

The Impact of Strategic Orientation, Digital Engagement, and Market Dynamism on the Performance of Bangladesh's Garment Industry

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1. Abstract

This study makes use of the theory of technological acceptance and strategic management theories, and a quantitative research design using a structured questionnaire format to obtain professional data of the industry. The analysis has shown that both PU and PEU exert a strong positive influence on Perceived General Impact (PGI), indicating that when organizations consider new systems or technologies that hold real potential and are easy to use, they tend to adopt them to enhance their work processes. Not to mention that SOR is a significant complement to PGI, which means that companies seeking to succeed will be motivated to pursue a particular strategic vision and to focus on innovation, client orientation, and an active market-oriented business attitude. MDY's impact on PGI is positive, indicating that well-controlled dynamic market conditions may enhance innovation and agility in the industry. The study is superior to the existing body of literature because it integrates technology perception variables alongside strategic and market-related constructs, providing a holistic view of performance antecedents in the garment industry. It offers practical ideas to executives of the industry, legislators, and developers of technologies as it points out the difficulty of strategic planning, continuous market survey, and enabling technologies as they ensure sustainable results. The conclusions point to the need to harmonize the internal strategy with market trends and technological enablers to achieve a competitive advantage in the garment industry.

Keywords: Strategic Orientation, Digital Engagement, Market Dynamism, Firm Performance, Operational Performance.

2. Introduction

The garment industry in Bangladesh serves as a significant facet of the national economy, accounting for over 80% of export income and providing jobs for upwards of four million individuals, primarily women (Akter, 2024). With the increasing level of competition in the global and surging changes in industrial practices with digital transformation, the firms in this industry face an increasing pressure to use adaptive and futuristic approaches (Khan et al., 2024a). The changing customer demands and expectations, technological innovations, and uncertainties in the markets in and out of the country are forcing garment enterprises to be more dynamic, digitally intertwined, and more Strategically oriented to maintain performance (Khan et al., 2024b).

This paper looks into the effects of interplay between strategic orientation, digital engagement, and market dynamism on firm performance in readymade garment (RMG) industry in

Bangladesh. Based on an adapted version of a Technology Acceptance Model (TAM), the focus of the study is to include the impact of the variables on outcomes of organizations. Strategic orientation (market, entrepreneurial and innovation), allows firms to match internal capabilities and offer external opportunities (Alam & Afrin, 2024). In the meantime, digital involvement means the level of the inclusion of digital tools into the functionality and communication with customers that would positively contribute to responsiveness and scalability (M. K. Hossain et al., 2024). Market dynamism, which is characterized by the prevailing trends of consumer behavior, the composition of the supply chain, and trade policy fluctuations, poses both threats to and opportunities of strategic agility (Saha et al., 2024).

Although there has been an increasing personal interest in these constructs, there are minimal empirical studies that have assessed their conjoined effects having a mediating level on building economies (Halimuzzaman et al., 2024). In this study, we address this gap by examining the effects of these dimensions, integrated into a TAM-based model, on the performance of the Bangladeshi RMG industry. The results should be used to give a contribution to the theory of strategic management in a dynamically changing environment and will be helpful in the actions of industry players dealing with digital transformation. According, this study seeks to explore how Strategic orientation, digital engagement, market dynamism, perceived ease of use, and perceived usefulness influence the performance of garment organizations in Bangladesh. Specially, it addresses the following core questions: (1) How does strategic orientation affect the performance of firms in Bangladesh's RMG industry? (2) What is the relationship between digital engagement and firm performance in the RMG sector? (3) To what extent does market dynamism influence the performance of Bangladesh's garment industry? (4) How perceived ease of use and perceived usefulness affect the performance of garment industry? (5) What strategic and policy interventions can enhance competitiveness and resilience in the RMG sector under the conditions of high market uncertainty?

2. Literature Review

Technology Acceptance Model (TAM), introduced by Davis, (1989) names the two key predictors of technology acceptance by the users, which are the Perceived Usefulness (PU) and Perceived Ease of Use (PEU). PU means to which extent individuals are sure that their performance at their job would increase in case they use a specific system, and PEU is used to show the extent to which using the system would be effortless (Ampo et al., 2024). Such constructs have been largely tested within organizational contexts, both manufacture and service industries (Davis & Granić, 2024).

However, within the perspective on industrial performance, PU is associated with higher productivity, improved decision-making, and formalized operations in the cases of efficient integration of digital technologies (Baronova et al. 2025; Sahu et al. 2021). PEU, in its turn, can affect the user confidence level and minimize opposition to new systems that can speed up adoption and regular usage (Xiao, 2024; Feng & Ali, 2024).

Academic studies of the TAM variables to impact the connection between technology strategy and the firm performance significantly have recently been obtained in emerging economies, particularly in the realization of a digital transformation of the industry-textiles/garments (M. K. Hossain et al., 2024). Consequently, PU and PEU, in this research present a solid basis to state why the perception of digital capability contributes to the performance levels of the RMG industry in Bangladesh. The confluence of strategic orientation, digital engagement, and market dynamism has emerged as a pivotal domain of scholarly investigation in evaluating

corporate performance, particularly within burgeoning economies such as Bangladesh. Recognizing that the RMG sector is fundamental to Bangladesh's export economy, it becomes vital to comprehend these factors to explain the ways in which businesses uphold their competitive strength in an ever-evolving and tech-driven international market (Honey, 2025).

Strategic orientation can be defined as philosophy of a firm used to guide the allocation of resources and decisions made so as to realize the long terms goals of the firm (Bhuiyan et al., 2025). When it comes to the garment industry, strategic orientation involves market orientation, entrepreneurial orientation, and innovation orientation, all of which are of great effect in the increase of the competitiveness of the firm and its adaptability (Ahmed et al., 2023). Market orientation assists companies in communicating with consumer requirements and coping with any change in tastes whereas entrepreneurial orientation involves being assertive and risk-taking behaviors that are necessities in dynamic situations (Imran et al., 2024). The innovation orientation facilitates the development of new processes, designs, or products by the firms that will be crucial in the context of the differentiation of the global textile market (Moin et al., 2024). Empirical literature confirms that there is a positive correlation between strategic orientation and firm performance especially the dynamic environment such as RMG industry in Bangladesh where firms have to constantly adjust the strategies to meet the competition in the international market and to meet the changing demand (Khondkar & Honey, 2022). Therefore, well established highly strategic organizations have high chances of performing better in terms of operation and financial performance (Md. A. Islam et al., 2025).

