



## Impact of Market Orientation and Performance Measurement Orientation on the Performance of Small and Medium Scale Enterprises

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### Abstract

Effective management of Small and Medium Enterprises' (SME) performance is a crucial task since SMEs are recognized as the backbone and the growth engine of national economies. They play an important role from many directions, namely, in enhancing economic growth, job creation, innovation, and sustainable development. Prior research discuss links between market orientation (MO) and firm performance, as well as between performance measurement system (PMS) and firm performance. However, studies on the reciprocated influence of the two perspectives on SME performance is limited. Empirical data were collected through a survey from Sri Lankan SMEs and the instrument included 59 five-point Likert scale statements. Pretest data from 35 respondents were analysed to identify the relationships between MO, Performance measurement orientation (PMO), and SME performance. According to the pretest results, MO as well as PMO has a positive relationship with SME performance. However, a post study with a larger sample of 73 responses did not establish the relationship between MO and SME performance but established the relationship between PMO and SME performance. The novelty of the study stems from three angles by: (1) being the first study explaining performance orientation which consists of adoption of PMS and use of performance information; (2) providing insights on how SMEs performance can be influenced by managing MO, PMO and other factors; and (3) listing the factors that influence MO and PMO.

*Keywords: Market orientation, Performance measurement orientation, Performance measurement system, Firm performance*

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## 1. Introduction

Small and Medium Enterprises (SMEs) are recognized as the backbone and the growth engine of national economies. They play an important role in economic growth, job creation, innovation, and sustainable development (Lekmat, Selverajah & Hewege, 2018; International Trade Center, 2019). Globally, SMEs make up more than 95% of all firms, accounting for approximately 50% of value addition and 65% of total employment. This amounts to between 420 million and 510 million SMEs, 310 million of which operate in emerging markets (International Trade Center, 2019).

In the context of Sri Lanka, it is estimated that the SMEs accounts for over 90% of the total enterprises, 45% of the total employment and make a significant contribution of 52% to the Gross Domestic Product (GDP). The Government has identified this sector as a thrust area that should be developed to provide employment to uplift the living standards of the people. As per the Department of Census and Statistics (DCS) Economic Census 2013/14, the number of establishments in the SME sector is 1.017 million providing livelihood to nearly 2.25 million persons (Ministry of Industry and Commerce, 2016). Therefore, SMEs' impact on the economic future of a nation cannot be understated, thus bringing forth increasing attention among governments, policymakers, and researchers (International Trade Center, 2016).

Substantial research published in the area of SMEs and their performance indicate that some SMEs grow and transform themselves to become larger organizations strengthening their capabilities while others struggle and eventually die. This has been reported as a common phenomenon across different parts of the world and thus, it is important to study what cause and perpetuate such a global phenomenon. Some researchers highlight that this is caused by lack of macroeconomic elements such as policy framework and institutional support, while others investigate the influence of other factors which are within the control of SMEs, for e.g., resource utilization, developing competitive advantage in functional areas, innovation, and tracking and monitoring performance, which enable SMEs to service, sustain and score, despite the problems associated with the macro elements and lack of institutional support.

Many emerging economies in the recent past have launched new policies to transform their economic structures with a view to becoming value-based economies. The aim is to transform themselves from producing commodities to producing value added goods and services, and from a production-based to a service-based economy (Lekmat et.al., 2018). Sri Lanka too is in the move towards transforming to a value-based economy, and towards this the National Policy Framework for Small and Medium Enterprises (SMEs) Development in the year 2016 was initiated, giving high priority to the development and strengthening of SME sector, enabling to become efficient and competitive to effectively penetrate into global market (Ministry of Industry and Commerce, 2016). With this transformation it is important that SMEs adopt and adapt to initiatives such as MO and performance orientation, since these management tools will help SMEs to avoid issues such as loosing opportunities in local and global markets (Gruber-Mueck & Hofer, 2015), inability to accurately identify cost and revenues, and these efforts will help them to ensure better control and performance (Cocca & Alberti, 2009) and to unleash their full potential. Although there is research conducted on SMEs relating to MO and performance orientation, many of them have focused on developed countries (Länsiluoto et al., 2019) and there is a vacuum in research conducted in developing countries, including Sri Lanka. Many researchers (Homburg, Artz, & Wieseke 2012; Hyonen, 2007; Mintz & Currim 2013; O'Sullivan & Abela 2007; Länsiluoto et al., 2019) emphasize the lack of research on testing the relationship between MO and performance measurement systems adoption and their effect on firm performance in SMEs.

