The Effect of Marketing Culture on Marketing Effectiveness, Technical Efficiency and Business Performances: An empirical study of Commercial Banking Sector in Sri Lanka

Abstract

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Literature reveals that Marketing Culture (MC) and Marketing Effectiveness (ME) contribute for the enhancement of Business Performance (BP) and Technical Efficiency (TE) of any industry. However, existing literature in Sri Lanka has paid little attention to study the impact of MC on ME, TE and BP. Therefore, the objective of this study is to examine the *Effect of Marketing Culture on Marketing Effectiveness, Technical Efficiency and Business Performances*. Research design is empirical descriptive. Unit of analysis is commercial banks. All commercial banks were selected for the study. Strategic level managers were selected as proxies. MC and ME were assessed through a measurement arrive at priory, while TE and BP were derived through secondary data. The finding discloses that MC has a positive impact on ME, TE and BP in commercial banks and that the degree of impact of MC varies across the banks. Further the results shows that private sector banks represent relatively higher degree of positive impact compared to the public sector commercial banks. Finally, national and firm level policy recommendations were made to enhance the BP and TE through MC and ME.

Key Words: Business Performances, Commercial Banks, Marketing Culture, Marketing Effectiveness, Technical Efficiency

1.   Introduction

The importance of a firm's marketing culture and marketing effectiveness has received considerable interest in the past few years from both researchers and practitioners (Parasuraman, 1986; Schneider and Bowen, 1985). Further, literature discloses that marketing culture and marketing effectiveness brings company performance up (Day 1994). Further, the existing literature has enlightened the relationship between market orientation and business performance, and anecdotal evidences suggest the relationship between the market orientation and technical efficiency. However, according to the literature, a very little attention has been paid to examine the relationship between marketing culture, marketing effectiveness, technical efficiency and business performance in the Sri Lankan context, especially, in commercial banking sector where there is a indeed need to enhance the efficiency and performances to cope up with the changes in the dynamic marketing environment. Therefore, such a gap is addressed by the present study. The major purpose of this study is to examine *the effect of marketing culture on marketing effectiveness, technical efficiency and business performances of commercial banking sector in Sri Lanka.* The study consists of three objectives, viz, (1) assess the degree of marketing culture, marketing effectiveness, business performance and technical efficiency of commercial banks in Sri Lanka; (2) study the relationship among marketing culture, marketing effectiveness, business performance and technical efficiency of commercial banks in Sri Lanka; and (3) make recommendation to enhance business performances of commercial banks in Sri Lanka through marketing culture, marketing effectiveness, and technical efficiency.

2.   Literature Review

2.1   Marketing Culture

Webster (1990) defines marketing culture as the pattern of shared values and beliefs that help individuals understand the marketing function and thus provide them with norms for behavior in the firm. Webster (1993) identifies the marketing culture as a multifaceted construct that encompasses service quality, interpersonal relationship, the selling task, organization, internal communications, and innovativeness.

2.2   Marketing Effectiveness

Marketing effectiveness means doing the right thing in the field of marketing management, i.e. in creating and delivering values to the target market. Marketing effectiveness consists of five essential areas: customer philosophy, integrated marketing organization, marketing information, strategic orientation, and operational efficiency (Kotler 1988). The concept of marketing effectiveness has been addressed by the recent literature due to its strong association with many valuable organizational outcomes, such as stable, long-term growth, enhanced customer satisfaction, a competitive advantage, and a strong marketing orientation (Norburn et al 1990)

2.3   Business Performance

Performance has been defined in numerous ways, but usually is assessed along both quantitative and qualitative dimensions. The definition of performance in this study includes both quantitative and qualitative aspects of service performance. The qualitative aspects of performance include the service image, ability to attract important new customers, ability to better respond to competitors and create competitive advantage. Narver and Slater (1990) consider quantitative performance as a measure of the degree to which the services increase revenue and profitability. They have considered the return of assets as the performance of firms in service sector.

2.4   Technical efficiency

Koopmans (1951) has defined technical efficiency as a feasible combination of inputs and outputs where it is impossible to increase any output (and /or reduce any input) without simultaneously reducing another output (and/ or increasing any other input). Similarly, Ferrell (1957), Aigner et al. (1977). and Meeuseen and Vomolen Broeck (1977) have described technical efficiency as the ratio of a firm's observed level of outputs to the maximum level of outputs which could be achieved given its input levels.

