

# Does Innovation Instigated by Market Orientation and Financial Literacy Impact Business Performance in SMEs in the Eastern Province of Sri Lanka?

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**Abstract:** *The study's objective of the study was to examine the effect of market orientation and financial literacy on the performance of business of the small and medium enterprises in the Eastern province of Sri Lanka with the mediating effect of innovation. The study used primary data collected from 199 respondents in the region. SmartPLS 3 was used to analyze the data. Finding indicates that innovation does not mediate between market orientation and business performance. However, there is complementary mediation of innovation between financial literacy and business performance. Findings also suggest that market orientation adaptation among the small and medium enterprises is lacking and hence, it is important for these SMEs in the region to adapt marketing orientation as a philosophy which will help achieve the business performance. This study also rises a requirement of training the employees and managers in the aspects of market orientation along with financial literacy to enjoy the competitive advantage among industries.*

**Keywords:** *Market orientation, financial literacy, SMEs, Innovation*

## 1. BACKGROUND OF THE STUDY

SMEs are economically significant for countries in terms of generating employments (Bruque and Moyano, 2007) and that induces to the economic development of the country. Despite the fact that Sri Lanka has 80% of the economy representing small and medium scale enterprises (SMEs), SMEs are facing obstacles which should be overcome by managerial decisions making. The growth is also impeded by financial issues, infrastructure, technology, access to market, information access and business development (The National Human Resources and Employment Policy for Sri Lanka, 2012). Three districts namely Ampara, Batticaloa and Trincomalee Eastern province of Sri Lanka were affected badly during the prolonged civil war in the country. Sri Lanka needs to address the issues faced by the SMEs by strategizing their businesses.

It is important for SMEs to adopt market orientations which is one of the strategic orientations helps to achieve the favorable business performance (Kirca et al., 2005; Hilal and Mubarak, 2013; Sin et al., 2003; Cano et al., 2004). Thus, examining the market orientation and its impact on the business performance with the mediating effect of financial literacy among the SMEs are noteworthy to study in the context of Eastern province of Sri Lanka. This is further evident from the studies that market orientation helps grow the business and it creates competitive advantage for the organization. The studies in the areas of market orientation are lacking in the context of SMEs in the Eastern province of Sri Lanka.

Due to the nature of the complexity in the investment decision, researches in the areas of financial literacy receive more attention among the academics and practitioners (Jiang et al., 2020). People are with the highest qualifications in some countries where the financial literacy is in height (Carcia and Vila, 2020). For instant, in Germany, Japan, France, Australia and Sweden the financial market is strong and they are with higher financial literacy. Studies have been carried out and found a positive impact of financial literacy on the business performance (Wahyono and Hutahayan, 2020). Sri Lanka firms needs more financial literacy to be successful in their business. This is evident from the bankrupted finance companies in Sri Lanka (Heenkenda, 2014).

Many small and medium enterprises are operating in Ampara, Batticaloa and Trincomalee. The study related to market orientation and business performance of SMEs with mediating role of financial literacy in the context of Eastern province should be given importance and priority after the prolonged war and hence, the study is vital for SMEs in the region. This will upgrade the SMEs in the Eastern province of Sri Lanka and contribute more to the economic development of the country. Hence, the objective of the study is to investigate the effect of market orientation on the business performance while having the financial literacy as a mediating variable. Thus, the paper is prepared in the following line. Firstly, the research problem is explained with the importance of financial literacy. Secondly, review of literature is done and research methodology is explained. Finally, the results and discussion are given and conclusion is derived.

### **Theoretical Framework and Hypotheses Development**

Market orientation is a culture of an organization that creates a behaviour enabling the organization form the superior value for buyers and organization will sustain the competitive advantage (Foley and Fahy, 2009). Jaworski and Kohli (1993) state that market orientation is successful implementation of marketing concept thereby making concrete customers and organizational benefits. Market orientation consist of five dimensions such as customer orientation, competitor orientation, inter functional coordination and responsiveness and profit emphasis and are assisting to measure the market orientation of a firm (Brendan et al., 1998). Marketing oriented companies achieve better outcome than less marketing-oriented firms (Pulendran et al., 2003). According to Nwokah (2008), adaption of marketing orientation exhibits successful performance of the business. Marketing orientation is positively associated with business performance of the organizations (Kirca et al., 2005; Hilal and Mubarak, 2013; Sin et al., 2003; Cano et al., 2004).