This paper highlights the fact that, to survive and remain competitive, SMEs should focus more on factors within their control. With this milieu, the influence of MO and PMO on SME performance was examined. Länsiluoto et al., (2019) emphasizes that researching PMO entails investigating the performance orientation and PMS adoption nexus, which will be another focus area of this study. The objectives of this study are two-fold;

a) to ascertain the impact of MO on SME performance, and b) to ascertain the impact of PMO on SME performance.

SMEs constitute a wider spectrum of industries and markets, and the scope of this study is confined to Sri Lankan SMEs engaging in exportation and SMEs that are in the process of being nurtured to become exporters by the Export Development Board of Sri Lanka. The study follows the quantitative approach and survey strategy with a questionnaire developed using standardized and previously tested scales of measurement. With the developed instrument data were collected from 73 respondents.

This study adds many contributions to the existing research. First, it fills the void of existing research in the focus areas, in the context of developing countries, especially in the Sri Lankan context by examining the extent to which MO and PMO will impact SME performance within the Sri Lankan context. Other contributions include providing insights to policy makers and individual SME exporters to organize their businesses to achieve better performance and as stated earlier to unleash their full potential. The paper is organized as follows. The second section reviews the literature on MO and PMS in general and the context of SMEs in particular. Third section discusses the research model constructed by perusing existing literature, followed by the fourth section which discusses about the methods used. This is followed by the results and analysis of the data collected. The paper ends by providing some conclusions and directions for future research.

## 2. Theoretical Background

### **2.1. Definition of SMEs**

As it is national governments that define SMEs, there is no globally agreed definition on SMEs. Different countries use different definitions for SMEs based on their level of development. Several international organizations have adopted their own definitions of SMEs. For instance, for the World Bank, an SME is a firm with 99 employees or fewer, whereas, for the Asian and African development banks, an SME is a firm with 50 employees or fewer. The commonly used yardsticks are the total number of employees, annual sales turnover, total investment and persons employed. In the Sri Lankan context, the SME policy framework defines SMEs based on the number of employees and annual turnover (Ministry of Industry and Commerce, 2016). Sri Lanka uses a hybrid definition for SMEs based on the type of the business and Table 1 elaborates the definition.

**Table 1: Definition of SMEs in Sri Lanka**

Sector	Criteria	Medium	Small	Micro
Manufacturing	Annual Turnover	Rs. Mn. 251 –750	Rs. Mn. 16- 250	Rs. Mn 15 or less than Rs. Mn. 15
	Number of Employees	51 – 300	11 – 50	10 or less than 10
Service Sector	Annual Turnover	Rs. Mn. 251 –750	Rs. Mn. 16- 250	Rs. Mn 15 or less than Rs. Mn. 15
	Number of Employees	51 – 200	11 – 50	10 or less than 10

*Source: Ministry of Industry and Commerce (2016)*

## 2.2. Market Orientation

MO, being considered as one of the classical concepts of marketing (Deshpande, Farley, & Webster, 1993) is understood from two main perspectives, namely the cultural perspective and the behavioral perspective (Armario, Ruis, & Armario, 2008). It is seen as the organizational adoption of the marketing concept (Kohli, Jaworski, & Kuma, 1993). It also is interrelated to and therefore often synonymously used with terms such as customer orientation (Webster, 1988), customer focus (Deshpande & Farley, 1999), customer-focused, customer-oriented, and customer-centric (Dursun & Kilic, 2017). Deshpande and Farley (1999) consider MO to be identical to customer orientation and similar to the marketing concept. MO considers customers to be of main focus (Chao & Spillan, 2010). Narver et al. (1998) views that MO conveys how the objectives and the culture of a company focus on the creation of value for clients. MO is considered to be consisted of several components. To name a few: customer orientation, competitor orientation, inter-functional coordination (Narver & Slater, 1990), intelligence generation/ market intelligence, intelligence dissemination, organization wide responsiveness (Kohli & Jaworski, 1990), customer focus, marketing impact on strategy, coordinated marketing, status and professionalism of the marketing function (Lawton & Parasuraman, 1980).

Given this multi-faceted understanding of MO, it is only natural that

the definitions of MO to be wider. However, some of the more widely accepted definitions, as can be seen in the literature are the definitions of Narver and Slater (1990) who define MO to be the basis of marketing and strategic planning, orienting the company toward the creation and delivery of superior value for its customers; and that of Kohli and Jaworski (1990) who define MO as the organization wide generation of market intelligence, entailing the processes through which a firm implements marketing concepts. Joensuu-Salo, Sorama, Vilijamaa, and Varamaki (2018), identified the former to be a definition from a cultural perspective and the latter from a behavioural perspective. Morgan et al. (2009), on the other hand define MO as the extent to which a firm engages in generation, and dissemination of market intelligence and its responsiveness to market intelligence pertaining to current and future customer needs and wants, competitor strategies, and actions and the broad business environment.