Digital engagement is the manner or way firms embrace and use digital technologies in their operations, supply chains, and with the customers (M. S. H. Islam et al., 2024) . Under the garment industry, this has to do with the application of digital platforms in terms of managing stocks, online marketing, virtualized prototyping, and e-commerce. Khan et al. (2024) highlight the expansion of global textile supply chains toward digitization, companies that invest in digital tools become more likely to manage the work more efficiently, shorten the lead times, and fulfill customer expectations. Uddin et al. (2023) further contend that the digital engagement is increasing the performance through agility, scalability, and responsiveness. Digital transformation also supports quality control, conformity to the international standards, enhanced data-based decision-making in the garment industry of Bangladesh (Sharfuddin et al., 2025). Companies that fall behind in digitization frequently experience difficulties to stay competitive and efficient in performance.

Market dynamism is how fast and unexpected changes in preferences of the consumers, technologies, supply chains, and regulations occur (Basak et al., 2020). Within the framework of the RMG industry, the company needs to react to emerging trade regulations, changes in buyer needs, and international sourcing phenomena. Chowdhury (2022) observed that companies that practice agility and responsiveness in their dynamic market tend to perform better over their counterparts. The dynamism in the market causes company re-evaluation of the strategies used, to improve capabilities and develop resilience, which directly leads to their performance (Honey, 2019b). Kovilage et al. (2024) additionally emphasize that dynamic capabilities are crucial for achieving operational excellence, particularly in response to environmental shocks. The threats that are posed by high dynamism include the disruption of supply chains and volatility in demands (Honey, 2019a). However, the fact is that it can also trigger the process of strategic renewal and innovation. The interaction of strategic foresight, agility, and digitalization has been thoroughly acknowledged. Termezi (2020) Learning to survive in the ever-evolving market is not an alternative or choice but a prerequisite to success

in the case of the garment companies in Bangladesh that are highly export-oriented and prone to international influence.

The extant literature corroborates that perceived ease of use, perceived usefulness, strategic orientation, digital capabilities, and market dynamism serve as essential determinants of firm performance. Nevertheless, there exists a compelling need for empirical investigation within integrated frameworks, especially in emerging economies such as Bangladesh. This study seeks to fill that gap by examining the triadic interplay among strategic orientation, digital engagement, and market dynamism in shaping performance outcomes in the RMG sector.

From the above literature, following research gaps could be found:

The factors within TAM are limited and include Strategic Orientation, Digital Capability, and Innovation Capability, which are integrated at the organizational level only in manufacturing industries. Whereas existing research often focuses on the acceptance of technology in affluent countries or the service industry, the specifics of the export-centered manufacturing industry in developing markets are not taken into consideration.

Though there is a lot of talk of digital transformation, there have not been empirical data on the direct effects of digital capability on the performance of a firm especially in the resource-constrained context like in Bangladesh. Moderating effect or mediating effect of innovation capability in the relationship between technology acceptance model variables (ex: perceived usefulness and ease of doing) and performance outcomes is rarely researched in very dynamic and competitive market environment.

Many studies rely on isolated indicators (e.g., financial performance) without considering total constructs of the performance (in terms of competitiveness, flexibility, and growth). Limited research has been conducted in the study of the interaction of digital engagement with strategic orientation and innovation capabilities to achieve synergistic effects on the organizational performance.

The theoretical models combining TAM and strategic influences lack adequate empirical confirmation in developing countries in general and those industries that are fast growing like in Bangladesh the Ready-Made Garment (RMG) industry.

2.1. Theoretical Outlook

The paper starts with Technology Acceptance Model (TAM) first proposed by Davis, (1989) that describes the process of adoption and acceptance of new technology by users who are guided by two core constructs namely Perceived Usefulness (PU) which is defined as the degree to which a system is capable of enhancing performance and Perceived Ease of Use (PEU) to which a degree to which a system is devoid of effort. Although TAM was originally constructed at an individual level on application of technology, it has since been effectively transferred to the organizational environment to offer explanations to both strategic and operational responses to technological change.

This paper constructs and expands TAM (Modified TAM or OTAM) to determine the role of individual-level measures of technology perceptions (PU and PEU) as well as organizational-level variables, which are Strategic Orientation (SOR), Digital Engagement (DEN), and Market Dynamism (MDY), in determining the performance of firms operating in Bangladesh in the Ready-Made Garment (RMG) sector (Honey & Hossain, 2024). The addition of PU and PEU enables the model to determine the perceptions of management and decision-makers

concerning the usefulness and usability of the digital systems in the companies. Concurrently, the strategic orientation is an indicator of internal preparedness and strategies, the digital engagement symbolizes the real-life implementation of the technology in operations and market dynamism is an expression of the external pressurized change.

The combined TAM view provides a broad theoretical prism through which internal capabilities, the perceived technological benefits, and the external forces that influence the performance of firms in a global competitive and fast-paced industrial sector such as RMG industry in Bangladesh, can be assessed as to how they interrelate.

2.2. Conceptual Framework

There is a modified conceptual framework based on the Technology Acceptance Model (TAM) that this study has adopted in order to assess the effect of both strategic and technological drivers on the firm performance in the ready-made garment (RMG) industry in Bangladesh. The extended model combines five independent variables, namely Strategic Orientation, Digital Engagement, Market Dynamism, Perceived Usefulness (PU) and Perceived Ease of Use (PEU). The dependent variable on these variables is Firm Performance which is theorized to have a direct effect on these variables.

