

“The effects of information technology capability and strategy on firm performance – A study on the garment industry in Bangladesh”

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Abstract

Capabilities are the ability of firm resources to obtain a competitive advantage for superior firm performance. Information technology capability can be termed as an information exchange regarding the production process, utilization of equipment and machine, market, and quality control of raw material suppliers, manufacturers, and foreign buyers. The objective of this study is to evaluate the effects of information technology capability and strategy on firm performance. The present study utilized a quantitative method and also recognizes Confirmatory Factor Analysis (CFA) to identify the relationship between observed variables and latent constructs. This study applies SPSS version 23 and Structural Equation Model (SEM) based on AMOS version 24 for analyzing the survey data in the 120 garment factories. The findings revealed that information technology capabilities and strategies are positively associated with firm performance e.g. return on assets (ROA), reduced cost, and improve productivity.

Keywords: Information capability, Information strategy, firm performance, garment industry, resource based view.

1. Introduction

Information sharing is vital to the coordination of the supply chain and important to supply chain success. The desire of managers to share information is an important component and information has to be a useful, accurate, and timely response to the partners of supply chain (Shang and Marlow, 2005). Logistics system reliance on the flow of information from both suppliers and customers. Information processing involves (EDI) electronic data interchange and important management decisions. EDI allows some industry to utilize electronic transactions rather than paper-oriented documents e.g. order invoices, purchase orders, and send customer documents (Tseng, 2004). By executing information technology capability, the firms can attain a competitive advantage, and organizations can intensify the level of their marketplace and realize their intents by advancing the information technology utilized (Saeidi, et al., 2019). Organizations can acquire the assistance from aggregate production, enlightening business performance, and providing additional competitive advantages by applying information technology capability (Liang and Li, 2008). Information technology develops to present new thoughts and revolutions of the businesses on the marketplace (Braojos, et al., 2019).

The economy of Bangladesh is heavily dependent on the readymade garments industry which is the foundation for creating job opportunities in the country. In a developing countries like Bangladesh, garment industry is the major driver for industrialization. The export of RMG is near about 27949.19 US million dollars that represent 83% of total export in Bangladesh (BGMEA, 2020). Bangladesh's ready-made garments industry has undergone a dramatic emergence in the last few years as one of the world's top manufacturing hubs for clothing shopping (Yasmin et al., 2020). It seems to be critical for the Bangladesh economy if Bangladesh loses the market share of the garments industry. In Bangladesh communication technologies and power supplies are far from global standards, which lead to reducing competitiveness of garment exporters inside the country (Adhikari and Weeratungee, 2007). There is a lack of a superior grade of infrastructure that leads to shipment delay from viewpoint of the owner (Saxena and Salze-lozach, 2010). Labor productivity is very low compared to other countries due to a lack of information sharing (Nuruzzaman, 2013). The

inadequate application of advanced technology in the production process is very time consuming and restricted to apply just in time concept in the process. (Islam and Pattak, 2017). The insufficient sharing of information restricts a firm's capability to leverage. Furthermore, fast improvements in technology and worldwide information arrangement mean that supply chain partners and firms must retain suitable, reasonable inter-organizational information systems if they are to maintain the ability to respond quickly and effectively to changing customer expectations and needs (Zhao et al., 2001). However, earlier research findings have limited focus on developing countries like Bangladesh but exceptional concentration on information technology capability and strategy on developed countries e.g. USA, UK. This research focuses on the Resource-Based View (RBV) to evaluate the relationship between information technology capability and strategy with the firm performance of the ready-made garment industry in Bangladesh.

1.1 Research questions

- a. What are the information technology capability and strategy on firm performance measurements?
- b. How do these capability and strategy are associated with firm performance?

2. Literature review

2.1 Theoretical discussion

Resource-based view theory (RBV) reveals that the capability of the firm is essential instrument for the better export performance of the firm. When firm capable to match resources and capabilities they are inclined to penetrate the new area whether domestic market or international market. In Bangladesh, readymade garment industries have resources and capability that assists to formulate strategy and achieve superior firm performance. So, resource-based view (RBV) is indispensable for sustainable competitive advantage on Bangladesh readymade garments.