The term literacy is defined as “the ability to identify, understand, interpret, create, communicate and compute enabling individuals to achieve their goals, to develop their

knowledge and potential, and to participate fully in their community and wider society.” (UNESCO, 2004). Financial literacy is related to the knowledge and ability regarding the finance. This includes financial knowledge, financial behaviour and financial attitudes. It is also found that financial literacy also impacts the financial inclusion and savings. This infers that a person is with higher financial knowledge will show an interest in savings formally and informally (Morgan and Long, 2020). Financial literacy is also positively affecting the innovation in an organization as it assists investors in getting rid of financial constraints and enables risk management in an organization (Tian et al., 2020). Financial literacy is positively influencing on the productivity. It decreases the absenteeism and contributes to the entrepreneurial success (Lopus et al., 2019). This is also helping to enhance the performance of the organization. Hence, financial literacy tends to contribute to the business performance of small medium enterprises. A research in Indonesia among textile industry revealed that the competencies of any organizations can be developed with the strong support of market orientation, learning orientation and financial literacy by supporting to improved financial decision contributing to the innovation and performance of small and medium enterprises (Wahyono and Hutahayan, 2020). Thus, when the financial literacy is placed or added as an mediating variable between market orientation and business performance, there is tendency that the performance of SMEs may increase.

Based on the theoretical framework, the following hypotheses were developed.

H<sub>1</sub>: Market orientation in SMEs positively related to innovation in SMEs in the Eastern province of Sri Lanka

H<sub>1a</sub>: Innovation in SMEs is mediating between market orientation and business performance of SMEs in the Eastern province of Sri Lanka

H<sub>2</sub>: Financial literacy of SMEs is positively associated to innovation in SMEs in the Eastern province of Sri Lanka

H<sub>2a</sub>: Innovation in SMEs is mediating between financial literacy and business performance of SMEs in the Eastern province of Sri Lanka

H<sub>3</sub>: Innovation in the SMEs leads to business performance of the organizations.

## **2. RESEARCH METHODOLOGY**

The study is quantitative. The study was conducted with a view to examine the impact of market orientation and financial literacy on the business performance with the mediation of innovation among the SMEs in the Eastern province of Sri Lanka. Hypotheses were developed and analyzed and hence, the research philosophy is positivism. Time horizon is cross sectional since the data was collected only once. Survey methodology was adapted to collect the data from the respondents.

### ***Survey Instrument***

Using previous studies and authors, the survey instrument was developed. Five-point likert scales ranging from strongly disagree to strongly agree were used to measure the variables.

Four items for market orientation were adapted from Jawrski & Kohli (1993). Items for the variable financial literacy was adapted from Hsiao & Tsai (2018). Four items to measure the variable innovation was adapted from Skerjavaj et al. (2010). Similarly, the items to measure the business performance was adapted from Li & Zhang (2007) and Niu et al. (2013).

**Sampling and Data Collection**

Data used for this study were collected from 199 executives and managers of small and medium enterprises in the Eastern province of Sri Lanka. Small and medium enterprises include textile, hotels, transport firms, private hospitals and restaurants. The questionnaire was administered by the researcher in all three districts in the Eastern province of Sri Lanka. Questionnaires was also sent via google forms and by email to the respondents. 273 questionnaires were issued and researcher received 199 duly filled questionnaires which were used for analysis.

**3. FINDINGS AND DISCUSSION**

**Profile of the Sample**

In the total number of respondents, 83% represent male and 17% of the respondents were female. In the case of age distribution, 46.2% of them were the age group of 25-40 years and 39.3% of the respondents belong to the age group of 41-55 years. 9.5% of them were above the age of 55 years and 10% of them were below 25 years. The respondents' educational qualifications were 31.1% with below GEC (O/L) and 36.7% with GCE (A/L) qualifications. 21.1% of them were with Bachelor degree and 11.1% were with postgraduate qualifications.

**Model Assessment**

To assess the structural model and Cronbach's Alpha, composite reliability and average variance extracted were calculated using SmartPLS 3. This is given in Table 1.