MO is considered as an organizational resource and capability (Morgan et al., 2009) and is viewed as a valuable, rare, imperfectly imitable and nonreplaceable capability that could generate sustainable competitive advantage (Tho, 2019). The features of an organization that would create such capability has been identified to be one that, (1) proactively and systematically acquires and evaluates market intelligence concerning customers, competitors, government, technology and other environmental forces (Fernandes, et al., 2020); (2) considers both customers and competitors since both appear in the marketplace (Hunt & Morgan, 1995); (3) considers current and future customers, competitors, and broader market condition (Jaworski et al., 2000) and; (4) intensely customer centric in focus, directing organizational decision making to meet explicit and latent customer needs at a profit (McCarthy & Perreault, 1984).

Being market oriented has several favourable consequences, for e.g., enhancing firm performance by satisfying customers' needs and facilitating sharing of competitors' information and inter- functional coordination (González-Benito, González-Benito & Muñoz-Gallego, 2009; Narver & Slater, 1990). It also enhances superior customer value (Kohli & Jaworski, 1990). It is a vital characteristic in the internationalization

processes and in international performance (Cadogan, Kuiwalainen, & Sundqvist, 2009; Frösén et al., 2016; Acosta, Crespo, & Agudo, 2018), where it is believed that companies that are market oriented have a better understanding of the needs and wants of foreign customers, strategies and capabilities of competitors and external forces and therefore could respond appropriately (Fernandes et al., 2020).

Given MO to be a very important construct in marketing, several authors have identified antecedents of MO to be two-fold as structural variables which include the objective aspects of the organization (Aiken, Bacharach, & French, 1980) and cultural variables which reflect the norms and shared values of organization members (Deshpande & Webster, 1989). The structural variables include elements such as formalization, centralization, and departmentalization, whereas the cultural variables include organizational learning (Olavarrieta & Friedmann, 2008), market focus, entrepreneurial proclivity (Matsuno et al., 2002), and quality context (Raju, Lonial, & Crum, 2011).

#### 2.2.1. Market Orientation and SMEs

Raju et al., (2011), assert that the role of MO in SMEs is quite distinct to that in larger organizations, which can firmly be linked to the differences among SMEs and large-scale organizations. They also consider SMEs to be highly market oriented and compete effectively with larger organizations and show stronger performance (Zhang, Giang, & Zhu, 2015) while satisfying customer needs. This enables SMEs to develop better products and services than their competitors (Kohli & Jaworski, 1990). Spillan et al., (2013) established that this relationship between MO and performance can also be found in microenterprises. Raju et al., (2011), assert the MO-Performance relationship to be stronger in SMEs, compared to larger firms and the same has been observed in several studies in different contexts (Raju et al., 2011).

#### 2.3. Performance Measurement Systems

PMSs are mostly discussed in the operations management literature (Koufteros et al., 2014) and a wide range of areas in the performance measurement domain is researched by different scholars; for instance, development of guides for PMSs (Bititci, Carrie, & McDevitt, 1997;

Dekker, Groot, & Schoute, 2013; Neely, Gregory, & Platts, 2005; Lima, 2010); characterizations of PMSs (Neely, 1999; Neely et al., 2005); multidimensionality perspective of PMSs (Kaplan & Norton, 2001); and matrices of PMSs (Kaplan & Norton, 2008; Melnyk, Stewart, & Swink, 2004).

A PMS is a balanced and dynamic system that can support the decision-making process by gathering, elaborating and analyzing information (Neely, Adams, & Kennerley, 2002). A PMS is expected to provide a concise overview of performance through sets of metrics that guide and support the decision-making processes of an organization (Taylor & Taylor, 2014). The terms adoption of PMS and use of performance information in measuring firm performance are discussed separately in prior research. However, both attempt to give the meaning 'adoption'. In this paper, the authors consider both adoption and use, combined together and it is referred to as 'performance measurement orientation (PMO)'. Thus, this study considers both aspects and attempts to first, identify the factors that influence PMO and next, to identify the influence of PMO on firm performance together with MO.