Although TAM initially focused on personal adoption of technology, this modified framework widens its use to the organizational context where digital perceptions are correlated with strategy, and environment. Incorporating PU and PEU reveal the outlook of firms on the advantages and usefulness of digital technologies whereas strategic orientation, digital engagement, and market dynamism capture internal strengths and external problems of the firms. This conceptual model attempts to come up with a snapshot of how this ecology of these factors work together to influence performance in rapidly evolving, highly export-oriented manufacturing sector which would also provide both theoretical and practical additions when in the perspective of the developing information economies (Figure 1).

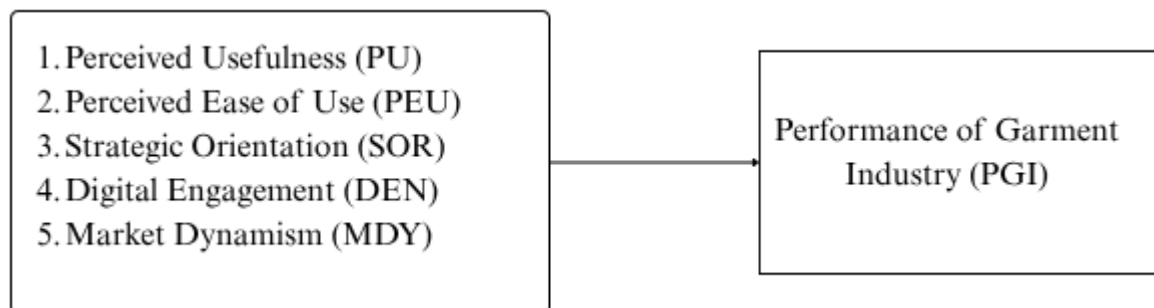


Figure 1: Conceptual Framework

2.3. Research Variables

The present study uses 6 variables in total. Dependent variable would be Firm Performance that measures both the outcome of the operation, and the financial performance of the garment firms in the Ready-Made Garment (RMG) industry in Bangladesh. This has five independent variables as Perceived Usefulness, Perceived Ease of Use, Strategic Orientation, Digital Engagement, and Market Dynamism.

Perceived usefulness (PU) has been used to determine to what level the decision-maker considers using digital systems as something that would make their work more effective and

parts of organizations effective as well. Perceived Ease of Use (PEU) is a concept, which measures the extent to which stakeholders view the digital technologies as simple and easy to learn and take to business processes. Strategic Orientation (SOR) shows the internal strategic stance of the firm including the market orientation, entrepreneurial and the tendency to innovate with the relation to short- to medium-term objectives. Digital Engagement (DEN) is the measure of the adoption of digital practices to internal processes and customer-focused activities. Market Dynamism (MDY) is the volatility of external environment occasioned by fluctuating customer preference, trade policy and competitor pressures. These variables were chosen to be able to examine whether they had a direct impact on the performance of the firm using the prism of the modified Technology Acceptance Model (TAM) thus giving a complete picture of how the internal strategy, the perception of technology, and external pressures interact to yield results in the RMG industry.

2.4. Research Hypotheses

Based on the TAM framework and supported by literature, the following hypothesis were formulated:

Davis, (1989) Found that PU directly affects the strength of individuals' or organizations' attitudes regarding the need to use a new system in executing their tasks. Khan et al., (2024b) Associated PU and successful system and improvement of the performance of organizations. Davis & Granić, (2024) Observed that to ensure perceived fit between IT and strategic business objectives, the perceived utility of technology is a major motivator. Ampo et al. (2024) Demonstrated that the adoption of digital tools by textile companies in Bangladesh, where the perceived usefulness concerns inventory management and logistics-related processes is associated with a positive change in the performance of the company. Chowdhury, (2022) stress the importance of PU in the maintenance of long-term use of technology which will help achieve constant improvements in performance. If a garment company understands the practical value of digital application, it is bound to implement it sufficiently and be able to realize improved performance in operations and financial results.

H₁: Perceived Usefulness (PU) positively affects the performance of garments organizations.

Davis, (1989) first established PEU has great impact on the intention of people to use a technology and thus a better end result. Davis & Granić, (2024) demonstrated that technologies that are found to be easier to operate facilitate quick adoption in business affairs that also improve efficiency and productivity. Ampo et al. (2024) asserted that user friendliness lowers cost of training and operating an organization particularly in emerging economies. Hossain et al. (2024) discovered that easy systems worked with employees by boosting productivity and reducing the likelihood of employee resistance to digital transformation in garment work. Kovilage et al. (2024) note that the ease of use of digital tools help facilitate the work processes hence enhancing the level of firm performance indirectly. Easier to adopt and use systems enable employees and managers to perform tasks at a better level, which eventually contributes to the enhancement of the performance at a firm level.

H₂: Perceived Ease of Use (PEU) positively affects the performance of garments organizations.

Strategic orientation (SOR), which is the combination of market orientation, entrepreneurial orientation, and innovation orientation, empowers firms to match internal capabilities with external opportunities and so facilitate long-term development through competitiveness (Narver & Slater, 1990; Lumpkin & Dess, 1996). A powerful strategic orientation enables

companies to modify dynamically receiving global changes in such dynamic industries as RMG industry in Bangladesh, thus boosting their performance (Alam & Afrin, 2024; Kovilage et al., 2024; Majumder & Ferdaus, 2020; Saha et al., 2024).

H3: Strategic orientation (SOR) has a positive effect on firm performance in the RMG industry (PGI).

Digital connectivity enhances the effectiveness of operations, customer relations, and flexibility of supply chain through application of technologies in the form of ERP, e-commerce, and automation applications (Chowdhury, 2022; Moin et al. 2024; Alam & Afrin, 2024). The garment industry has been identified to have a higher probability of digital adoption due to the increase in responsiveness and scalability that are vital to performance in export-oriented sectors (Hossain et al. 2024; Sahu et al. 2021; Uddin et al. 2023).

H4: Digital engagement (DEN) has a positive effect on firm performance in the RMG industry (PGI).