Table 1 Construct reliability and validity

	<b>Cronbach's Alpha</b>	<b>rho_A</b>	<b>Composite Reliability</b>	<b>Average Variance Extracted (AVE)</b>
Business performance	0.838	0.869	0.902	0.755
Financial literacy	0.754	0.756	0.836	0.505
Innovation	0.803	0.814	0.871	0.628
Market orientation	0.799	0.818	0.869	0.626

Composite reliability is ranging from 0.75 to 0.90 which is greater than the level of threshold 0.70. The AVG is also more than 0.50 for all variables given in Table 1. The results are with sufficient reliability and thus, its assures the constructs convergent validity. The discriminant validity is also confirmed with Fornel and Larker criterion which is also given in Table 2.

Table 2 Fornel and Larker Criterion

	<b>Business performance</b>	<b>Financial literacy</b>	<b>Innovation</b>	<b>Market orientation</b>
Business performance	0.869			
Financial literacy	0.754	0.711		
Innovation	0.774	0.783	0.792	
Market orientation	0.676	0.738	0.582	0.791

Table 2 shows the confirmation of discriminant validity as the coefficients are not more than the square root of the AVG extracted. In addition, the discriminant validity is also assured with the factor loadings given in Table 3.

Table 3 Factor Loadings and VIF for Items Constructs

<b>Items constructs</b>	<b>Factor Loadings</b>	<b>VIF</b>
bp1	0.870	2.094
bp2	0.926	2.610
bp3	0.806	1.757
fl1	0.701	1.515
fl2	0.769	1.966
fl3	0.753	1.727
fl4	0.663	1.324
fl5	0.661	1.250
in1	0.770	1.751
in2	0.763	1.714
in3	0.846	1.897
in4	0.786	1.693
mo2	0.767	1.509
mo3	0.677	1.451
mo4	0.810	2.081
mo1	0.896	2.636

Table 3 shows the factor loadings and variation inflation factors. The factor loadings are greater than the other. The VIF are also more than 0.2 and not more than 5 (Hair et al., 2017).

### Analysis of the Model and Testing the Hypotheses

The structural model is given in Figure 2.  $R^2$  values ranges from 0 to 1. When the study has higher values of R square, it is considered to be accurate to predict the model.  $R^2$  values 0.75, 0.50 and 0.25 are deemed to be substantial, moderate and weak (Hare et al., 2013). In this study,  $R^2$  value for innovation as an endogenous variable is 0.613 and hence, the predictive relevance market orientation and financial literacy is moderate with the structural model. However, in the case of adding the innovation as a mediating variable the predictive relevance is also moderate ( $R^2 = 0.60$ ).

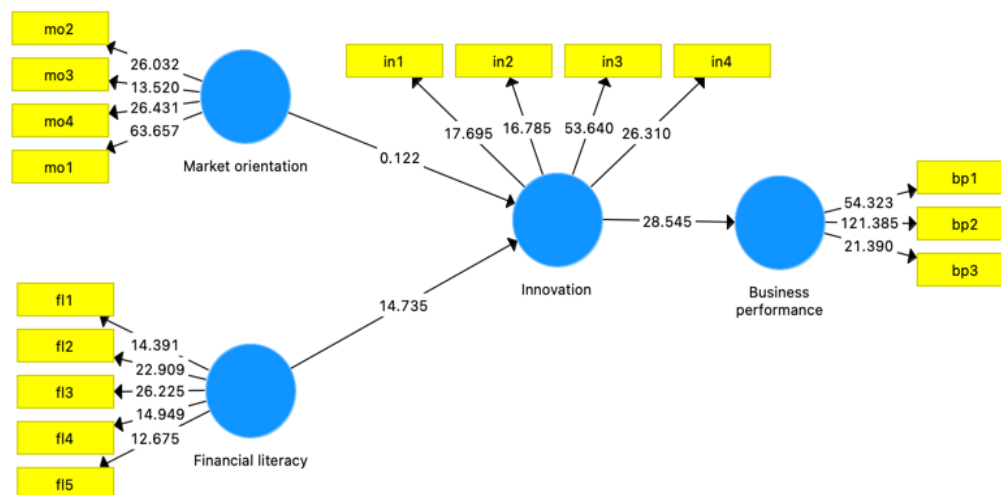


Figure 2 Structural Model

Bootstrapping procedures was also carried out. Three paths in the model are significant. This is given in Table 4.