2.5   Marketing Culture and Marketing Effectiveness

Literature claims that marketing culture influences the marketing effectiveness. For instance, Sin and Tse (2000) disclose that service firms that can be characterized as close to customers and show an identifiable set of corporate values are those that demonstrate superior strategic marketing effectiveness. Further, service firms that are more oriented to their markets and more knowledgeable of their customers' value chains are more likely to structure their services based on customers' needs

and preferences. As a result, they are capable of creating exceptional value for their customers. In return, customers will perceive the firm's services as being of premium quality (Day 1994). Previous research has suggested that quality is a key element in the market orientation – profitability relationship (Day 1994). With the right quality, customers will be more responsive by continuing patronage and spreading goodwill. Further this argument is supported by Chang et al (1999), claiming that market-oriented culture gives greater marketing effectiveness. Further, Norburn (1990) prove the hypothesis that companies which are highly effective in marketing shows the availability of marketing culture at a greater extent.. Further, Webster (1992) discovered that there is a significant relationship between the type of marketing culture a service firm has and its profitability and marketing effectiveness. Again Appiah-Adu et al, (2001) says that business performance of financial service sector in UK depend on marketing effectiveness, which, in turn, depends on marketing culture. According to above discussion hypothesis 1 is derived as follows.

H1: Commercial banks with higher degree of marketing culture have a higher degree of marketing effectiveness.

2.6   Marketing Culture and Technical Efficiency

Theory implied a positive relationship between marketing culture and technical efficiency. According to Chang et al (1999), understanding what customer does not want will result in greater efficiency, reduce waste in management and manufacturing, and enhance competitive advantage. Consequently, the adoption of a market orientation narrows perceptual gaps between customers and the management and yields better business performance because customers are served in an efficient manner. As a result, a business with marketing culture will enjoy high efficiency. In line with the Chang et al argument, Wong and Saunders (1993) argue that companies with highly market oriented culture show their outstanding manufacturing efficiency. Based on these findings second hypothesis is formulated.

H2: Technical efficiency of commercial banks positively relates to their degree of marketing culture.

2.7   Marketing Culture and Business Performances

An appropriate culture is one of the most important ingredients of successful marketing of services (Webster 1992). Further, Webster (1992) discusses the importance of marketing culture to any organization. He stated that the culture of a firm has been found to be important in many ways. It is a form of control of participants. It might also be a critical key used by strategic managers to direct the course of actions in their organization. It influences corporate effectiveness through the formal

structure of jobs, authority, and technical and financial procedures. It also affects employees' behavior, a firm's ability to meet their needs and demands, and the way the firm copes with the external environment. Further, marketing culture also has significance in terms of employee socialization. Finally, Webster (1992) discovered that there is a significant relationship between the type of marketing culture a service firm has and its profitability and marketing effectiveness. Further, Wong and Saunders (1993) recognize marketing culture as driving forces of success of a business. Similarly, Deshpande et al (1993) claim that marketing culture, characterized by its emphasis on competitive advantage and market superiority, is likely to result in the best business performance. Again, Narver and Slater (1990) reinforce Kohli and Jaworski's (1990) conceptualization by defining a market orientation as the organizational culture that most effectively and efficiently creates the necessary behaviors for the creation of superior value for buyer and thus continuous superior performance for the business. However, all of these discussions facilitate hypothesis three of this study.

H3: Higher level of marketing culture helps commercial banks to gain a greater amount of business performances.

2.7   Marketing Effectiveness and Business Performances

According to Kolter(1977), Norburn et al (1988), Naver and Slater (1990), and Yukselen (1997), marketing effectiveness affects the performance of a company. Sin and Tse (2000) also disclose that marketing effectiveness and business performances are strongly associated positively with each other.

Similarly, according to Chang et al (1999), a favorable combination of the dimensions of marketing effectiveness brings much favorable business performance for market- oriented firms.   Further, the top managers of those companies that demonstrate superior marketing effectiveness, as defined by Kolter in terms of people and quality, will be those that demonstrate superior financial profit performance and market share growth. This happened as top managers wishing to improve the likelihood of achieving effectiveness in the marketplace should encourage and emphasis the importance of the human focus. Norburn et al (1990).

According to Appiah-Adu et al, (2001) marketing effectiveness is associated with higher levels of business performance. Further, they cited previous research findings demonstrate that marketing effectiveness is positively associated with business performance. For instance Dunn et al (1994) found that marketing inactive organizations in the USA placed less importance on performance measure such as market share, profit to sales ratio, new product development and market development than their marketing active counterparts. Ghosh et al (1994b) found that, regarding attitudes towards marketing, better performing businesses in Australia, New Zealand and Singapore provided more support than their relatively poor performing counterparts to statements which communicate a sound understanding of marketing. The better performers also tended to be characterized by superior results with regard to both market-based and financial measures. Similar findings were reported by Hooley et al (1984) and Kiel et al (1986) over a decade ago in the UK and Australia respectively. Building on the evidence of these research findings is concerning a marketing effectiveness-performance relationship. With the backup of literature, fourth hypothesis is developed.

H4: Commercial banks which are highly effective in marketing reflects a higher business performances.