Firms resource based view theory is related to economics that performance of the firm is the activities of capabilities and resources (Barney, 1991). To take competitive advantage and better performance, this theory emphasizes on the capabilities and

resources obtained by the entity. Various capabilities consist of technology, company reputation, all assets, organizational processes, knowledge, and information, firm attributes that provide firms to establish various strategies which in turn improve performance effectively and efficiently. Resource based theory developed many contributions to the area of diversification literature. This theory suggests an opportunity for further contributions and elaborating ways that diversification might be enriched with the help of resource based theory by integrating with new institutional economics, industrial organizational economics and ideas from organizational economics. The resource based view theory observed as a channel to examine the resources that required for international diversification and production. Theory recommended that subsidiary capability facilitates knowledge flows within the multinational operations. Managers possess global experience which represented firm particular tacit knowledge that is challenging to imitate. Furthermore, information resource in multinational company's effects behavior and skill of the workforce. This kind of information capabilities are connected to firm performance in terms of labor productivity.

2.2 Literature review and hypothesis development

Many researchers broadly clarified the information capability and strategy and their effects on firm performance (e.g., Akter et al. 2016; Hao and Song2016;Magutu et al.,2015;Marinagi et al., 2014;Parnell, 2011).

Information technology capabilities are complicated bundles of knowledge and skill applicable in information management to effective and efficient use of information's in organization. Information technology strategy ensures that information systems development plans are integrated with organizational and functional strategic plans (Peppard and ward, 2004). It Incorporate the potential of new and emerging technologies in long term business development (Peppard and ward, 2004).Shang and Marlow, (2005) identified that information capability could increase logistics integration, distribution performance and developing supply chain achievement through RBV. Notably, information sharing is vital to the coordination of supply chain and important to supply chain success. The desire of managers to share information

is an important component and information has to be a useful, accurate, and timely response to the partners of the supply chain. This study identifies that information technology capability didn't affect directly the financial performance but had indirect effects on financial performance through logistics performance.

Firms generate better performance that has already acquired technology than firms that fail to develop such technology owing to financial constraints (Immixai and Takashi, 2010). Samsul, (2012) recommended that technology up-gradation includes the acquisition of new technology and machinery that helps to improve product quality and quantity. This upgrading assists to sustain growth performance. In garment factories, firms invest in spreading machines, computerized cutting and bar code inventory systems. For export-oriented industries, technology capabilities show a critical role (Cao et al., 2014). Information technology provides effective and efficient production by enhancing collaboration and communication between the value chain activities e.g. raw material supply, product design, inventory, production, sales, and distribution. Information focused capability must use to create other specific which is difficult to imitate. Liu and Luo (2012) pointed out the affiliation among logistics capabilities, competitive advantage, and firm performance by utilizing process capability, flexibility capability, and information integration capability.

Hao and Song, (2016) examined technology-driven strategy on firm performance by mediating the strategic capability. The findings concluded that technology capabilities and information technology capabilities were significant relations to technology-driven strategy but marketing capabilities and market-linking capabilities were insignificant relations with technology-driven strategy. Besides, various categories of strategic capabilities are directly related to firm performance. The reason was that technological activities were more emphasized and due to improving the technological capabilities and maximum portion of available resources were distributed to the technological capabilities.

Inmyxai and Takashi (2010) observed that there was a positive relationship between information technology capability and performance. Yao, et al., (2009) Information technology capabilities are positively associated with firm performance due to strong

information connections that are vital to support organizational communications. Liu and Luo, (2012) found that there was no direct impact of Flexibility and information capability on firm performance. Hsu et al., (2008) investigate the sound effects of information sharing capability on buyer-supplier relationships and firm performance. Stank, et al.2001; Zhao et al., 2001 study found a similar answer. Stank, et al., (2001) revealed that customer-focused capability has a positive effect on firm performance whereas information focused capability has an indirect effect on firm performance. Sound operations were the prerequisite to understand customer needs supported by flexible processes. But information focused capability has direct effects on customer-focused capability which in turn improves firm performance. Uddin, et al., (2020) revealed that profitability is positively related to the adoption of information technology. Haseeb, et al., (2019) also identified the positive relationship between information technology strategy and firm performance.