Table 4 Bootstrapping and Path Analysis

Direction	Path coefficient	$f^2$	$t$	$p$
H <sub>1</sub> : MO -> In	0.009	0.000	0.122	0.903
H <sub>1a</sub> : MO->In->BP			0.121	0.904
H <sub>2</sub> : FL->In	0.776	0.708	14.735	0.000
H <sub>2a</sub> : FL->In->BP			13.676	0.000
H <sub>3</sub> : In->BP	0.774	1.497	28.545	0.000

As far as hypotheses are concerned, H<sub>1</sub> which is representing the relationship between market orientation and innovation is not supported (*Path coefficient* = 0.009,  $t = 0.122$ ,  $p > 0.05$ ). H<sub>1a</sub> mediated through innovation between market orientation and business performance is also not supported ( $t = 0.121$ ,  $p > 0.05$ ). H<sub>2</sub> reflecting the association concerning financial literacy and innovation of the small and medium enterprises is supported (*Path coefficient* = 0.776,  $t = 14.735$ ,  $p < 0.05$ ). H<sub>2a</sub> representing the mediation of innovation between financial literacy and business performance is supported ( $t = 13.676$ ,  $p < 0.05$ ). When examining the H<sub>3</sub> providing the relationship between innovation and business performance is supported *Path coefficient* = 0.774,  $t = 28.545$ ,  $p < 0.05$ ).

The  $f^2$  values need to be examined. According to Chohen (1988), values 0.02, 0.15 and 0.35 are denoting small, medium and large effects.  $f^2$  values are also representing the contribution of the exogenous variables to the R<sup>2</sup> values of the model. Table 4 shows that the effect size of

the market orientation to the innovation is insignificant. Financial literacy has larger effect on the innovation and on the business performance.

Blindfolding procedures analyzed the structural model to be examined the predictive relevance. The criterion is if the endogenous variable is with the  $Q^2$  value more than 0, the dependent construct is with predictive relevance. The  $Q^2$  values for the variables such as business performance and innovation are 0.434 and 0.376 respectively. This is greater than 0 and therefore, it has predictive relevance.

#### **4. DISCUSSION, MANAGERIAL IMPLICATIONS AND CONCLUSION**

Investigating the mediating effect of the innovation between market orientation and business performance and between financial literacy and business performance were the objective of this study. Innovation is not mediating between market orientation and business performance among the SMEs in the region (Eastern province). However, with regard to financial literacy and business performance, a complementary mediation is existing due to the innovation.

$H_1$  and  $H_{1a}$  were not supported in the study. Findings suggest that the SMEs in the Eastern province of Sri Lanka are not tend to follow the market orientation. Instead, they mainly focus on the financial aspects of the business in terms of generating profitability. Marketing orientation is implementing marketing concept which may reflect on the responses to the competitive reactions, consideration of customer satisfaction, keeping competitive advantage derived from the customer needs and formulation of business objectives based on the customers' requirements.

Moreover, the innovation is mediating well between the financial literacy and business performance among the SMEs in the Eastern region of Sri Lanka. This is consistent with the findings of Wahyono and Hutahayan (2020) and hence, the study supports the existing literature as well. SMEs in the regions are using their financial knowledge and use risk management and improved profitability thereby the innovation is encouraged among the SMEs. Thus, top management motivates new products and services in accordance with the market demand.

Market orientation is an important factor for strategy development and competitive advantage. This creates an opportunity along with the supports of innovation and financial performance. Further, market orientation affects the customer satisfaction, sales, quality perception and market share. Hence, SMEs should adapt market orientation that enables firm to generate profits. This study also rises a requirement of training the employees and managers in the aspects of market orientation along with financial literacy to enjoy the competitive advantage.

Market orientation and financial literacy are important for managers for their innovative thinking and reaching the best business performance in SMEs. Market oriented thinking will lead to innovative thinking that help match the consumer needs fueling the profitability of the business. Financial literacy also leads to innovative thinking helps identify nonprofitable areas of the business that may assist in avoiding business risk. Thus, this study help managers to understand how the market orientation and financial literacy helps achieve business performance of SMEs in the Eastern province of Sri Lanka.

This study has limitations in term of languages. The districts in the Eastern province have people talking multi languages such as Tamil and Sinhala. Researcher faced many challenges in meeting non-Tamil speaking people. Secondly, the other variables under the strategic orientation according to the literature need to be considered for such studies. This study considers only market orientation and financial literacy as independent variables. The sample could also be extended further as the region has some small and medium enterprises. In addition, this study can lead to future study as well. The study can be extended further with the samples from other provinces of Sri Lanka and then the bias can well be minimized.

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