2.8   Marketing Effectiveness and Technical Efficiency

Marketing effectiveness and technical efficiency are another important relationship that this study examines. Such relationship is drafted through the literature review. According to Matanda and Mavondo (2001) there appears to be a hierarchy of effects among channel activities with technical efficiency significantly associated with innovation, marketing effectiveness and access to resources. In their research they define technical efficiency as the ability of a channel to reduce wastage, to maintain continuity of supply access to grading and packaging facilities. Also, marketing effectiveness defines as the ability to access alternative markets for products that do not make it to the primary markets and ability to have lower marketing costs. Then, the study discloses the positive association in between marketing effectiveness and technical efficiency. Further, they contend that market oriented companies implement supply chain activities to influence business performance. Thus, market orientation variables are posited to affect business performance through the mediating effect of supply chain activities such as marketing efficiency, technical efficiency, innovation and access to resources. It shows that marketing effectiveness positively affect the technical efficiency.

Further, according to Kolter (1988) measurement scale of marketing effectiveness consists of five dimensions, viz, customer philosophy, integrated marketing organization, adequate marketing information, strategic orientation and operational efficiency; operational efficiency is more or less same as the technical efficiency (Appiah-Adu et al, 2001). Hence, it implied that marketing effectiveness highly related with technical efficiency. Therefore, fifth hypothesis of the study is;

H5: Effectiveness in marketing functions is positively related to the technical efficiency in commercial banks.

2.9   Technical Efficiency and Business Performances

Relationship between technical efficiency and business performance has been discussed in the literature. According to Chang et al (1999), a business firm which operates efficiently, in return, brings higher business performances. It directly discloses the positive relationship between technical efficiency and business performances. Further, a study done by Matanda and Mavondo in 2001 discloses that customer orientation is associated with technical efficiency within the supply chain. Also, there appears to be a hierarchy of effects among channel activities with technical efficiency significantly associated with innovation, marketing effectiveness and access to resources. Further, they contend that market oriented companies implement supply chain activities to influence business performance. Thus, market orientation variables are posited to affect business performance through the mediating effect of supply chain activities such as marketing efficiency, technical efficiency, innovation and access to resources. It shows that marketing effectiveness positively affect the technical efficiency. Therefore, the last, sixth hypothesis of this study is;

H6: Technical efficiency of commercial banks are positively related to its business performances.

3.   Methodology

The purpose of this study is of "explanatory" type and the type of investigation is correlational. as it tries to explain the relationship among marketing culture, marketing effectiveness, technical efficiency and business performance. The study was conducted in natural environment where events normally occur, that is non - contrived setting. The study tested. six hypotheses .

3.1 Sampling Plan

The target population for the study is all local commercial banks as the unit of analysis is individual local commercial banks. Strategic level managers are the proxies of the commercial banks. Strategic level managers are selected as they make strategic level strategies to cultivate marketing culture on commercial banks.

3.2 Conceptual Framework

Base on the literature following conceptual framework as depicted in figure 1 is developed.

Figure 1 : Conceptual Framework
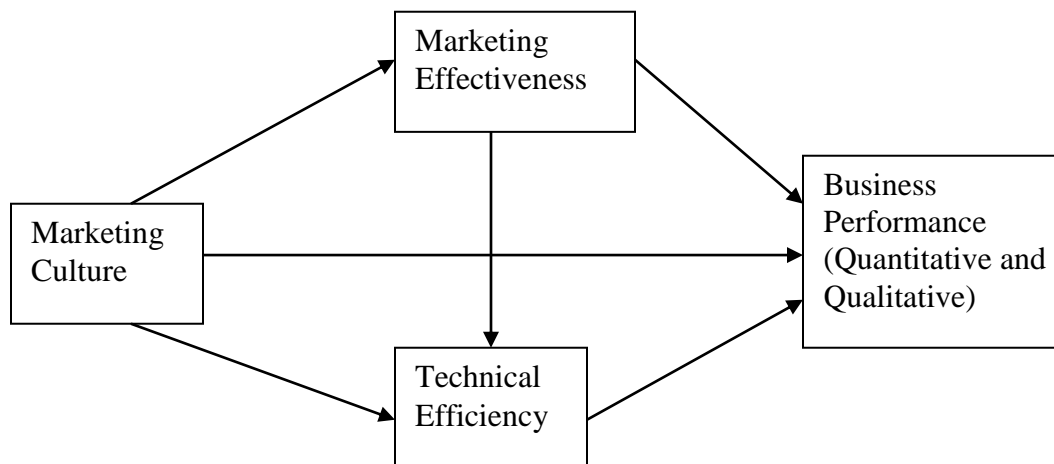
3.3 Operationalization