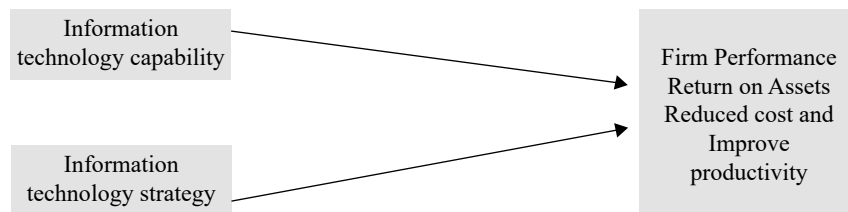


Figure 1: Developing conceptual framework

Liu and Luo, (2012) pointed out the affiliation among logistics capabilities, competitive advantage, and firm performance by utilizing process capability, flexibility capability, and information integration capability. There was no direct impact of Flexibility and information capability on firm performance. Wang et al., (2015) disclosed that all capabilities are influenced positively on the efficacy of external collaboration that leads to an increase in the firm's market and financial performance. In addition, within market turbulence, it was found that there were positive effects on innovation and information capabilities. Luo. J. (2014) explores a model to investigate how Information Technology (IT) capability influences internet-enabled supply and

demand process combination, which will ultimately increase firm performance. The study found that from IT capability manufacturing firms achieved many advantages in different ways. Ortega, (2010) studied to find out the moderating role of technological capabilities between firm performance and competitive strategies. The analysis revealed that technology has an important role as a moderator between firm performance and competitive strategies. Based on RBV the following hypothesis can be developed:

H1: Information technology capability has a direct and significant relationship on firm performance.

H2: Information technology strategy has a direct and significant relationship on firm performance.

3. Methodology

A questionnaire survey was conducted to the ready-made garment industry in the export processing zone area of Bangladesh. The above hypothesis was verified on 120 readymade garment firms. The senior managers of the garment were considered as a respondent owing to special knowledge about the IT environment of the firm. The element comprises the information and technology capability, information strategy and firm performance were reliance on earlier studies (e.g., Hao and Song, 2016; Wang et al., 2015; Luo, 2014; Liu and Luo, 2012). Likert scale based on five points was applied to identify the level of judgments. Respondents were asked to provide their perceptions on every question where 1 represents to 'strongly disagree' and 5 correspondents to 'strongly agree'. Data was collected in the year of 2018.

According to BGMEA, (2016), there were 237 garment factories available in the EPZ area where four or five senior managers are necessary to functioning properly. In this paper, simple random sampling has been used. The sample size of 385 has been identified by applying the Cochrun formula from $237 \times 4 = 948$ population. In the sample questionnaires of 385, few questionnaires were removed from the study due to extreme outlier. Table 1 identified the elaboration of demographic information. Demographic information reveals that forty-five percent of the firm had

>2000 employees (Table 1). Most of the firms were settled between 2001-2005 years. Senior managers were experienced more than ten years where respondents possessed bachelor and diploma degree.

Table 1. Respondents demographic information.

Characteristics	Explanation	Percentage
Employees	<1000	5%
	1000-1999	15%
	2000-2099	45%
	>3000	35%
Managers experience	<1 year	25%
	>1 year but <10 years	22%
	>10 years	53%
Year of establishment	<1995	20%
	1996-2000	13%
	2001-2005	40%
	2006-2010	27%
Qualification	Diploma	40%
	Bachelor	37%
	Masters	23%

Table 2. Descriptive statistics.

Items and latent variables	Mean	S.D	ITC	ITS	FP
Information technology capability (ITC) ^a			^c 1		
ITC1 My firm has sufficient infrastructure for flow of information.	^b 3.81	^b 0.86			
ITC2 My firm has skilled IT expert to convert output from input.	3.65	1.02			
ITC3 My firm uses ERP (enterprise resource planning) for production process.	3.04	0.89			
ITC4 My firm uses internet in every aspects of logistics activities.	3.56	1.12			
Information technology strategy (ITS) ^a			^{**} 0.71	1	

ITS1 My firm effectively utilised operational information between various departments.	2.98	0.96			
ITS2 My firm has strategy to use EDI (electronic data interchange) at all levels of industry.	2.94	1.04			
ITS3 My firm has strategy to buy product based on superiority of technology.	2.82	1.01			
Firm performance (FP) ^a			**0.82	**0.56	1
RC My firm able to reduce total cost by using IT effectively.	4.16	0.47			
FP My overall firm performance (return on assets) in 2017 was better than years 2015 and 2016.	3.53	1.10			
IMP My overall firm performance (improve productivity) in 2017 was better than years 2015 and 2016.	4.01	0.69			

^a Five-point Likert scale – strongly disagree (1) to strongly agree (5).