Considering the literature on factors influencing the adoption of a PMS in SMEs; Garengo and Bititci (2007) proposed four factors: corporate governance structure, advanced information practices, changes in the firm's business model and an authoritative management style. Other factors that have gained attention of scholars are; organization size (e.g., Chenhall, 2003; Garengo, Biazzo, & Bititci, 2005; Hoque & James, 2000); external environment (e.g., Wijaya & Akbar, 2013) and organizational culture (e.g. Garengo et al. (2005). No specific studies that discussed the factors influencing performance information use in SMEs could be identified. However, in general factors such as: organizational size (e.g., Bourdeaux & Chikoto, 2008; Moynihan & Ingraham, 2004); leadership (e.g., Bourdeaux & Chikoto, 2008; Dull, 2008; Kroll & Vogel, 2014); organizational culture (e.g., Lee & Clerkin, 2017; Moynihan & Pandey, 2012); workforce characteristics (e.g., Kroll & Vogel, 2014; Moynihan & Pandey, 2010), competence and expertise in performance management (e.g., Bourdeaux & Chikoto, 2008; Dull, 2008) etc. were identified influential.



PMSs influence people's behaviour, organizational capabilities, and performance at different levels (organizational, team, managerial, inter-firm) (Franco-Santos, Lucianetti, & Bourne, 2012). At the organizational level (which is the focus of this study) a balanced PMS will improve firm performance by: (1) providing a better translation of the strategy into operational terms, (2) making the act of strategizing a continuous process, and (3) providing a greater alignment of various processes, services, competencies and units of an organization (De Geuser Mooraj, & Oyon, 2009).

Use of PMSs facilitate strategy implementation and organizational performance improvement (Davis & Albright, 2004; Franco-Santos et al., 2012). Many performance measurement frameworks such as Balanced Scorecard (Kaplan & Norton, 2001), Performance Measurement Matrix (Keegan et al., 1989), the Result and Determinants Model (Fitzgerald et al., 1991), the Performance Pyramid (Lynch & Cross, 1992), and the Performance Prism (Neely et al., 2002) have been proposed to facilitate organizations to orchestrate their resources more effectively to improve performance in general.

### 2.3.1. Performance Measurement Systems and SMEs

Performance measurement in SMEs differs from that of large companies due to the smaller size of SMEs, the focus on financial returns, and the informal and unstructured nature of SMEs (Lima & Carpinetti, 2010). "We believe that if you don't measure progress toward an objective, you cannot manage and improve it" (Kaplan & Norton, 2008, p.68). This is applicable to SMEs as well. However, even though the SMEs recognise the importance of PMS, the rate of using PMS is very low (Sousa et al., 2006). There are four contingency factors that affect the adoption and use of PMS in SMEs: corporate governance and structure; management IS; business model; organisational culture; and management style (Garengo & Bititci, 2007). Garengo et al. (2005) identified the following factors influencing the PMSs in SMEs: the limited human resource - prevents them from engaging in additional activities such as PMS other than the daily work, lack of managerial capabilities, the negative perception on the benefits of management tools, lack of funds to bear the implementation costs of a PMS, reactive decision-making models and short-term orientation,

tacit knowledge in SMEs, the rarely formalised processes leading to issues in gathering information to implement and use PMS, and lack of full understanding on the performance measurement concept and the potential advantages of implementing PMS.

During the emergence of the literature on firm performance, the performance of small firms was measured basically on its cashflow. Ghalayini and Nobe (1996) introduced a classification of performance measures as: (1) Traditional performance measures, mostly financial measures, consider intention of top managers and these lead to employee frustration; (2) Non-traditional performance measures, based on company strategy, mainly non-financial performance, intended for all employees, and these lead to employee satisfaction etc. In addition, the performance of SME's are considered from both qualitative and quantitative perspectives. Efficiency, financial results, number of customers, level of production (Anggadwita & Mustafid, 2014); market share, profitability, productivity, dynamics of revenues, costs, and liquidity (Gupta & Batra, 2016; Zimon, 2018); absorption of new technologies, turn over are some of the variables used to evaluate firm performance quantitatively. Goals achievement, leadership style, employee behaviour (Anggadwita & Mustafid, 2014); customer satisfaction (Alpkan et al., 2007); product and process innovation, organizational and marketing innovation (Sheehan, 2013) have been used as measurement variables from a qualitative perspective. At another level, indicators of performance are discussed. For instance, aspects such as: reputation, productivity, employee satisfaction, profits, sales, prompt order delivery, sufficient working capital, effectiveness in operations of production, product quality, target achievement, number of clients, easiness in supervision, reduction in product cost, and product diversification are such indicators used to measure SME performance (Gopang et al., 2017).

Finding accurate data about performance of SMEs has been identified as a challenge particularly in Sri Lanka because the SMEs are very reluctant to disclose real data and they don't maintain financial reports in a proper manner (Wijewardena et al., 2004; Pushpakumari & Watanabe, 2009). Hence, Pushpakumari and Watanabe (2009) in their study could only ask owners/managers to indicate the trends of using certain indicators

during last three years such as: highly increased, increased, moderate, decreased, and highly decreased.