.Measurement scales for marketing culture, marketing effectiveness, and business performance were developed on priory basis. Marketing culture was measured through six (06) dimensions, viz, Service Quality, Interpersonal Relationship, Selling Task, Organization, Internal Communication and Innovativeness; and thirty four (34) indicators as suggested by Webster (1993). Six - point Likert type scale ranging from "Necessary (6)" to "Not Important at all (1)" was used as rating scale. Marketing effectiveness was measured using five (05) dimensions -customer philosophy, operational efficiency, strategic orientation, adequate marketing information, and integrated marketing organization-.and thirty one (31) indicators (Kotler 1977; 1997 and Webster 1995). Five point Likert scale was used to get the opinion of these dimensions. Business performance is measured through

three sets of measures (Jain & Bhatia 2007), viz, financial, non-financial and overall business performance.. For measuring financial measures respondents were asked to report their perceptions about their organizations' performance during the last five years in respect of sales growth, market share and profitability/ ROI. Even though the study used subjective measures as objective measures on performance is beset with the respondents' disinterest and hesitation (Appiah-Adu and Singh 1998). Amongst the measures of non-financial consequences, 'employees' organizational commitment', Esprit de corps and product quality were used. Five point Likert scale ranging from "Much better (5)" to "Very Poor (1)" was used to measure both financial, non-financial performance. New Product Success (NPS) has been operationalzed as a three-item scale which includes- rate of new product/services development, market development, and success of such developments. Five point scale ranging from "strongly agree (5)" to "strangely disagree (1)." Competitiveness was measured through the statement of "we are more competitive than our competitors" using five point Likert scale (Jain 1998). Lastly, the overall business performance has been measured through the respondents' opinion about the organization's performance in comparison to its major competitors over the past three years. Five point Likert scale ranging from "Much better (5)" to "Very poor (1)" was used for this purpose.

Technical efficiency was measured by using Stochastic Frontier Analysis (SFA). According to Sathye (2001), labor, capital and loanable funds are taken as independent variables, while taking "demand deposits" and "Loans and Advances" as dependent variables, for quantifying the technical efficiency of each bank. Ho and Zhy (2004) also used more or less the same inputs and outputs for measuring technical efficiency. Further, Battese and Coelli, (1995) have shown that a translog production frontier model or Cobb-Douglas production frontier model can be used in quantifying the efficiency use of resources of each DMU. Hence, the translog production frontier for both outputs: deposits, loans are given in equation (1) and (2) respectively.

$$\ln Y_i = \beta_0 + \beta_1 \ln L_i + \beta_2 \ln K_i + \beta_3 \ln(L_i)^2 + \beta_4 \ln(K_i)^2 + \beta_5 \ln(K_i)\ln(L_i) + (V_i - U_i),$$

i=1,2,…N,   ………….(2)

$$\ln Y_i = \beta_0 + \beta_1 \ln L_i + \beta_2 \ln K_i + \beta_3 \ln(L_i)^2 + \beta_4 \ln(K_i)^2 + \beta_5 \ln(K_i)\ln(L_i) + (V_i - U_i)$$

i=1,2,…N,   ………….(3)

Where: Output (Y) = (The logarithm of) the value of deposits of the i-th firm in t-th period for equation (1) and (The logarithm of) the value of loans of the i-th firm in t-th period for equation (2) ; Labor (L) = (The logarithm of) number of employees of i-th firm in t-th period; Capital (K) = (The logarithm of) the value of capital expenditure of the i-th firm in t-th period; β = unknown parameters; V_i are random variables which are assumed to be iid N(0, σv^2), and independent of the $U_i = (U_i \exp(-\eta(t-T)))$, where the U_i are non-negative random variables which are assumed to account for inefficiency in production and are assumed to be iid as truncations at zero of the $N(\mu, \sigma u^2)$ distribution; η is a parameter to be estimated.

Instead of translog production frontier, the Cobb-Douglas form of production frontier can be used to quantify the technical efficiency (Economics in Disequilibrium: An Approach from the Frontier - Kalirajan and Shand, 1994: 15-26). The respective equation is given in (3) as follows).

$$\ln Y_i = \beta_0 + \beta_1 \ln L_i + \beta_2 \ln K_i + (v_i - u_i) \qquad\qquad \ldots\ldots\ldots\ldots.(4)$$

Where; Output (Y) = (The logarithm of) the value of deposits of the i-th firm in t-th period for equation (2) and (The logarithm of) the value of loans of the i-th firm in t-th period for equation (3) ; Labor (L) = (The logarithm of) number of employees of i-th firm in t-th period; Capital (K) = (The logarithm of) the value of capital expenditure of the i-th firm in t-th period; β = unknown parameters; V_{it} are random variables which are assumed to be iid N(0, σv^2), U_{it} are non-negative random variables which are assumed to account for technical inefficiency in production and are assumed to be iid as truncations at zero of the $N(\mu, \sigma u^2)$ distribution.

However, the most appropriate form of the production frontier will be selected using the F-test ($H_0 : \beta_3 = \beta_4 = \beta_5 = 0$), taking the tronslog form of the production frontier as the unrestricted model and the Cobb-Douglas form of the production frontier as the restricted model.

Based on the appropriate form of the production frontier (in) efficiency of i-th firm in the given period is derived using equation 6.

$$EFF_i = \frac{E(Y_i^* \setminus U_i, L_i, K_i)}{E(Y_i^* \setminus U_i = 0, L_i, K_i)}$$ where; $Y_i^* = \exp(Y_i); 0 < EFF_i < 1$, the efficiency measures can

be shown to be defined as $\exp(-U_i)$. …………………...(6)

The maximum likelihood estimators for the parameters in the model are obtained using the FRONTIER computer programme (Coelli, 1996).

