a connection was dramatically decreased from an average of 14 days in 2005 to 2–4 days in 2006. Some fixed line connections are now provisioned on the same-day which is the first such service in Sri Lanka.⁴

Improvements in faults clearance and the call completion ratio are also proof of the improvement of service quality of the organization. It is evident that SLT has focused a lot on increasing its call completion ratios. SLT believes that it is one of the most important criteria in determining customer satisfaction. At the end of 1998, call completion rates improved to 34% and faults clearance improved to 60% (SLT Annual Report 1998). Currently, SLT's rate of clearing faults has climbed to 96% in the Colombo Metropolitan area and 84% across the whole island.⁴ Thus, the operation and maintenance of project facilities had become much more reliable than before priva-

Table 5 : Customer base

	Prior-privatization		Immediately after privatization			Post-privatization		
	1995	1996	1997	1999	Growth % (95–99)	2000	2006	Growth % (97–06)
Wired Lines	205,943	254,500	315,241	580,199		653,144	909,894	
CDMA	—	—	—	—		—	269,338	
Total No. of Connections	205,943	254,500	315,241	580,199	182%	653,144	1,179,232	274%

Source : SLT Annual Reports 1995, 1996, 1997, 1999, 2000 & 2006

⁴ [http://www.clarity.com/resources/SLT%20Case%20Study%20V8%20\(APPROVED%20for%RELEASE\).pdf](http://www.clarity.com/resources/SLT%20Case%20Study%20V8%20(APPROVED%20for%RELEASE).pdf)

tization period. Further, the introduction of “Teleshops” and improvement in billing system added more to the improvement in customer care.

5.3.4 Social Responsibility and Employee Stewardship

To the nation :

Currently, apart from SLT’s role as the main player in telecommunication industry in Sri Lanka, it has made substantial contributions to the economic wealth of the nation through taxes and other levies. For the year 2006, SLT contributed Rs. 3.8 billion by way of taxes plus a sum of Rs. 2.7 billion by way of other levies, all of which helps swell the Government’s Exchequer. Further, SLT is empowering national events of the country by means of sponsoring of national sports events, professional bodies and school events (SLT Annual Report 2006).

To Employees :

Since privatization, SLT’s main challenge was to motivate its employees to be more efficient, effective, market-sensitive and customer focused. Efficiency was promoted through the adoption of 5S and Kaizen techniques organization-wide, in addition to the extensive use of IT and other new technologies. Customer focus was promoted through consciousness-raising and training. These efforts continued in 2005, in line with the company’s policy of continuous improvement.

Since privatization, SLT has been recognizing the requirements and aspirations of employees who have entered into long-term contracts and SLT has taken steps to protect and guarantee their rights. Rectifying of salary anomalies among ranks and jobs that had accumulated over a long period of years, introduction of salary revisions, bonuses and welfare facilities were the major changes done in the remuneration area with the privatization. Currently, to enhance skills of employees, SLT offers a variety of programs (IT orientation and enhancement, new technology, management development and soft skills development) to upgrade technical know-how and soft skills alike.

To Society :

SLT’s role in the contribution to the society spawns in several ways. SLT is partnering the Ministry of Education in providing broadband network connectivity to schools and universities island-wide. SLT is also partnering the Government of Sri Lanka in setting up a Local Government Network integrating government offices in several provincials.

The above review of SLT’s performance indicates that it has made substantial improvements in many aspects since privatization. The important aspect is that it has focused not only on the financial improvement of the company, but also on its employees, customers, society and the nation as a whole as well. Financially it has moved from a small player to an industry giant. Technologically it has moved from a low-tech company to a high-tech company, which provides integrated solutions to other companies. Employee skills and competence have improved considerably due to the planned dissemination of knowledge and continuous training. Customer service has improved from almost a zero level to an acceptable level. Further, the contributions to the society and nation

have helped improve its already known brand to a preferred brand. All in all, performance improvements witnessed after the privatization until to date over the prior-privatization period, can be considered as significant.

6. Discussion of findings

Table 6 shows an overall summary of the findings of SLT in the three time periods concerned. It highlights the strategic typology, strategic direction, use of MCS and level of organizational performance in each time period.

According to the past researchers, they have found that strategy plays a key role within MCS, yet this role is not fully understood. But there is a growing body of literature which examined the impact of strategy on MCS (Miles and Snow, 1978; Dent, 1990; Govindarajan and Gupta, 1985; Miller and Frisen, 1982; Simons, 1987, 1990, 1994, 1995; Langfield-Smith, 1997; Marginson, 2002; Kober et al., 2007). Much of the empirical research in the field of strategy and MCS has investigated the relationship between specific elements of the MCS and the particular strategy of the company.

Miles and Snow (1978) noted that the strategy choice the company makes would affect its MCS, meaning that different types of organizational plans and strategies would tend to cause different control system configurations.

Porter (1980) stated that in order to cope with the five competitive forces, an organization can implement one of the three generic strategies. These generic strategies are intended to create a defendable position for a firm in the long run and outperform its competitors in the industry. However the successful implementation of strategy needs different resources and skills. Porter's generic strategies also imply differing organizational arrangements, control procedures, and inventive systems.