### 3. Research Model

#### 3.1. Relationship between Market Orientation and Firm Performance

MO has been researched with other variables in several ways. It has been considered an independent variable where Olavarrieta and Friedmann (2008) consider knowledge-related resources to provide a key link between MO and firm performance. Vorhies and Harker (2000) found that firms with high MO also had higher levels of the six marketing capabilities, these being: marketing research, product development, pricing, distribution, promotion, and marketing management.

The relationship between MO and firm performance has been widely discussed in different business contexts (Jaworski & Kohli, 1993; Voss & Voss, 2000; Jyoti & Sharma, 2012). As highlighted by Blankson, Motwani, & Levnurg, (2006), and Aminu (2018), there is a lack of similar researches done in the context of developing countries in particular with SMEs while there is a vast volume of literature on MO and firm performance in the context of developed countries. Few examples of studies that used firm performance as a dependent variable are (Aliyu, 2014; Harrison-Walker, 2001; Jaworski & Kohli, 1993; Mahmoud, 2011). A study done in USA has found that MO significantly relates to firm performance (Jaworski & Kohli, 1993), while another study in UK has found a significant positive relationship between the same variables (e.g., Appiah-Adu & Singh, 1998; Matsuno, Mentzer, & Ozsomer, 2002; Megicks & Warnaby, 2008; Foley & Fahy, 2009). This finding is also evidenced in studies such as Aliyu (2014) and Mahmoud (2011). However, the variables considered under MO also decides the extent of the relationship or the impact of the overall MO on firm performance. For instance, Harrison-Walker (2001) states that only customer and competitor orientation have shown a positive and significant relationship towards firm performance.

Literature contends that MO has a positive role on firm performance (Jaworski & Kohli, 1993; Boekema et al., 2000; Kanagasabai, 2008; Frösén et al., 2016; Prifty & Alimehmeti, 2017; Slater and Narver, 1993) while Bunic (2007) argues that the effect is insignificant. Moreover, literature

contends that companies with higher MO achieves higher performance in relation to higher sales, profits, return on assets, and market share (Lado & Maydeu-Olivares, 2000). For instance, SMEs that exhibit strong MO had shown a significant and consistent improvement for years in their sales and profitability than those that are less market oriented (Becherer, Halstead, & Haynes, 2001). On the other hand, some studies have found that there is a relationship between MO and SME performance, but the relationship is not significant. Few examples of such research are Jimenez-Jimenez, Sanz-Valle, & Hernandez-Espallardo (2008) and Silva et al., (2009). In addition to these, some research argues that there is a negative relationship between MO and SME performance, for e.g., Grewal and Tansuhaj (2001) and Arshad, Mansor, & Othman (2012). Therefore, it is clear that research conducted on MO and firm performance produced mixed results.

When considering the MO – Firm performance relationship in the SME context, there are a few studies which shows no relationship between MO in overall or any of the individual MO variables and SME performance (Johnson, Dibrell, & Hansel, 2009; Suliyanto & Rahab, 2012; Murjan & Md Salleh, 2012). Nwokah (2008), and Shehu and Mahmood (2014) also state that there is no relationship at least between MO and SME performance. Nevertheless, it is notable that these studies which have found no relationship to exist have used different variables than the studies that have found the existence of a relationship or impact of MO on SME performance. In addition to the scales/ measurements used (Wang, 2012), findings can be different due to the differences in cultural, industry, and the sample chosen. Also, some contradictory results of previous studies suggest that the relationship between MO and SME performance is varied and complex as its impact cannot be viewed in a simple manner (Yusif, 2012).

Considering the above, the 1st hypothesis is proposed as:

H1: Market orientation has a positive impact on SME performance

### 3.2. Relationship between Performance Measurement Systems on SME performance

PMS has a strategic role and is important in supporting organizational

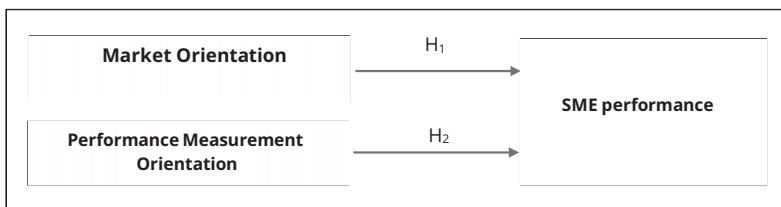
development in SMEs (Garengo & Bititci, 2007) and the extent to which organizations can exploit and identify its strategic capabilities are influenced by the use of information generated through the PMSs (Grafton, Lillis, & Widener, 2010). With well designed PMSs, performance management becomes easy and effective, enabling strong controls and monitoring, which can ultimately influence firm performance (Bititci et al., 1997).