3.4   Decision Criteria

The mean scores of the measurement of marketing culture (MC) and marketing effectiveness (ME) were calculated to determine the degree to which MC and ME is applied by the commercial banks. The standards which wwer used as the decision criteria are given in table 1(a) and (b).

Table 1 (a): Decision Criteria for MC

Mean Value	Standard
1 - 3.4	Low degree of existence
3.5 - 5	Moderate degree of existence
5.1 - 6	High degree of existence

Source: Survey Data

Table 1 (a): Decision Criteria for ME

Mean Value	Standard
1 - 3	Low degree of existence
3.1 - 4	Moderate degree of existence
4.1 - 5	High degree of existence

Source: Survey Data

4.   Validity of Measurement Scales

4.1   Unidimensionalty

Unidimensionality is the degree to which items represent one and only one underline construct. This research uses a measurement scales developed on priory basis. Factor Analysis was performed by

taking each dimension at a time. The items related to the each dimensions of both MC and ME were highly loaded to the respective dimension arrived at priory ensuring its unidimensionality.

4.2   Reliability

Reliability was tested through Cronbach's Alpha. The result table 2 shows that standardized Cronbach's Alpha of constructs exceeds the criterion (0.7) assuring the construct reliability.

Table 2. Reliability Statistics

Constructs/ Performance Indicators	Cronbach's Alpha Based on Standardized Items	N of Items
Marketing Effectiveness	.922	31
Marketing Culture	.950	34
Financial performance	.718	3
Employee commitment	.794	3
Esprit de corps	.862	2
Service Quality	.693	2

4.3   Content Validity

Rigorous literature review was carried out to develop an adequate and representative set of items that tap the domain of MC, ME, TE and Business Performance concept as closely as possible.

4.4   Convergent Validity

Convergent Validity was assessed through paired sample correlations for both MC and ME. The results given in table 3 (a) and (b) show the assurance of convergent validity.

Table 3(a) : Results of Paired Samples Correlations for Marketing Culture

		N	Correlation	Sig.
Pair 1	TotalSQ & TotalMktCul	15	.940	.000
Pair 2	TotalIC & TotalMktCul	15	.888	.000
Pair 3	TotalIN & TotalMktCul	15	.878	.000
Pair 4	TotalOR & TotalMktCul	15	.751	.001
Pair 5	TotalIR & TotalMktCul	15	.847	.000

		N	Correlation	Sig.
Pair 6	TotalST & TotalMktCul	15	.875	.000

Table 3(b) : Results of Paired Samples Correlations for Marketing Effectiveness

		N	Correlation	Sig.
Pair 1	TotalCP & TotalMktEff	15	.864	.000
Pair 2	TotalOE & TotalMktEff	15	.855	.000
Pair 3	TotalSO & TotalMktEff	15	.920	.000
Pair 4	TotalMI & TotalMktEff	15	.658	.008
Pair 5	TotalMO & TotalMktEff	15	.892	.000

5.   Discussion

5.1   The Degree of MC and ME

The first objective of the study is to examine the degree of MC, ME, TE and BP in commercial banks in Sri Lanka. Out of these four variables, MC, ME and BP are the constructs which derive the values from Likert scale. Further, commercial banks were categorized into two groups, viz, private banks and public banks, based on their ownership. Degree of MC, ME, BP and TE are derived for each of the groups. The result is given in table 4. According to the table, the highest mean value of ME is recorded in public banks. In case of MC, private banks report relatively a higher degree compared to public banks. TE is almost similar in both categories. Financial performances are relatively high in public banks, while subjective measures of business performances are relatively high in private banks. According to the decision criteria given in table 1, all mean values of MC in both private and public banks are in between 3.5 and 5.1 (threshold for category) reporting the moderate degree. But, the mean value of ME in private banks are in the moderate category (3.1 and 4) while the mean value of ME in public banks are in the higher category (4.1-6).

Table 4: mean values of constructs for bank categories

Owner	TotalMktEff	TotalMktCul	TE	TotalFinPer	TotalQltyPer

private	Mean	4.7167	4.9164	.6915	4.7923	4.6081
	N	26	26	26	26	26
	Std. Deviation	.35519	.48834	.05041	.29156	.37474
public	Mean	5.0500	4.8832	.7000	4.8333	4.5350
	N	4	4	4	4	4
	Std. Deviation	.05774	.84506	.02309	.19245	.53997
Total	Mean	4.7611	4.9120	.6927	4.7978	4.5984
	N	30	30	30	30	30
	Std. Deviation	.34984	.52877	.04748	.27805	.38970

Source: Survey Data

One sample t -tests were performed to examine whether the statistical significance difference exists among different categories. Table 5 (a),(b),(c) and (d) highlight the results .Table 5 (a) discloses that the mean values of MC in both public (4.8832) and private banks (4.9164) exceed the lower boundary of moderate category (i.e.3.5) and the difference between the two mean values is statistically significant at the $p \leq 0.05$. However as shown in table (b) none of the sectors exceeds the upper boundary of the moderate category (i.e.5.1) ($p \leq 0.05$). It suggests that the degree of MC in both public and private sector commercial banks is at moderate level. Furthermore, table 5 (c) and (d) reveal that the mean values of ME in both public (5.0500) and private (4.7167) banks exceed the lower boundary of moderate category (i.e.3.1); also it exceeds the floor of the higher category (i.e.4.1). It suggests that the degree of MC in all commercial banks is at a relatively higher level.