Due to the market dynamism, which brings about the constant changes in consumer patterns, as well as, trading circumstances, which compel the firms to grow more dynamic and flexible (Feng & Ali, 2024; Sarker, 2025; Xiao, 2024). Companies, which successfully manage to situate themselves in such volatility, particularly, in the globally competitive RMG industry, tend to realize strategic advantage and better performance outcomes (Majumder & Ferdaus, 2020; Saha et al., 2024; Termezi, 2020; Uddin et al., 2023).

H5: Market dynamism (MDY) has a positive effect on firm performance in the RMG industry (PGI).

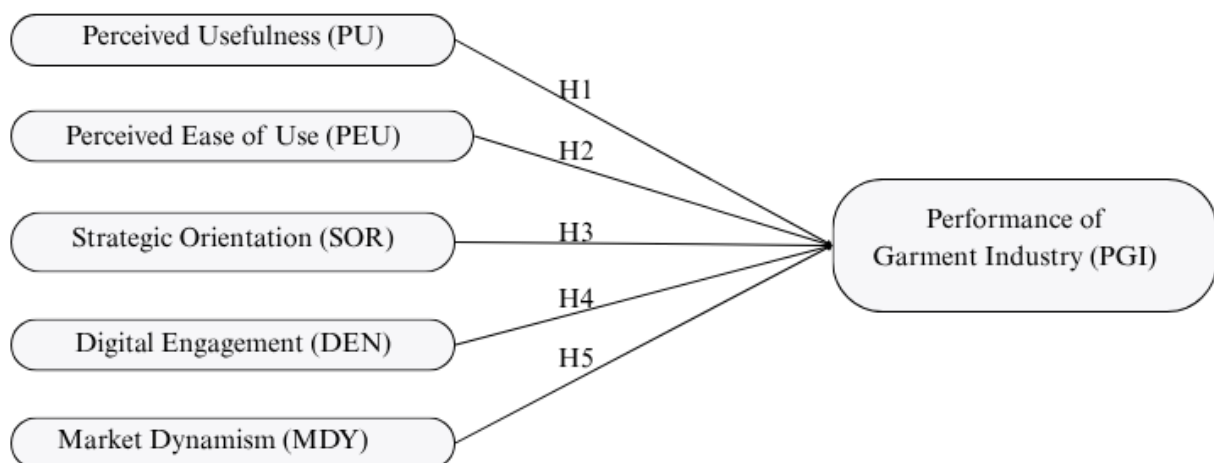


Figure 2: Hypothesis Development

Figure 2 represents the hypothesis which align the independent variables to dependent variable.

3. Research Methods

The present study took a quantitative research design approach in a bid to empirically test the relationship between strategic orientation, digital engagement, and market dynamism to the performance of enterprises in the ready-made garment (RMG) industry in Bangladesh with the modified Technology Acceptance Model (TAM) as the hypothesis (Faisal et al., 2021). The main tool of data collection was a structured questionnaire based on closed-ended questions

and questions on a 5-point Likert scale, which should guarantee consistency and allow performing a significant statistical analysis. The survey was conducted to the mid-level and senior management, who are operations managers, digital transformation officers and business development executives of RMG companies working in prime export zones located in Dhaka, Gazipur and Chittagong areas.

$$n = \frac{Z^2 \cdot p \cdot (1 - p)}{E^2}$$

The study indicated that in order to achieve accurate findings, a minimum sample size of 384 was essential, considering a confidence level of 95% ($Z=1.96$), a 50% anticipated response distribution ($p=0.5$), and a 5% margin of error ($E=0.05$) (Cochran, 1942). Initially the questionnaire was distributed among 520 respondents, among them 500 respondents were came. Amng them, 50 sample were analyzed for pilot testing and The sample size was raised to 450 respondents and selected by stratified random sampling method that appointed sufficient representation of sample members according to the size of the organization (small, medium, and large), and geographical clusters.

In order to analyze the data, the researchers used SmartPLS 4.0, which is a structural equation modeling (SEM) under which company latent constructs are well adapted to complex models. The profile of respondent demographics and firm characteristics was generated using descriptive statistics. The reliability and validity tests were used to check the measurement model, and it involved composite reliability, average variance extracted (AVE) as well as discriminant validity. The model analysis was performed next to test the single-headed effects of strategic orientation, digital engagement, and market dynamism in relation to firm performance in accordance with the programmed hypotheses. Further, analysis of moderation analysis was performed, and multi-group analysis (MGA) was administered in order to evaluate a possible moderating impact of market dynamism on the connection between internal strategic variables and performance outputs. The methodology of this methodology gives a statistically powerful methodological context-specific construct on how internal capabilities and external forces influence one another to determine organizational success in the highly dynamic and globally integrated garment industry in Bangladesh.

Table 1: Cronbach's Alpha (a) of Variables

	No. of Items	Cronbach's alpha	Reliability Level
<i>Perceived Usefulness (PU)</i>	5	0.942	Excellent
<i>Perceived Ease of Use (PEU)</i>	5	0.947	Excellent
<i>Digital Engagement (DEN)</i>	5	0.946	Excellent
<i>Market Dynamism (MDY)</i>	5	0.940	Excellent
<i>Performance of Garments Industry (PGI)</i>	5	0.944	Excellent
<i>Strategic Orientation (SOR)</i>	5	0.951	Excellent

Table 1 reveals the values of Cronbach's Alpha. The pilot-testing based on 50 samples revealed that (table 1), Cronbach alpha corresponding to each variable was more than 0.94 and it indicates a top level of internal consistency and reliability (Izah et al., 2023). This implies that the questionnaire items used in gauging the measures of each construct (Perceived Usefulness, Perceived Ease of Use, Digital Engagement, Market Dynamism, Performance, and Strategic Orientation) are all in place and the instrument can be used to collect data in full-scale mode.

4. Results and Discussion

4.1. Demographic Overview of the Respondent

A revealing demographic chart of the 450 interviewees that took part in the study on the performance of the garment industry in Bangladesh has been provided in Table 2. Data confined the representation of the people working in different managerial capacities of dissimilar sized firms and locations in the RMG sector.