The theoretical foundations of both Miles and Snow (1978) and Porter (1980) primarily suggest that a firm first formulates a strategy, based on its particular circumstances. This is followed by the allocation of necessary resources and implementation of various control systems to achieve the strategy. Interviews with top management in SLT revealed a similar process. The strategy formulation in SLT begins with the formation of annual business plan. SLT prepares an annual business plan each year, which identify the strategies to be implemented next year. Corporate strategy division of SLT first prepares the annual business plan and then communicates it down the hierarchy. Once they receive the feedback from the lower-level, they modify it and forward it to the top management. Top management of SLT is involved in the process of finalization of the annual business plan. Once finalized, it is explored down hierarchy, and middle and operational level managers implement the annual business plan to attain the strategies. This process is very much similar to the strategy implementation process identified by Simons (1995).

As stated earlier, one factor which is instrumental for the successful implementation of

Table 6 : Summary of results across three time periods

	Prior-Privatization (1995–1996)	Immediately after Privatization (1997–1999)	Post-privatization (2000–2006)
Strategic Typology	• Reactor	• Prospector	• Prospector
Strategic direction	• No clear strategic direc- tion	• Investments to meet high demand • Creation of strong, com- petent and highly pro- fessional corporate man- agement structure • Structural strengthen- ing to meet competition that came from the liber- alization of the market.	• Building an image that befitted SLT's position- ing as market leader of the industry. • Leading in technology with diversification
Use of Management Control Systems	• Limited control mechan- isms in use. • Government interfer- ences led to justify de- lays, inefficiency and in- effectiveness • Bureaucratic controls & Results monitoring were used frequently.	• Introduction of various MCs • Significant progress in the level of usage in all MC mechanisms. • Use of Organizational culture, Training & de- velopment, Communica- tion mechanisms more frequently	• Increased attention to the same MC mechan- isms. • Clear improvement in existing control mechan- isms. • Focus on other new con- trol mechanisms.
Organizational Performance	• Poor performance evi- denced from low finan- cial returns, low oper- ational efficiency and low quality of service.	• Improved financial re- turns, operational effi- ciency, quality of service and customer care • Maintenance of a steady market position	• Improvements in same areas noted in im- mediately after priva- tization period. • Technological advance- ments • Increased contributions to the society, nation and employees

strategies is control systems. In SLT, while some control systems are initiated by the top management, some others are initiated by the middle management based on their annual business plan. Once initiated by the middle management, they seek the commitment of the top management to implement these control mechanisms. There are different types of control systems used by different divisions in SLT, as their strategic objectives differ.

Based on these findings, it can be contended that formation of strategies comes first in SLT which is followed by the introduction of various control systems to successfully implement the strategies.

Another important issue that needs attention is whether the change in strategy is followed by change in MCS to match the new strategy. It was revealed earlier that the strategy adopted by

SLT changed from a reactor in prior-privatization period to a prospector in immediately after privatization period. Further, it was evident that SLT relied more on bureaucratic controls and results monitoring during prior-privatization period. Once the strategic typology changed to a prospector during immediately after privatization period in SLT, it could not continue to rely and implement the same set of management control systems that they used before. Data analyses revealed that they shifted to a new set of control systems and started to rely more on organizational culture, training and development, and communication mechanisms. When SLT moved from immediately after privatization period to post-privatization period, they continued to adapt a prospector typology, while exploring more on the same path. Even though, they continued to be a prospector, their strategies changed each year necessitating changes in MCS. During this period, a major noticeable change was the shift from the use of diagnostic type of control systems to an interactive type of control systems. Therefore, it is apparent that a change in strategy was followed by changes in MCS to match the new strategy in SLT during the periods concerned.

Another important aspect is the examination of the role of MCS play in the implementation of strategies. The findings indicate that control systems play a vital role in the successful implementation of strategy. Simons (1995) noted that MCS measures the progress of the strategy. As this progress is monitored by senior managers, they can take corrective actions if necessary. As identified earlier, as the strategies adopted by SLT changed over time, the MCS followed suit. Analysis of SLT's performance in three periods indicated that there is a significant improvement in performance in each period over the previous period. Therefore, it can be contended that the strategies have been successful, and MCS have played a vital facilitator role in the successful implementation of strategies.

7. Conclusion

This study examined the relationship between strategy and MCS. It is noted that the strategic direction of SLT was changed after privatization. This resulted in the changes in strategy over different periods and changes in MCS followed suit. Further, significant improvements in organizational performance could be witnessed in each period over the previous period indicating the success of strategies implemented. These findings in combination pointed to an existence of a two-way relationship between strategy and MCS in which strategy leads the initiation of MCS and MCS facilitates the successful implementation of strategy.

The author has to acknowledge that there are several limitations in the study. First, despite the usefulness and richness of case research, there has been criticism of case study as a research strategy. This criticism emanates mainly from its lack of statistical reliability and validity, and inappropriateness for testing hypotheses and making statistical generalizations (Yin, 2003). Second, this was a retrospective longitudinal study and it relied on participants recall of events in the three time periods studied. Therefore, the results could be dependent on their recall of events.

Finally, the analysis of MCS was dependent on self reported data to the questionnaire. However, the interviews with key personnel in SLT helped compensate for this limitation.

Overall, the author believes that this study adds a valuable contribution to the strategy-MCS research arena. While the present study could reveal a two-way relationship between strategy and management control systems, more research in this area is required to reinforce these findings.

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