On one hand, scholars argue that the use of PMS leads to improved capabilities, which consequently impact performance of firms (Koufteros, Vergheese, & Lucianetti, 2014) and claim that organizations with a PMS in place can outperform their counterparts which do not have PMS (Davis & Albright, 2004; Crabtree & DeBusk, 2008). However, an important concern that literature points to is the lack of clarity on the exact influence of PMS on performance (Pavlov & Bourne, 2011). That is, despite the identification of an existence of a relationship between PMS and performance, how the PMS are linked to performance has not been precisely demonstrated. This leaves an unresolved gap on the impact of PMS on performance. On the other hand, some propose mixed results on the effects of PMS usage on organizational performance (Chenhall & Langfield-Smith, 1998; Ittner, Larcker, & Meyer, 2003).

Considering the above, the 2nd hypothesis is proposed as:

H2: PMS adoption has a positive impact on SME performance

Figure 1: Theoretical Framework



Source: Developed by Authors

#### 4. Methods

Taking a quantitative approach, an initial pre-test was conducted, and later more data was collected to test the model of the effects of MO and PMO on SME Performance. The pre-test was a sample of 35 entrepreneurs,

who were students of the Higher Diploma in Entrepreneurship and Small Business Management programme conducted by a Sri Lankan state higher educational institution. The sample was then expanded to capture a variety of different SME exporters island wide (73 responses). All hypotheses were tested with both the samples, the smaller pretest sample and the larger sample post the initial sample –the larger sample was reported for the purposes of this study. Table 2 summarises the measured variables of this study.

#### 4.1. Respondents and Procedure

Data were gathered online using the google platform where the google link to the instrument was sent via email to a list of SME owners and managers. The instrument was in English and Sinhalese<sup>5</sup> to avoid any linguistic difficulties that the respondents might experience. This list was obtained from the Export Development Board of Sri Lanka. Respondents were not offered any incentive for filling the online questionnaire. Of the 73 completed surveys, 56 (76.7%) were filled by owners of the business, nine (12.3%) by the managers of the business and eight (11%) by employees of the business. 62 (84.9%) was operating in the manufacturing sector with the rest representing the services sector. Of these businesses, 49.3% (36) reported an annual turnover of less than 16 million Sri Lankan Rupees (LKR), 39.7% (29) reported an annual turnover of LKR 16 – 250 million, 11% (08) reported an annual turnover of LKR 251 – 750 million and none reported an annual turnover of more than LKR 750 million. Of these businesses, a majority of 42.5% (31) has been in the business for more than 10 years, 37% (27) has been in the business for 05-10 years, and 20.5% (15) has been in operation for less than 05 years. 44 (60%) of the businesses employ only 1-10 employees, with 18 (24.7%) employing 11-50 employees, and only 11 (15.1%) employing 51 – 200 employees. Of the businesses, only 27 (37%) engaged in exporting and 46 (63%) intended to enter to the export trade.

#### 4.2. Measures

All scales used to measure the constructs used a 5-point Likert scale.

Market Orientation: The 32-item Market Orientation Scale (MARKOR)

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<sup>5</sup>*Sinhalese is one of the native languages spoken in Sri Lanka*

(Jaworski & Kohli, 1993) was used in the study. A sample item is “If a major competitor were to launch an intensive campaign targeted at our customers, we would implement a response immediately.” Items were measured on a scale ranging from 1 (“strongly disagree”) to 5 (“strongly agree”).

Performance Measurement Orientation: 10-items from Ittner et al., (2003) scale was adapted. A sample item is “How would you rate the use of information in the following perspectives when you are evaluating the firm performance? - Short-term financial performance (e.g., annual earnings, return on assets, gearing, and liquidity)”. Items were measured on a scale ranging from 1 (“never”) to 5 (“almost always”).

Firm Performance: 17 relevant items from the works of Selvam et al., (2016), Al-Matari, Al-Swidi, and Fadzil (2014), Santos and Brito (2012), Chapman and Kihn (2009), and Govindarajan and Fisher (1990) were used to measure this variable. A sample item is “How would you rate your performance relative to: (1) your own firm’s performance last year, (2) your competitor during the past three years? – Cash flow from operations”. Items were measured on a scale ranging from 1 (“much worse”) to 5 (“much better”).

All items of the used scales appear in Appendix A. Reliability of the instrument is given below in Table 2.