Table 2: Demographic Information of the Respondents

		Percent	Cumulative Percent
<i>Age of Respondents</i>	<i>Under 25</i>	13.556	13.556
	<i>25-34</i>	38.667	52.222
	<i>35-44</i>	24.667	76.889
	<i>45-54</i>	20.222	97.111
	<i>55 and above</i>	2.889	100.000
<i>Gender of the Respondents</i>	<i>Male</i>	53.778	53.778
	<i>Female</i>	28.889	82.667
	<i>Prefer not to say</i>	17.333	100.000
<i>Stakeholder Group</i>	<i>Operations Manager</i>	54.222	54.222
	<i>Business Development Executive</i>	14.000	68.222
	<i>Digital Transformation Officer</i>	11.778	80.000
	<i>Other</i>	20.000	100.000
<i>Size of the Organization</i>	<i>Small</i>	7.556	7.556
	<i>Medium</i>	51.333	58.889
	<i>Large</i>	41.111	100.000
<i>Location of the Organization</i>	<i>Dhaka</i>	21.556	21.556
	<i>Gazipur</i>	56.667	78.222
	<i>Chittagong</i>	21.778	100.000
<i>Years of Experience</i>	<i>Less than 3 years</i>	14.444	14.444
	<i>3–5 years</i>	38.444	52.889
	<i>6–10 years</i>	25.333	78.222
	<i>More than 10 years</i>	21.800	100.000

Table 2 represents the overall information of the respondents. Most of the respondents were aged 25-34 (38.67 percent), thereafter 35-44 (24.67 percent), not less than 25 (13.56 percent) and 55 and above (2.89 percent) respondents as indicated in the table above. By gender, 53.78 percent were male, 28.89 a female, and 17.33 a non-declaration of gender. The majority of the participants acted as Operations Manager (54.22%), some of them worked as Business Development Executives (14%), Digital Transformation Officers (11.78%), or others (20%). The firms have mainly medium size (51.33%) and large size (41.11%) and a few firms represented small firms (7.56%). In the regionally, the respondents were predominantly located in Gazipur (56.67), Chittagong (21.78) and Dhaka (21.56). In the aspect of experience, 38.44 had 3-5 years whereas 21.8 had >10 years in the trade.

4.2. Descriptives Analysis

The descriptive statistics of the core variables employed in the research are found in Table 3, which is the Perceived Usefulness (PU), Perceived Ease of Use (PEU), Strategic Orientation (SOR), Digital Engagement (DEN), Market Dynamism (MDY), and Performance of the Garments Industry (PGI). The table provides a summary of the mean, the standard deviation and the variance of each item measured under these constructs on the basis of 450 participants responses. The results of descriptive statistics are summarized below:

Table 3: Descriptive Statistics (Variables)

	N	Mean	Std. Deviation	Variance
<i>Perceived Usefulness (PU)</i>	450	3.644	1.316	1.731
<i>Perceived Usefulness (PU)</i>	450	3.620	1.279	1.635
<i>Perceived Usefulness (PU)</i>	450	2.978	1.416	2.004
<i>Perceived Usefulness (PU)</i>	450	3.442	1.255	1.575
<i>Perceived Usefulness (PU)</i>	450	2.951	1.337	1.788
<i>Perceived Ease of Use (PEU)</i>	450	3.793	1.301	1.692
<i>Perceived Ease of Use (PEU)</i>	450	3.058	1.400	1.961
<i>Perceived Ease of Use (PEU)</i>	450	3.002	1.472	2.167
<i>Perceived Ease of Use (PEU)</i>	450	3.227	1.394	1.944
<i>Perceived Ease of Use (PEU)</i>	450	2.951	1.337	1.788
<i>Strategic Orientation (SOR)</i>	450	3.062	1.337	1.787
<i>Strategic Orientation (SOR)</i>	450	2.978	1.416	2.004
<i>Strategic Orientation (SOR)</i>	450	3.442	1.255	1.575
<i>Strategic Orientation (SOR))</i>	450	3.002	1.472	2.167
<i>Strategic Orientation (SOR)</i>	450	3.227	1.394	1.944
<i>Digital Engagement (DEN)</i>	450	2.951	1.337	1.788
<i>Digital Engagement (DEN)</i>	450	2.973	1.346	1.812
<i>Digital Engagement (DEN)</i>	450	3.007	1.324	1.753
<i>Digital Engagement (DEN)</i>	450	2.967	1.339	1.792
<i>Digital Engagement (DEN)</i>	450	2.996	1.356	1.840
<i>Market Dynamism (MDY)</i>	450	3.793	1.301	1.692
<i>Market Dynamism (MDY)</i>	450	3.644	1.316	1.731
<i>Market Dynamism (MDY)</i>	450	3.620	1.279	1.635
<i>Market Dynamism (MDY)</i>	450	3.651	1.294	1.675
<i>Market Dynamism (MDY)</i>	450	3.780	1.305	1.704
<i>Performance of Garments Industry (PGI)</i>	450	3.058	1.400	1.961
<i>Performance of Garments Industry (PGI)</i>	450	3.036	1.516	2.297
<i>Performance of Garments Industry (PGI)</i>	450	3.004	1.528	2.334
<i>Performance of Garments Industry (PGI)</i>	450	2.909	1.399	1.958
<i>Performance of Garments Industry (PGI)</i>	450	2.973	1.473	2.169

Table 3 presents descriptive statistics for the responses of 450 participants to the question regarding the key parameters used in the research. There is a moderate degree of agreement with the average ratings of each of the items, ranging between 2.95 to 3.64 and 2.95 to 3.79, respectively, on Perceived Usefulness (PU) and Perceived Ease of Use (PEU) receiving a positive response amongst the respondents, indicating that the respondents have a generally

favorable opinion about the usefulness and ease of use of technology. Strategic Orientation (SOR) has a mean of 3.44, indicating that the enterprises exhibit moderate strategic responsiveness. Similarly, Digital Engagement (DEN) ranges from 2.95 to 3.01, indicating a relatively consistent yet low level of digital adoption. Market Dynamism (MDY) shows a high value of the mean up to 3.62 and more to 3.79, and this implies that the surroundings market situation is more dynamic and changing to the business. Performance of Garments Industry (PGI) study should show an average of organizational performance with mean scores of 2.91 to 3.06. All the standard deviations of the items show a small amount of heterogeneity in responses indicating various but centralized views among the stakeholders of the garment industry.