^b This is scale of composite value from set of variables calculated by taking average from the scale.

^{c**} Correlation is significant at the 0.01 level

3.1 Validity and Reliability measurement

Factor analysis was applied to find out the effects of information technology capability and strategy on firm performance. Factor analysis is broadly applied as a multivariable approach in statistics that adjusts low factor with correlated variables in numbers that were important as well. The results of the Bartlett analysis were noteworthy at $p=0.000$ levels and the identified values were 4332.045. The Kaiser Meyer Olkin (KMO) was adequate at the value of 0.745. The adequate value suggests that factor analysis is appropriate.

Table 3. Measurement table

Factors	Loading Estimated	Loading Standardized	Error of standard	Critical ratio
Information Technology capability ($\alpha=0.88$)				
ITC1	1.010	0.675	0.075	11.540
ITC2	1.144	0.876	0.078	11.432
ITC3	0.845	0.754	0.089	12.441
ITC4	0.675	0.870	0.082	9.997
Information Technology Strategy ($\alpha=0.81$)				
ITS1	1.000	0.731	0.068	11.553
ITS2	1.045	0.780	0.079	12.549
ITS3	0.856	0.685	0.087	10.123
ITS4	0.737	0.687	0.074	9.664
Firm performance ($\alpha=0.90$)				
ROA	1.453	0.754	0.090	8.453
RC	0.687	0.675	0.056	11.990
IMP	0.543	0.631	0.064	9.400

Factor analysis was attained by using factor rotation and $\text{varimax}^{\text{max}}$ was used to obtain the analysis of principal components. The study did not contemplate factor loading < 0.50 and < 0.65 in case of communality covariance. The first item information technology capability explains 6.35% of variance as a whole; the information technology strategy clarifies 7.845% of the total variance. Unidimensionality and validity convergent were recorded as a tolerable limit for the sake of the Tucker-Lewis index (0.876), the goodness of fit index (0.907), root mean square error of approximation (0.0678), comparative fit index (0.914), and the standard cut-off was also satisfactory. The study did not recognize any residual values based on standardized (Hair et al., 1998). Parameter changes were projected $< \pm 0.3$. Item reliability was obtained depend on

R^2 , variance extracted, and construct reliability. Multiple squared correlations were > 0.31 that recommends the supported reliability.

4. Results and Discussion

The bootstrap samples (Chi-square = 265.152; $df=102$) and the necessary elements for model expansion were satisfied. It fulfilled the fit indexes (CFI= 0.914; TLI=0.876 and RMSEA = 0.0678). Standardized residuals and modification indexes were evaluated after calculation of model fit. Modification indexes were not found larger and parameter changes are expected. There were no larger modification indexes and expected parameter changes.

4.1 Hypothesis Testing

Hypothesis (H1) identified that information technology capability significantly affected firm performance by suggesting a positive value 1.67 (Table 4). It revealed standard error 0.421, t-value 4.054, and p-value 0.001, which sustained the hypothesis. So, it can be enlightened that information technology capability has affirmative effects on firm performance.

Hypotheses	Structural relationship	t-value	p-value	S.C		Test of SEM	Rationalization
				Direct	Indirect		
<i>H1</i>	IT cap- FP	4.054	0.001	2.13	-0.460	Support	Reject Null
<i>H2</i>	IT stra- FP	1.532	0.001	0.87	-0.189	Support	Reject Null

Table 4. Hypothesis results

Hypothesis (H2) suggested that information technology strategy has a positive effect on firm performance. For this hypothesis, the indirect effect is -0.189, the t-value is 1.532, standard error 0.181, which is significant as $p>0.05$. It undoubtedly proposed that technology strategy has a positive relationship with firm performance and support the hypothesis (H2).