**Table 2: Summary of quantitative questionnaire**

<b>Construct</b>	<b>Variables</b>	<b>No of Items</b>	<b>Reliability</b>
Market Orientation	Intelligence gathering	10	0.72
	Intelligence dissemination	08	0.61
	Responsiveness	14	0.49
Performance Measurement Orientation		10	0.89
Firm Performance	Firm Performance compared to last year’s performance	17	0.97
	Firm Performance compared to competitor’s performance during the past three years	17	0.98
<b>Total Items</b>		<b>76</b>	

## 5. Results

The descriptive statistics and intercorrelations of the study variables are reported in Table 3. The mean values and the standard deviations for the different variables are given in this table. As per the standard deviations of performance compared to competitors, performance compared to last year's performance, SME performance, it is clear that data points are spread out over a significantly large range of values.

**Table 3: Descriptive Statistics for the study**

	IG	ID	Res	MO	PMO	PC	PLY	SMEP
Mean	3.25	3.00	3.15	4.03	4.03	3.24	3.11	3.19
Std. Deviation	.60	.54	.36	.72	.72	1.07	1.01	1.02

Note: IG - Intelligence Generation, ID - Intelligence Dissemination, Res - Responsiveness, MO - Market Orientation, PMO - Performance Measurement Orientation, PC - Performance compared to competitor, PLY - Performance compared to last year's performance, SMEP - SME Performance

**Table 4: Correlations for the study**

	IG	ID	Res	MO	PMO	PC	PLY	SMEP
1. IG								
2. ID	.60**							
3. Res	.61**	.55**						
4. MO	.89**	.86**	.80**					
5. PMO	.27**	.19	.28*	.30*				
6. PC	-.09	-.05	-.12	-.07	.70**			
7. PLY	-.05	-.03	-.02	-.05	.64**	.91**		
8. SMEP	-.07	-.03	-.05	-.07	.69**	.97**	.97**	

Note: IG - Intelligence Generation, ID - Intelligence Dissemination, Res - Responsiveness, MO - Market Orientation, PMO - Performance Measurement Orientation, PC - Performance compared to competitor, PLY - Performance compared to last year's performance, SMEP - SME Performance

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

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

The pre-test results from the 35 responses showed that MO as well as PMO has a positive relationship with SME performance, the full results from the 73 responses used for this study demonstrated contradictory findings. Though MO has a weaker positive correlation with PMO ( $r = .30$ ,  $p < 0.5$ ). PMO has a strong positive relationship with SME performance ( $r = .69$ ,  $p < 0.1$ ). However, MO has an insignificant correlation with SME performance.

The regression model is statistically significant on a 95% confidence level ( $p=0.00$ ). Moreover, the results of a regression analysis show that 56% of variations can be explained by the study's independent variables ( $R^2 = 0.56$ ). The overall relationship between the two independent variables



and the dependent variable is 74.8% ( $r = 0.748$ ).

The coefficient values were statistically examined in two phases. At the first phase, they were examined for the individual variables of MO construct (intelligence generation, intelligence dissemination, responsiveness) where they were insignificant under the 5% significance level ( $p = 0.00$ ). PMO was significant at 5% significance level ( $p = 0.00$ ). The unstandardized coefficient ( $\beta = 1.11$ ) which denotes that SME performance is expected to increase by 1.11 units at an increase of 1 unit of PMO. Statistical analysis output relevant to the first phase is given in Appendix B. The second phase examined for the MO construct as a composite where the model was statistically significant at a 5% significance level ( $p = 0.00$ ). The unstandardized coefficient ( $\beta = -0.67$ ),  $p = 0.01$  shows that SME performance is expected to decrease by 0.67 units at an increase of 1 unit of MO. PMO was significant at 5% significance level ( $p = 0.00$ ). The unstandardized coefficient ( $\beta = 1.09$ ) which indicates that SME performance is expected to increase by 1.09 units at an increase of 1 unit of PMO. Statistical analysis output relevant to the first phase is given in Appendix C.

## 6. Discussion

This research suggests that though PMO leads to better SME performance, MO has no impact on SME Performance. Rather it shows a negative relationship between MO. This behaviour is the opposite to hypothesis in relation to MO and SME performance. A strong and positive correlation between MO and SME Performance, was expected, but based on the data analysis the hypothesis 1 had to be rejected. Extensive literature emphasises the need to be market oriented in attaining superior performance. However, data implies that Sri Lankan SME performance is not impacted by MO, rather other factors, including the orientation towards performance measurement (PMO) as observed in this study. This however, is in line with the findings of research which showed that no relationship or a negative relationship between MO and SME performance (Johnson, Dibrell, & Hansel, 2009; Suliyanto & Rahab, 2012; Murjan & Md Salleh, 2012; Nwokah, 2008; Shehu & Mahmood, 2014). This emphasizes Wang (2012), observations that the findings on MO and SME performance can be different due to differences in culture, industry, and

the sample chosen and as in this case with the Sri Lankan SME context. We also have to bear in mind the limited responses based on which this study (73 responses) as well as the analysis was carried out. Further, most of our SMEs were more skewed towards being small, where this may have had a bearing on their orientation towards MO and its impact thereby on SME performance.