Table 5 (a): Results of One-Sample Test: MC

	Test Value = 3.5					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
	Lower	Upper	Lower	Upper	Lower	Upper
Private	14.795	25	.000	1.41769	1.2203	1.6150
Public	3.264	3	.047	1.38500	.0345	2.7355

Table 5 (b): Results of One-Sample Test: MC

	Test Value = 5.1

	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
	Lower	Upper	Lower	Upper	Lower	Upper
Private	-1.903	25	.069	-.18231	-.3797	.0150
Public	-.507	3	.647	-.21500	-1.5655	1.1355

Table 5 (c): Results of One-Sample Test : ME

	Test Value = 3.1					
				Mean Difference	95% Confidence Interval of the Difference	
	t	df	Sig. (2-tailed)			
	Lower	Upper	Lower	Upper	Lower	Upper
Private	23.234	25	.000	1.61692	1.4736	1.7603
Public	67.550	3	.000	1.95000	1.8581	2.0419

Table 5 (d): Results of One-Sample Test : ME

	Test Value = 4.1					
				Mean Difference	95% Confidence Interval of the Difference	
	t	df	Sig. (2-tailed)			
	Lower	Upper	Lower	Upper	Lower	Upper
Private	8.865	25	.000	.61692	.4736	.7603
Public	32.909	3	.000	.95000	.8581	1.0419

5.2   Variance in MC and ME in commercial banks

The above discussion discloses that the MC in both public sector commercial banks is at a moderate level, and ME of all banks is at a higher level. Then, researchers examined whether the degree of MC and ME varies among the banks. To achieve this purpose One Way ANOVA was performed to test the statistical significance of the mean differences among the banks.

Table 6 (a): Results of One Way ANOVA test for Marketing Culture

TotalMktCul

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1.618	5	.324	1.197	.340
Within Groups	6.490	24	.270		
Total	8.108	29			

The result given in table 6(a) reveals that a significant difference does not exist among the degree of MC in commercial banks ($p \leq 0.01$). However, table 6 (b) shows that a significant difference exists among the degree of ME in commercial banks ($p \leq 0.10$).

Table 6 (b): Results of One Way ANOVA test for Marketing Effectiveness

TotalMktEff

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.385	1	.385	3.409	.075
Within Groups	3.164	28	.113		
Total	3.549	29			

The second objective of the study is to examine the relationship among MC, ME, BP and TE of commercial banks. . To achieve this objective six hypotheses have been tested. All six hypotheses were tested by performing product moment correlation. . The discussion of the results of the hypotheses testing is given below.

The result of testing hypothesis 1 is shown in table 7. The result shows that MC and ME positively relates with each other ($p \leq 0.01$).

Table 7: Correlations of MC and ME

		TotalMktEff	TotalMktCul
TotalMktEff	Pearson Correlation	1	.629(**)
	Sig. (1-tailed)		.006
TotalMktCul	Pearson Correlation	.629(**)	1
	Sig. (1-tailed)	.006	

** Correlation is significant at the 0.01 level (1-tailed).

The result of testing hypothesis 2 is given in table 8 shows that MC has a positive significant relationship with TE at 0.01 confidence level.

Table 8: Correlations of MC and TE

		TotalMktCul	TE
TotalMktCul	Pearson Correlation	1	.700(**)
	Sig. (1-tailed)		.002
TE	Pearson Correlation	.700(**)	1
	Sig. (1-tailed)	.002	

** Correlation is significant at the 0.01 level (1-tailed).

For testing hypothesis 3, both objective and subjective measures were employed to measure business performance. Financial performance was taken as objective measures, while employee commitment, Esprit de corps and service quality were taken as subjective measures. Therefore, MC was correlated with these four types of performances. The result in table 9 discloses that MC positively relates to all types of business performance ($p \leq 0.01$).

Table 9: Correlations of MC and BP

		TotalMktCul	TotalFinPer	TotalEmPer	TotalTCPer	TotalSQPer
TotalMktCul	Pearson Correlation	1	.575(**)	.772(**)	.875(**)	.778(**)
	Sig. (1-tailed)		.000	.000	.000	.000
TotalFinPer	Pearson Correlation	.575(**)	1	.605(**)	.686(**)	.749(**)
	Sig. (1-tailed)	.000		.000	.000	.000
TotalEmPer	Pearson Correlation	.772(**)	.605(**)	1	.677(**)	.694(**)
	Sig. (1-tailed)	.000	.000		.000	.000
TotalTCPer	Pearson Correlation	.875(**)	.686(**)	.677(**)	1	.806(**)
	Sig. (1-tailed)	.000	.000	.000		.000
TotalSQPer	Pearson Correlation	.778(**)	.749(**)	.694(**)	.806(**)	1
	Sig. (1-tailed)	.000	.000	.000	.000	

** Correlation is significant at the 0.01 level (1-tailed).

The result of testing hypothesis 4 shown in table 10 reveals that ME possesses a positive relationship with all four types of business performances ($p \leq 0.01$).