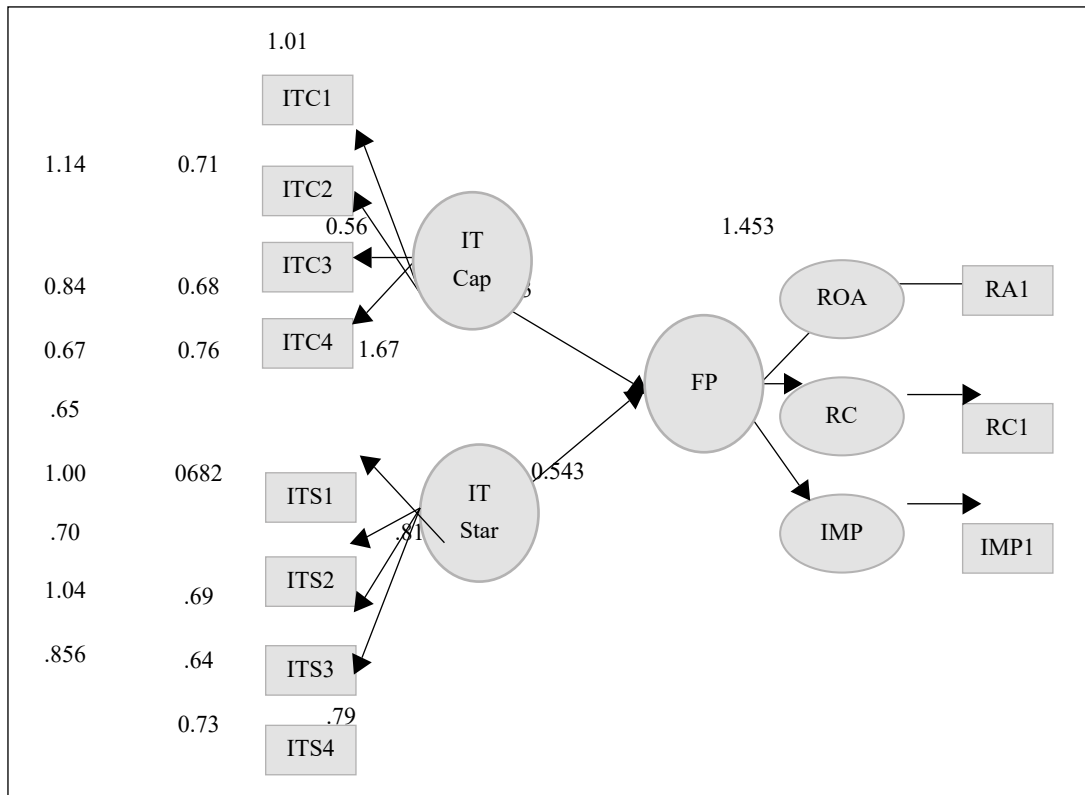


Figure 2. Findings summary

(Chi-square=265.152; df=102; CFI= 0.914; TLI=0.876 and RMSEA = 0.0678) (p < 0.05)

The hypothesis (H1) identified the positive (+ve) association ship between information technology capability and firm performance where $p \leq 0.001$, $t=4.054$, and $\beta= 2.13$. Many previous studies were supported this hypothesis by many researchers (e.g., Akter et al., 2016; Hao and Song, 2016; Immixai and Takashi, 2010). The reasonable clarification might be that information focused capability is used to create specific attributes which are difficult to imitate. Information technology was connected across the various department of the garment industry. There were other numerous drivers of buyer-supplier relationships through information technology capability. Technology capability may trim down cost, keep inventory level at the minimum level and lead time of production will reduce.

The hypothesis (H2) also indicated the positive (+ve) association ship between

information technology strategy and firm performance where $p \leq 0.001$, $t=1.532$, and $\beta=0.871$. Many previous studies were supported this hypothesis by many researchers (e.g., Hao and Song, 2016; Liu and Luo, 2012). The reasonable clarification was that there was adequate use of IT for the users of the garment industry. Firms were utilizing upgraded technology and the management of the garment industries were allocated budget for computer software and hardware installation (Nuruzzaman, 2013). To sustain the advanced technology, specialized persons were hired from other countries of the world. After purchasing the advanced technology, appropriate maintenance was taken.

