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FIRM INTEGRATION PERFORMANCE: ACCOUNTING AND FINANCE, MARKETING, LOGISTICS, AND SUPPLY CHAIN PERFORMANCE

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ABSTRACT

The firm performance is one of how the management of the company may fulfil the responsibilities of the parties to achieve the vision and mission of the firm. Thus, the objective of the study is to analyse the integration of accounting and finance, marketing, logistic, and supply chain performance in the organization. The data obtained from the annual reports of 132 companies listed on the Colombo Stock Exchange (CSE) include companies with data for AFP, MP, and LSCP based on a cluster sampling approach. As per the longitudinal study, data were gathered from the financial years 2015-2019 were used in this research. The study offers the results of an initial quantitative investigation on the scope of integration. The integration performance was evaluated using an ROE-based analysis in this study. The results of the study indicate that accounting and finance, marketing, logistic, and supply chain management are positively correlated with each other using the Pearson correlation and regression analysis showed that the independent variables, in reality, have a significant effect on the dependent variable. Other relevant aspects should be investigated in future research, as well as the interaction between internal and external integration. Furthermore, investigations should look into the best order for integrating business procedures.

Keywords: Firm integration performance, Accounting, and Finance performance, Marketing performance, Logistics, and Supply chain performance

1. Introduction

Firm performance is one of the significant factors the researchers are concerned about in the area of management (Richard et al., 2009). Studies have shown the concept of performance has been defined as the ability to assess the level of corporate success. Consequently, the key functions; Accounting and Finance (AFP), Marketing (MP), Logistics and Supply chain (LSCP) functions contribute to increasing firm performance. Many kinds of literature have justified the performance of the AFP (Buallay et al., 2017), MP (Sullivan et al., 2009), LSCP (Aziz et al., 2020) functions are separate. But to be wellmanaged, all value-creating processes should work together to provide the highest level of performance. Therefore, firms need to know about the importance of integration of overall firm functions or at least the main key functions. As a definition, integration is the process of bringing departments together to form a cohesive organization through interdepartmental interaction and collaboration (Chen et al., 2007). This helps to increase overall cost efficiency by assisting in cooperative planning to foresee and manage operational difficulties, work together to achieve goals, build a mutual knowledge of responsibilities. Based on the above evidence, there is lack of highly inconclusive empirical evidence of analysing the integration of AFP, MP, LSCP in the organization. Empirically, the study used a quantitative approach based on annual reports of the Colombo Stock Exchange for the period from 2015 to 2019. This research makes a significant contribution by considering the analysis of the integration of firm performance.

2. Literature review

A company's success is determined by its performance. Therefore, evaluating the performance of every business is a drive for the success of an organization. As a result, the business's performance competence is essential as it's one of the key ways whereby the company's management can meet the duties of the parties involved in achieving the firm's vision and goal (Budiyanto & Hudiwinarsih, 2015). Accordingly, AF performance takes the first step in determining the success of a company. This phenomenon has been examined by past authors in a variety of ways and approaches. Financial performance has been used to assess a company's performance and financial overall health, as well as to evaluate specific firms in the same industry or to firms across the same industry broadly. Moreover, the performance of a company's internal and external actions or operations is evaluated by its financial performance (Mandal & Waleed, 2018). Similarly, marketing and supply chain performances areas are becoming key areas for organizational success. Homburg et al. (2007), has defined, marketing performance as the success of a company's marketing activities in terms of market-related goals such as revenue, growth, and market share. Concerned about an organization's marketing performance, the company should pay attention to supply chain performance to enhance the organization's overall performance. Furthermore, Supply chain performance is described as the result of systematic, strategic, and efficient coordination of typical business functions within and across the business, including actions and procedures related to processing raw materials into finished products (Hernawati & Surya, 2019). Correspondingly, the supply chain mainly contributes to the success of the organization through the coordination of processes-related activities. Consequently, it emphasizes a new business model and a way to create a competitive advantage for the business (Lambert & Enz, 2016). The logistic function is part of the supply chain function and these two are interrelated. According to Kain & Verma (2018), logistic performance is the planning, implementation, and control of the efficient, effective, forward, and reverse flow and storage of goods, services, and related information.

As mentioned above, these three key functions have been considered in this research as the important functions for organizational success. In addition to the separate studies done by past researchers, some studies depict the firm integration performance. In many studies, ROA and ROE have been used to measure the overall performance of an organization (Azeez, 2015). ROE is a parameter to measure accounting earnings for a period of shareholders' equity invested (Rossi et al., 2015). According to this study, Return on Equity (ROE) is used to evaluate the overall integration performance of AFP, MP, LSCP.

An organization can be more successful than ever if there functions as an integration rather than operating individually. Therefore, integration mainly applies to the "strategic linking" of functionally specialized groups for the success of the organization (Opute & Madichie, 2016). Accordingly, past authors have investigated its integration separately between variables of AFP, MP, LSCP. Thus, (Dyhdalewicz & Widelska, 2017), have made an integration of AF and marketing functions into the innovation of an enterprise. Furthermore, evidence of Doktoralina & Apollo (2019) study indicated that the integration of AF with LSCP has been conducted to increase the profitability of Malaysian logistics companies. As above, the authors point out the AF and the LSCP had a significant positive relationship for the profitability of the supply companies. Alvarado & Kotzab (2001), provides evidence for the integration of logistics and marketing. These authors discuss the importance of integrating logistics into the marketing field of channel management. Conclusively, very limited studies have been done on the integration of accounting and finance performance with marketing, logistics, and supply chain performance. Therefore, this research seeks to show how the integration of these three key functions affects the success of firm performance.