Table 10: Correlations of ME and BP

		TotalFinPer	TotalEmPer	TotalTCPer	TotalSQPer	TotalMktEff
TotalFinPer	Pearson Correlation	1	.605(**)	.686(**)	.749(**)	.494(**)
	Sig. (1-tailed)		.000	.000	.000	.003

TotalEmPer	Pearson Correlation	.605(**)	1	.677(**)	.694(**)	.517(**)
	Sig. (1-tailed)	.000		.000	.000	.002
TotalTCPer	Pearson Correlation	.686(**)	.677(**)	1	.806(**)	.620(**)
	Sig. (1-tailed)	.000	.000		.000	.000
TotalSQPer	Pearson Correlation	.749(**)	.694(**)	.806(**)	1	.386(*)
	Sig. (1-tailed)	.000	.000	.000		.018
TotalMktEff	Pearson Correlation	.494(**)	.517(**)	.620(**)	.386(*)	1
	Sig. (1-tailed)	.003	.002	.000	.018	

** Correlation is significant at the 0.01 level (1-tailed).

* Correlation is significant at the 0.05 level (1-tailed).

The result of testing hypothesis 5 reported in table 11 supports the hypothesis at 0.01 level.

Table 12: Correlations of ME and TE

		TotalMktEff	TE
TotalMktEff	Pearson Correlation	1	.478(**)
	Sig. (1-tailed)		.004
TE	Pearson Correlation	.478(**)	1
	Sig. (1-tailed)	.004	

** Correlation is significant at the 0.01 level (1-tailed).

The result of testing hypothesis 6 given in table 12 supports the hypothesis at 0.01 level.

Table 12: Correlations of TE and BP

		TE	TotalFinPer	TotalEmPer	TotalTCPer	TotalSQPer
TE	Pearson Correlation	1	.465(**)	.573(**)	.678(**)	.461(**)
	Sig. (1-tailed)		.005	.000	.000	.005
TotalFinPer	Pearson Correlation	.465(**)	1	.605(**)	.686(**)	.749(**)
	Sig. (1-tailed)	.005		.000	.000	.000
TotalEmPer	Pearson Correlation	.573(**)	.605(**)	1	.677(**)	.694(**)
	Sig. (1-tailed)	.000	.000		.000	.000
TotalTCPer	Pearson Correlation	.678(**)	.686(**)	.677(**)	1	.806(**)
	Sig. (1-tailed)	.000	.000	.000		.000
TotalSQPer	Pearson Correlation	.461(**)	.749(**)	.694(**)	.806(**)	1
	Sig. (1-tailed)	.005	.000	.000	.000	

** Correlation is significant at the 0.01 level (1-tailed).

As a sum up, all six hypotheses were supported in this study while being agreed with the literature. Then, identifying the dimensions of MC which have salient impact on ME, TE and BP is another objective of this study. This was achieved through stepwise regression analysis. The regressions were employed as follows. .

Step 1: The dimensions of MC regress on ME.

Step 2 : The dimensions of MC regress on TE

Step 3: The dimensions of MC regress on BP (Financial Performance)

Step 4: The dimensions of MC regress on BP (Non-Financial Performance)

The result of step 1 given in table 13 (a) and (b) reveals that the regression model is significant at 95% level and that 67% of the variance of ME is explained by the variance of dimensions in MC. Among them all dimensions, except Innovativeness and Selling task were significant. In identifying the salient dimensions of MC, the results show that the variance of ME is largely explained by the variance of interpersonal communication.

Table 13 (a) Dimension of MC on ME - ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.627	6	.438	10.925	.000(a)
	Residual	.922	23	.040		
	Total	3.549	29			

a Predictors: (Constant), TotalST, TotalOR, TotalIN, TotalIR, TotalIC, TotalSQ

b Dependent Variable: TotalMktEff

Adjusted R Square is 0.672

It is followed by interpersonal relationship, organization and service quality respectively.

Table 13 (b) Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta	B	Std. Error
1	(Constant)	2.447	.500		4.889	.000
	TotalSQ	-.483	.218	.627	-2.216	.037
	TotalIC	.509	.139	.948	3.649	.001

TotalIN	-.187	.120	-.373	-1.554	.134
TotalOR	.301	.149	.398	2.021	.055
TotalIR	.447	.133	.767	3.358	.003
TotalST	-.123	.083	-.280	-1.482	.152

a Dependent Variable: TotalMktEff

The result of second step is shown in table 14 (a) and (b).. The regression model is significant at 95%. But, none of the dimensions in MC makes any impact on TE significantly.