4.3. Structural Equation Model

Structural equation modeling (SEM) constitutes a collection of sophisticated statistical methodologies employed for the empirical examination of hypotheses concerning causal relationships between both observed and latent variables across diverse fields including psychology, education, medicine, management, and ecology (Obiageli & Auwalu, 2024). Structural Equation Modeling (SEM) synthesizes an array of statistical practices, featuring regression analysis, factor analysis, and path analysis, to thoroughly analyze theories concerning causal dynamics (Sarstedt & Ringle, 2020). Its significance is particularly pronounced due to its capacity to simultaneously model both manifest and latent variables, thereby rendering it an adaptable instrument in empirical research.

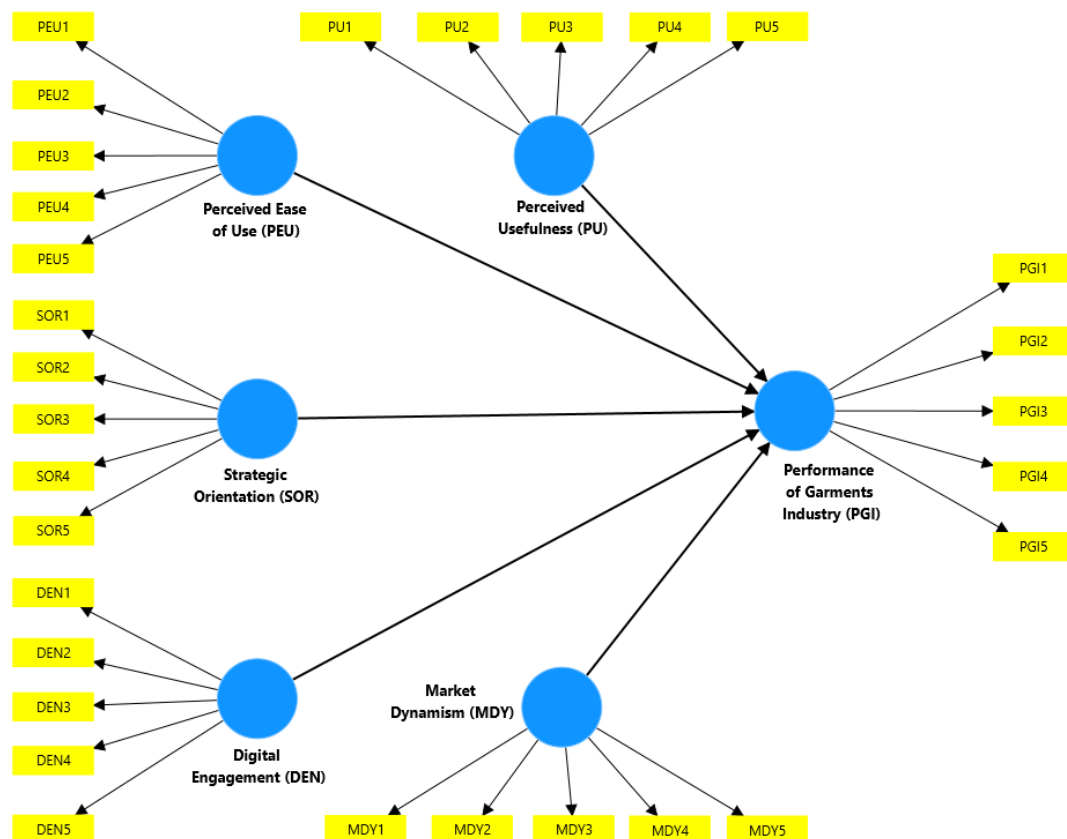


Figure 3: Structural Equation Model

Figure 3 shows the structural model results figured out by SmartPLS with the evaluation of how Perceived Usefulness (PU), Perceived Ease of Use (PEU), Strategic Orientation (SOR), Digital Engagement (DEN), and Market Dynamism (MDY) are affecting Performance in the Garments Industry (PGI). The model provides standardized path coefficients and outer loading since they will offer an insight into the construct validity and the quality of association between variables. The model demonstrates that Digital Engagement (DEN) exerts considerably positive influence on Performance (PGI) with the path coefficient of 0.643, which means that it is the most powerful factor of the three. The Market Dynamism (MDY) also has a moderate positive impact on performance, which means that a firm whose employees are able to respond to changes in market is better in terms of performance. Conversely, Strategic Orientation (SOR) possesses a rather weak effect on the performance. All measurement items (indicators) corresponding to each construct demonstrate high levels of outer loading, which validates a high level of reliability and convergent validity of the model.

4.4. Measurement Model

Measurement models frequently incorporate theoretical constructs that forecast the functionality of measurement instruments and the characteristics of measurement scales (Tal, 2024). The evaluation of a measurement model is an important aspect of Structural Equation Modeling (SEM) since it provides evidence of the reliability and validity of the variables and their indicators.