Developing a model incorporating the variables of MO and PMO, their effects on SME performance was tested. These findings have important implications for theory and research on the MO- PMO and SME performance relationship especially in the context of Sri Lanka.

## 7. Limitations, Implications, and Future Research

### ***Limitations***

One limitation of this research stems from having a small number of respondents, i.e., 73 in numbers, which is a challenge in generalizing the findings, given the local context. The study was conducted between September – November 2020, at the height of the second wave of the COVID-19 pandemic. Reaching out to institutions that maintained databases of exporters was a major obstacle, and that prevented researchers from setting an adequate number of respondents.

The study focused only on the Sri Lankan context, thus limiting the findings only to the Sri Lankan context. Another factor that somewhat limits the generalizability of the findings is the differences in the definitions of SME in different countries, which challenges mapping the findings of this study, based on the Sri Lankan context to the global context.

### ***Implications***

The results of our research provide some interesting implications for researchers and academics, SMEs and policy makers. From the point of view of academics, this study fills a lacuna in existing research in the focus areas of PMO, MO and SME performance, in the context of developing countries, especially in the Sri Lankan context. SME is a crucial sector in the economic development of a country. Hence, it is generally and theoretically accepted that SMEs like any other business need to be market oriented. Contrary to this notion, the insignificant impact of MO on firm performance discovered by the current study proves that there are various

other factors to be considered for the improvement of firm performance. Thus, the current study provides a strong basis for researchers to think differently and make decisions by considering all other factors for e.g., having a performance measurement adoption system, innovativeness, entrepreneurial orientation, technology, leadership and management, training and development, regulatory factors etc.

Practically, the study emphasizes the need for the SMEs to adopt PMO and PMSs in enhancing firm performance.

This study offers new knowledge to the policy makers, for not only crafting policies, but also in developing training programmes and support systems to adopt PMSs in SMEs and SME exporters in directing towards achieving firm performance, which is one of the prime objectives of any business.

### ***Future Research***

As future lines of research, the same research could be carried out partnering with either a public or private agency or an institution which is involved in managing and coordinating exporters, so that a wider range of responses could be obtained without any difficulty. This is particularly important since the findings of the current study with 73 respondents reveal that MO has no impact on SME performance, which rebuts accepted notions of well-articulated literature on the positive relationship observed between MO and performance in general and SME performance in particular. Thus, it is important to test the research model with a wider group of respondents representing a fair membership of the population. The SMEs Exporters focused on, in this study are not confined to a particular industry or a sector. Future studies could test the same model concerning SME exporters in a single sector to examine the relationship and the effects of the variables examined in this study. Further, the study could be expanded to cover any organization in the SME sector and not just exporters.

Future research should aim at extending the understanding of the interplay of variables other than MO on SME performance. Since SMEs are mostly family-owned businesses, the culture and social characteristics of SMEs are two such crucial variables. These factors are encouraged to

be considered in future research as it would add new knowledge to the literature.

Further, performance measurement adoption systems should be given more prominence in future research as it would describe the best way to measure and improve performance. Future studies could test the influence of other control variables such as firm size, years of experience as an exporter, capital and profits, number of employees etc. to the research model to ascertain how a mediating or a moderating intervention of these variables would change or affirm the findings.

On top of these, new theories, and models should be built, or significant modifications should be made beyond existing similar frameworks. For this, qualitative studies are also encouraged as it would indeed nourish the literature. Since SME's are one major influencing sector in an economy, more future research should be undertaken aligning with new trends and technologies as well.

## 8. Conclusion

This study investigated the impact of MO and PMO on SME performance in the domain of exporters. The study revealed two main findings: (1) there is no impact of MO on SME performance, and (2) PMO has a positive impact on SME performance. The study is unique as this is the first study which adopted PMO towards the SME performance within the Sri Lankan context. Further, this research indicated a negative relationship between MO and SME performance albeit many previous research revealing the opposite. Hence, the findings of the study were both supportive and contradictory to the existing theories at the same time.

Further, this study avails valuable insights for both theorists as well as practitioners such as policymakers and government authorities appointed to look into the development of the SME sector. The findings also emphasized the importance of exploring factors to be considered in improving SME performance. Moreover, the study presents new avenues that future researchers should focus on, and limitations of the current study will be helpful in improving future research efforts in contributing more to both the theory and practice of the SME sector.

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