Many contributions can be identified in the theory and practice of information technology capability and strategy. This research contributes to the innovative knowledge of the readymade garment industry and resource-based view researches. This study generates the sample from the readymade garment industry in Bangladesh, developing an opening to evaluate technology capability in a different context. For hypothesis analysis, this research applies a structural equation model that underpins the consistency of the elucidation of findings. This study highlights managers to dedicate watchful attention to the IT capability and strategy which may uphold condense costs that allow Bangladesh readymade garment industry to grip the position in the worldwide market.

The labor productivity can be increased by the assistance of information technology e.g. internet or email. The garment manufacturers require to handle materials and stock controlling activities through effective information technology for increasing return on assets and improve productivity. It is necessary for manufacturers to upgrade the information technology to influence foreign investors and develop sufficient infrastructure for the flow of information. Various stakeholders e.g. manufacturers, senior managers, initiators of industry are accountable for sharing information through IT practices or information sharing through face to face regarding garment industry. Managers need to careful consideration on the installation of machineries with local expertise. Therefore, this research contributes to an innovative framework to shape the unconventional expansion of the Bangladesh readymade garment industry.

5. Conclusion

With the lens of RBV, this research elucidates the ample view of information capability and strategy on firm performance. As an export-oriented firm, Bangladesh should give priority regarding the accessibility of information through the proper communication networks. Effective and efficient communication maintains the proper flow of information within local producers and foreign buyers. Information sharing capability is crucial to management for improving productivity, cost reduction, and return on assets. In logistics, the value of information contributes to developing better relationships, providing increased coordination and responsiveness. It generates relationships through information assimilations, business procedures and, decision arrangements for better firm performance. Information may be tactical oriented or strategic oriented e.g. customer's information. When the firm can access reliable information the manufacturers will modify the present plans or actions in near future.

For Bangladesh garment industry, information capabilities are explicit assets that provide firms to develop long term distinctiveness and complicated to progress and replicate by the competitor. Information capability and strategy can produce competitive advantages that lead to improving firm performance. Information/technology strategy has the full effects on industry variables and strategic positions e.g. economies of scale, cost-effectiveness, and power relationship with suppliers as well as buyers. It is important to recognize the existence of limitations. Some variables were restricted in the questionnaire e.g. improve productivity, total cost reductions, and return on assets. The results of this research were especially the garment industry with export-oriented firms exercising making, packaging, and cutting. The senior manager's opinion was used at the time of data collection using five-point Likert scale due to data confidentiality. Further research is required to investigate the firm's motives and the effects of technology adoption and what are the ways information capability can make value and reduce waste, what factors are advances, and restrict the use of technology.

References

Adhikari, R., and Weeratunge, C., 2007. Textiles and clothing in South Asia: current status and future potential. *South Asia Economic Journal*, 8(2), pp.171-203.

Akter, S., Wamba, S.F., Gunasekaran, A., Dubey, R. and Childe, S.J., 2016. How to improve firm performance using big data analytics capability and business strategy alignment? *International Journal of Production Economics*, 182, pp.113-131.

BGMEA. 2016. Bangladesh garment manufacturers and exporters association. Retrieved

from <http://www.bgmea.com.bd/>

BGMEA. 2020. Bangladesh garment manufacturers and exporters association. Retrieved from <http://www.bgmea.com.bd/>

Braojos, J., Benitez, J. and Llorens, J., 2019. How do social commerce-IT capabilities influence firm performance? Theory and empirical evidence. *Information & Management*, 56(2), pp.155-171.

Cao, D., Berkeley, N. and Finlay, D., 2014. Measuring sustained competitive advantage from resource-based view: Survey of Chinese clothing industry. *Journal of sustainable development*, 7(2), p.89.

Hair, J.F., Black, W.C., Babin, B.J., Anderson, R.E. and Tatham, R., 2006. *Multivariate data analysis*. Uppersaddle River.

Haseeb, M., Hussain, H.I., Ślusarczyk, B. and Jermisittiparsert, K., 2019. Industry 4.0: A solution towards technology challenges of sustainable business performance. *Social Sciences*, 8(5), p.154.

Hao, S. and Song, M., 2016. Technology-driven strategy and firm performance: Are strategic capabilities missing links? *Journal of Business Research*, 69(2), pp.751-759.

Hsu, C.C., Kannan, V.R., Tan, K.C. and Leong, G.K., 2008. Information sharing,

buyer-supplier relationships, and firm performance. *International Journal of Physical Distribution & Logistics Management*.