Table 14 (a) Dimensions of MC on TE - ANOVA(b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.042	6	.007	6.759	.000(a)
	Residual	.024	23	.001		
	Total	.065	29			

a Predictors: (Constant), TotalST, TotalOR, TotalIN, TotalIR, TotalIC, TotalSQ

b Dependent Variable: TE

Adjusted R Square is 0.544

Table 14 (b) Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta	B	Std. Error
1	(Constant)	.328	.080		4.095	.000
	TotalSQ	.016	.035	.156	.465	.646
	TotalIC	-.025	.022	-.350	-1.140	.266
	TotalIN	.022	.019	.325	1.146	.264
	TotalOR	.024	.024	.235	1.011	.322
	TotalIR	.032	.021	.402	1.489	.150
	TotalST	.004	.013	.072	.323	.750

a Dependent Variable: TE

Table 15 (a) and (b) discloses the results of step 3. The regression model is significant at 95% level. Accordingly, the variance of financial performance is largely explained by the variance of service quality. It is followed by interpersonal communication, organization, and selling task respectively.

However, the impact from interpersonal relationship and innovativeness on financial performances are not significant.

Table 15 (a) Dimensions of MC on BP (Financial Performance) - ANOVA(b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.350	6	.225	5.803	.001(a)
	Residual	.892	23	.039		
	Total	2.242	29			

a Predictors: (Constant), TotalST, TotalOR, TotalIN, TotalIR, TotalIC, TotalSQ

b Dependent Variable: TotalFinPer

Adjusted R Squire is 0.498

Table 15 (b) Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta	B	Std. Error
1	(Constant)	3.612	.492		7.339	.000
	TotalSQ	-.559	.214	.814	-2.608	.016
	TotalIC	.307	.137	.720	2.239	.035
	TotalIN	-.111	.118	-.278	-.936	.359
	TotalOR	.337	.146	.561	2.301	.031
	TotalIR	.074	.131	.161	.569	.575
	TotalST	.192	.082	.548	2.342	.028

a Dependent Variable: TotalFinPer

Table 16 (a) and (b) disclose the results of step 4. Here subjective measures, viz, service quality, employee commitment, team spirit and corporation has been taken as the dependent variable. The regression model is significant at 95% level. Accordingly the variance of subjective business performance is largely explained by the variance of selling task. It is followed by organization and interpersonal communication respectively. Other dimensions of MC do not make a significant impact on subjective measures of business performances.

Table 16 (a) Dimensions of MC on BP (Non-financial Performance) - ANOVA(b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3.866	6	.644	27.571	.000(a)
	Residual	.538	23	.023		
	Total	4.404	29			

a Predictors: (Constant), TotalST, TotalOR, TotalIN, TotalIR, TotalIC, TotalSQ

b Dependent Variable: TotalQltyPer

Adjusted R Square is 0.846

Table 16 (b) Coefficients(a)

		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
Model		B	Std. Error	Beta	B	Std. Error
1	(Constant)	1.413	.382		3.698	.001
	TotalSQ	-.253	.166	-.295	-1.519	.142
	TotalIC	.251	.106	.419	2.354	.028
	TotalIN	-.026	.092	-.046	-.280	.782
	TotalOR	.387	.114	.460	3.404	.002
	TotalIR	.041	.102	.063	.400	.693
	TotalST	.247	.064	.504	3.887	.001

a Dependent Variable: TotalQltyPer

6.   Conclusion and Recommendation

This research studied the degree of MC, ME, TE and BP in commercial banks in Sri Lanka. The research discloses that the degree of MC in both private and public banks is at moderate level and that the degree of ME in both sectors is at higher level. It also discloses that while the degree of TE in both private and public banks is more of less the same, the financial performances of public banks are at a higher degree than the private banks. The subjective measures of business performance of private banks reflect a higher degree than that of public banks. The result also shows that the degree of MC does not vary across the banks; however, the degree of ME varies across the banks. Further, this

study shows that degree of MC, ME, TE and BP relate to each other. Further more, researchers examine the impact of MC on ME, TE and BP in commercial banks of Sri Lanka.

Among the dimensions of MC, Service quality, Interpersonal Communication, Organization, and Interpersonal relationship have significant impact on ME. It also disclosed that dimensions of MC do not make any significant impact on TE suggesting that degree of TE may depend on some other factors. These findings are compatible with the literature. Further, service quality, interpersonal communication, organization, and selling task show a significant impact on financial performance of commercial banks. However, only interpersonal communication, organization, and selling task significantly influence the non-financial performance of commercial banks in Sri Lanka.

These findings recommend that commercial banks improve their ME through enhancement of service quality, interpersonal communication, organization, and interpersonal relationships, and financial performance through enhancement of service quality, interpersonal communication, organization, and selling task. Further, subjective measures of business performance of commercial banks can be improved through the development of interpersonal communication, organization, and selling task.

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