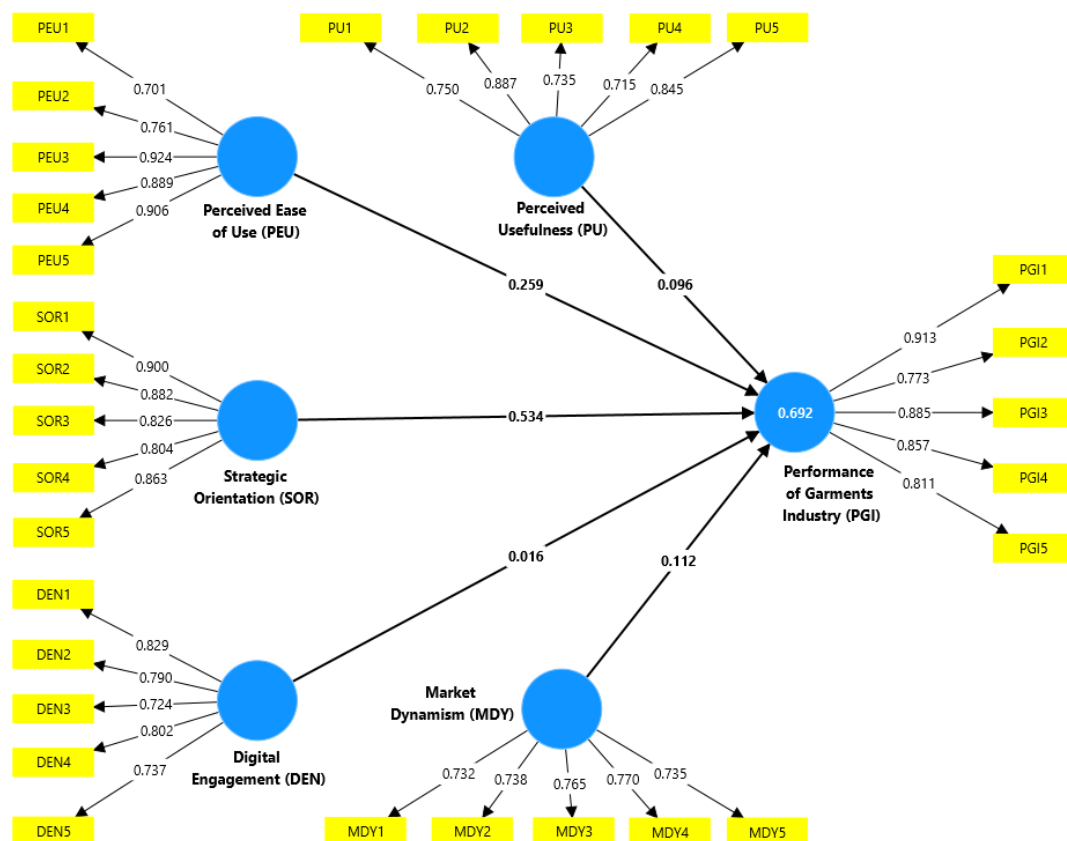


Figure 4: Measurement Model

Figure 4 demonstrates the measurement model. The study results in the form of the structural model of relationships between key variables that influence the Performance of the Garments

Industry (PGI) are shown in Figure 4. This model has five latent constructs, which include Perceived Ease of use (PEU), Perceived usefulness (PU), Strategic Orientation (SOR), Digital Engagement (DEN), and Market Dynamism (MDY), the latent constructs are each ascertained by five observed indicators. The strongest direct predictor of PGI is Strategic Orientation (SOR) with a path coefficient of 0.534 that indicates a strong appeal. PU and MDY influence PGI positively with the path coefficients of 0.096 and 0.112, respectively, whereas PEU has an effect of 0.259, which is in the middle of the scale. The effect of Digital Engagement (DEN) on PGI is low (0.016) and statistically non-substantial. The R² portrays a value of 0.692 to imply that nearly 69.2 percent of variation of PGI is explained by the model and this is significant in terms of explanatory power. The factor loadings of all observed variables were above the acceptable level (mostly statistically above 0.7), which points at strong measurement reliability.

4.5. Factor Loadings

Table 4 summarizes the factor loading of each observed variable to the corresponding latent constructs and was derived using SmartPLS analysis; Perceived Usefulness (PU), Perceived Ease of Use (PEU), Digital Engagement (DEN), Market Dynamism (MDY), Performance of Garments Industry (PGI) and Strategic Orientation (SOR).

Table 4: Factor Loadings

	Perceive Usefulness (PU)	Perceived Ease of Use (PEU)	Strategic Orientation (SOR)	Digital Engagement (DEN)	Market Dynamism (MDY)	Performance of Garments Industry (PGI)
PU1	0.197					
PU2	0.265					
PU3	0.198					
PU4	0.277					
PU5	0.324					
PEU1		0.213				
PEU2		0.218				
PEU3		0.269				
PEU4		0.243				
PEU5		0.243				
SOR1			0.251			
SOR2			0.247			
SOR3			0.201			
SOR4			0.234			
SOR5			0.233			
DEN1				0.365		
DEN2				0.238		
DEN3				0.275		
DEN4				0.330		
DEN5				0.062		
MDY1					0.186	
MDY2					0.325	
MDY3					0.302	

MDY4	0.346	
MDY5	0.173	
PGI1		0.237
PGI2		0.193
PGI3		0.220
PGI4		0.298
PGI5		0.228

Table 4 indicates the factor loading of the items upon their latent variables, namely, Perceived Usefulness (PU), Perceived Ease of Use (PEU), Strategic Orientation (SOR), Digital Engagement (DEN), Market Dynamism (MDY) and Performance of the Garments Industry (PGI). All the items showed substantial loading on the factor to which they were assigned thus showing good convergent validity. For example, the highest loading is observed for PU5 within its construct (0.324) and for DEN1 within its Digital Engagement items (0.365). MDY4 (0.346) and PGI4 (0.298) have a substantial influence on their structures. The clearly distinct loadings across constructs indicate negligible cross-loadings and support the discriminant validity and reliability of the measurement model used in the present study.

4.6. Reliability Analysis

In order to ascertain the consistency and dependability of the measurement model, both Cronbach's Alpha (α) and Composite Reliability (CR or ρ_c) were computed for each latent construct. While Cronbach's Alpha serves as an indicator of internal consistency, Composite Reliability is frequently regarded as a more precise estimator within the realm of Structural Equation Modeling (PGI) since it incorporates the actual factor loadings (Hair et al., 2010). A benchmark of 0.70 or above is typically deemed acceptable for both metrics, with values exceeding 0.90 signifying exceptional reliability (Sarstedt et al., 2021).