Inmyxai, S. and Takahashi, Y., 2010. The effect of firm resources on business performance of male-and female-headed firms in the case of Lao micro-, small-, and medium-sized enterprises (MSMEs). *International Journal of Business and Information*, 5(1).

Islam, M. and Pattak, D.C., 2017. Impact of Macro Environmental Factors on Garments Industry That Drives Export in Bangladesh. *Studies in Business and Economics*, 12(2), pp.100-111.

Liu, L. and Luo, D., 2012. Effects of logistics capabilities on performance in manufacturing firms. *Contemporary Logistics*, (9), p.8.

Liang, C. and Li, Q., 2008. Enterprise information system project selection with regard to BOCR. *International journal of Project management*, 26(8), pp.810-820.

Luo, J., 2014. Structure-Conduct-Performance, Resource-Based View and Business Strategy. *International Journal of Advances in Management Science (IJ-AMS)*, 3(4), pp.113-116.

Magutu, P.O., Aduda, J. and Nyaoga, R.B., 2015. Does supply chain technology moderate the relationship between supply chain strategies and firm performance? Evidence from large-scale manufacturing firms in Kenya. *International Strategic Management Review*, 3(1-2), pp.43-65.

Marinagi, C., Trivellas, P. and Sakas, D.P., 2014. The impact of information technology on the development of supply chain competitive advantage. *Procedia-Social and Behavioural Sciences*, 147, pp.586-591.

Nuruzzaman, M., 2013. *Improving competitiveness of readymade garment (RMG) industry of Bangladesh-Analysis of supply chains* (Doctoral dissertation, Curtin University).

Peppard, J. and Ward, J., 2004. Beyond strategic information systems: towards an IS

capability. *The Journal of Strategic Information Systems*, 13(2), pp.167-194.

Ortega, M.J.R., 2010. Competitive strategies and firm performance: Technological capabilities' moderating roles. *Journal of Business Research*, 63(12), pp.1273-1281.

Parnell, J.A., 2011. Strategic capabilities, competitive strategy, and performance among retailers in Argentina, Peru and the United States. *Management decision*.

Samsul, A.M., 2012. The competitive factors of the garment industry during the post multi-fibre arrangement (MFA) period: Empirical evidence from Bangladesh. *Ritsumeikan Asia Pacific University*.

Saxena, S.B. and Salze-Lozac'h, V., 2010. Competitiveness in the Garment and Textiles Industry: Creating a supportive environment. *A Case Study of Bangladesh*.

Saeidi, P., Saeidi, S.P., Sofian, S., Saeidi, S.P., Nilashi, M. and Mardani, A., 2019. The impact of enterprise risk management on competitive advantage by moderating role of information technology. *Computer Standards & Interfaces*, 63, pp.67-82.

Shang, K.C. and Marlow, P.B., 2005. Logistics capability and performance in Taiwan's major manufacturing firms. *Transportation Research Part E: Logistics and Transportation Review*, 41(3), pp.217-234.

Stank, T.P., Keller, S.B. and Daugherty, P.J., 2001. Supply chain collaboration and logistical service performance. *Journal of Business logistics*, 22(1), pp.29-48.

Tseng, Y. Y. 2004. *The role of transportation in logistics*. N.P.: n.p.

Uddin, N. and Miah, M., 2020. Effects of Green Technology on Firms' Profitability and Solvency: A Study on Textiles Industry of Bangladesh. *Asian Business Review*, 10(2), pp.109-114.

Wang, G., Dou, W., Zhu, W. and Zhou, N., 2015. The effects of firm capabilities on external collaboration and performance: The moderating role of market turbulence. *Journal of Business Research*, 68(9), pp.1928-1936.

Yao, Y., Dresner, M. and Palmer, J.W., 2009. Impact of boundary-spanning

information technology and position in chain on firm performance. *Journal of Supply Chain Management*, 45(4), pp.3-16.

Yasmin, N. and Raju, V., 2020. Bangladeshi Ready Made Garments Industry: Past and Future.

Zhao, M., Dröge, C. and Stank, T.P., 2001. The effects of logistics capabilities on firm performance: customer-focused versus information-focused capabilities. *Journal of Business Logistics*, 22(2), pp.91-107.