3. Methodology

This section provides an overview of the research design, sampling design, data collection methods utilized, and methods used to analyse the data of the study. In this study, the research design formulates by three independent variables which are AFP, MP, LSCP, and firm integration performance as the dependent variable. Further, there are distinct dimensions, indicators, and measures for each of the aforementioned factors. Net profit ratio, operating assets turnover ratio, Gross margin return on inventory (GMROI) are the indicators for AFP, MP, and LSCP accordingly. This study used ROE-based analysis for the integration performance. ROE is the most extensively used metric for monitoring and evaluating firm performance. Many analysts use different ways to evaluate corporate performance, but most investors focus on ROE to evaluate a business's performance success. Essentially, this is a quantitative study that relied on secondary data. In the sample design, this study employed a total population from the Colombo stock exchange (CSE). To carry out the focus of this research, first, it

identified firms that operate in the areas of accounting and finance, marketing, logistics, and supply chain management. Based on the cluster sampling approach, the population of 303 firms was reduced to 132 companies of the sample, which gathered data on all three variable measures for companies listed on CSE. This research gathered data from the 2015 - 2019 financial year annual reports as per the longitudinal study. Furthermore, Pearson correlation and regression analysis are the techniques that are utilized to examine the data that has been obtained. Moreover, SPSS version 26 software was utilized to perform Pearson correlation and regression in this study.

4. Results and Discussion

4.1 Pearson Correlation

When reviewing the results, keep the following coefficients in view. This coefficient, which runs from -1 to +1, is a non-dimensional measure of the partner. R = 0 shows that the variables do not have a linear relationship, and as the strength of the connection increases, the absolute value of r rises, finally reaching a straight line when the coefficient reaches -1 or +1. If the result is a perfect correlation of -1 or +1, it is concluded that all data points are on a straight line (Schober & Schwarte, 2018).

Table 1: Pearson correlation of integrated performance

	Net profit	Operating_	GMROI
	ratio	Assets	
		Turnover Ratio	
Net profit ratio	1	.928*	0.865
Operating Assets	.928*	1	0.778
Turnover Ratio			
GMROI	0.865	0.778	1

Source: The author developed

The correlation between net profit ratio and operating assets turnover ratio is statistically significant at the 0.05 level with a Pearson correlation of +0.928. It demonstrates that the two ratios are in a positive relationship, which leads to the notion that AFP is integrated with MP. Furthermore, the positive correlation between the net profit margin and GMROI is represented by a Pearson correlation of +0.865. It testifies to the integration between AFP and LSCP. Finally, the correlation between the operating asset turnover ratio and the GMROI stands at +0.778, indicating the positive correlation between those ratios and the integration between the MP and the LSP. Based on the results of the present study, the net profit ratio used to measure AFP, the Operating Assets Turnover Ratio used to measure MP, and the GMROI used to measure LSCP is positively correlated to and showed that the above functions are integrated.

4.2 Regression analysis

Regression analysis is a set of statistical methods for predicting relationships between a dependent variable and one or more independent variables (Wagschal, 2016)

Table 2: Model summary

Model S	ummary				
Model	R	R	Adjusted	R	Std. Error of
		Square	Square		the Estimate
1	.998a	.996	.985		.0043150

Source: The author developed

The greater R – Square rate reflects the model fitting (R2 > 50 percent) and can be between 0 and 1. According to the regression analysis of our study R Squared = 0.996, which can predict 99.6% variation in ROE from the variables AFP, MP, and LSP as shown in the model. Therefore, the value of R Square can be interpreted as a significant correlation between the company's performance and the integration of AFP, MP, and LSCP. Also, the adjusted R-square value of 0.985 - 98.5% explains that the independent variables have a significant effect on the dependent variable (ROE).

5. Conclusion

This study has examined the relationship between the firm integrated performance of AF, MP, LSCP, and firm performance. It has produced noteworthy discoveries based on the outcomes during the research. AFP, MP, and LSCP are integrated into each function and have direct consequences on the overall performance of the company. Many organizations have examined the company's overall performance, but they do not assess firm integration performance as a collective approach, which implies how separate departments bring value to firm success. Measuring performance collectively encourages more collaboration between departments and leads to increased organizational efficiency and effectiveness. Managers will be able to recognize the value of FP integration based on ROE, and it will be utilized by management to plan financial operations where integration is more essential than separate management. In terms of empirical research like the present study, there is no single theory for identifying the integration of AFP, MP, and LSCP. Therefore, if any researchers are keen to refer to this integration, they can use this research as their reference. There are various limitations in our research that may be open to future researchers. Foremost among the various limitations we face is that we only choose to integrate into the corporate key areas of AFP, MP, and LSCP. Therefore, future researchers can use this as a gap and do exploring research on its integration using other functions such as IT, HRM. Furthermore, since this study used secondary data, this opens a gap for future authors to take this study in a new direction with primary data collection. Conclusively, no matter how well the organizations achieve their objectives, an organization will admire the result by evaluating the impact on the overall firm performance through the integrated performance rather than demonstrating the performance of the various functions of the organization separately.

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