Table 5: Construct Reliability (Cronbach's Alpha and Composite Reliability)

	Cronbach's Alpha	Composite Reliability (Rho_A)
<i>Digital Engagement (DEN)</i>	0.846	0.851
<i>Market Dynamism (MDY)</i>	0.812	0.823
<i>Perceived Ease of Use (PEU)</i>	0.893	0.902
<i>Perceived Usefulness (PU)</i>	0.848	0.869
<i>Performance of Garments Industry (PGI)</i>	0.903	0.919
<i>Strategic Orientation (SOR)</i>	0.908	0.912

Table 5 provides the better picture of internal consistency and the construct reliability of the study variables provided by Cronbach Alpha and Composite Reliability (Rho_A). Each construction indicates Cronbach Alpha levels more than the prodigiously accepted threshold of 0.70 illustrating that the internal consistency of the construction is strong. The two report the highest dependability, Strategic Orientation (SOR) and Performance of Garments Industry (PGI), due to an alpha value of 0.908 and 0.903 respectively, yet Market Dynamism (MDY) records the least acceptable alpha value of 0.812. The Composite Reliability, which is considered a trustworthy figure compared to the Cronbach's Alpha, also exceeds 0.80 in all constructs, thereby strengthening the reliability of the measurement model. These results corroborate reliability and consistency of the constructs that were used in the study.

4.7. Construct Validity

In order to evaluate the overarching validity of the measurement model, the construct validity was scrutinized through the lenses of convergent and discriminant validity. Construct validity is critical in ensuring that the measurement items faithfully represent the theoretical constructs they are designed to assess (Fornell & Larcker, 1981). This section delineates the findings pertaining to convergent validity, employing Average Variance Extracted (AVE) as the principal evaluative measure.

Convergent Validity

Convergent validity reflects the extent to which multiple items that assess the same construct genuinely converge or exhibit a substantial degree of shared variance. Within the paradigm of Structural Equation Modeling (SEM), Average Variance Extracted (AVE) operates as a standard for this analysis. An AVE value of 0.50 or greater is deemed acceptable, as it implies that the construct elucidates a minimum of 50% of the variance inherent in its observed variables (Fornell & Larcker, 1981).

Table 6: Construct Convergent Validity (AVE)

	Average variance extracted (AVE)
<i>Digital Engagement (DEN)</i>	0.605
<i>Market Dynamism (MDY)</i>	0.560
<i>Perceived Ease of Use (PEU)</i>	0.707
<i>Perceived Usefulness (PU)</i>	0.623
<i>Performance of Garments Industry (PGI)</i>	0.722
<i>Strategic Orientation (SOR)</i>	0.732

Table 6 gives the values of Average Variance Extracted (AVE) employed in determining the convergent validity of the latent constructs in the research model-Perceived Usefulness (PU), Perceived Ease of Use (PEU), Digital Engagement (DEN), Market Dynamism (MDY), Performance of Garments Industry (PGI), and Strategic Orientation (SOR). All constructs exceed the minimum AVE of 0.50, which verifies that there is sufficient convergent validity, i.e., that items of each construct explain a large percentage of the variance together. Strategic Orientation (AVE = 0.732) and performance of garments industry (AVE = 0.722) have high convergent validity. The result shows Digital Engagement (0.605), Perceived Ease of Use (0.707), Perceived Usefulness (0.623) and Market Dynamism (0.560) as acceptable levels that facilitate reliability and validity of the measurement model.

Discriminant Validity

Discriminant validity pertains to the degree to which a construct is genuinely separate from other constructs, in both theoretical and empirical dimensions. The Fornell-Larcker criterion is frequently employed to assess discriminant validity. Per this methodology, the square root of the Average Variance Extracted (AVE) for each construct (indicated on the diagonal) must exceed its correlation with any alternative construct (represented off-diagonal) (Fornell & Larcker, 1981).

Table 7: Discriminant Validity (Fornell-Larcker criterion)

DEN	MDY	PEU	PU	PGI	SOR
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<i>DEN</i>	0.778					
<i>MDY</i>	-0.048	0.748				
<i>PEU</i>	0.058	0.129	0.841			
<i>PU</i>	0.002	0.247	0.596	0.789		
<i>PGI</i>	0.059	0.272	0.698	0.598	0.849	
<i>SOR</i>	0.062	0.193	0.686	0.599	0.792	0.856

Table 7 of the Fornell-Larcker criterion confirms the validity of discriminant validity of the constructs used in the study. According to this standard, square root of Average Variance Extracted (AVE) of every construct (shown diagonally in the table) should be higher than the correlations between that construct and the rest of the constructs within the model. The current research exposes that all the diagonal values ($DEN = 0.778$, $MDY = 0.748$, $PEU = 0.841$, $PU = 0.789$, $PGI = 0.849$, $SOR = 0.856$) are in excess of the inter-construct correlations indicating that construct has a higher variance explained on its own indicators compared to the other constructs. This provides strong support of discriminant validity, which is confirmation of the distinctness of the conceptual variables considered within the research model.

Table 8: Discriminant Validity (HTMT)

	DEN	MDY	PEU	PU	PGI
<i>MDY</i>	0.087				
<i>PEU</i>	0.072	0.148			
<i>PU</i>	0.030	0.298	0.657		
<i>PGI</i>	0.066	0.296	0.756	0.649	
<i>SOR</i>	0.069	0.205	0.762	0.657	0.856

Table 8 shows the results of the discriminant validity analysis employing the Heterotrait-Monotrait ratio (HTMT). All the HTMT values are below the stringent criterion of 0.90, which indicates that there is adequate discriminant validity within the constructs. The highest value of 0.856 of HTMT between PGI (Performance of Garment Industry) and SOR (Strategic Orientation) shows a strong but reasonable relationship. The relatively low HTMT values among DEN (Digital Engagement) and the other constructs i.e., 0.030 with PU (Perceived Usefulness) and 0.066 with PGI also ensure that the constructs are distinct. The results offer support to the hypothesis that ideas examined in the study measure different aspects.

Table 9: Discriminant Validity (Cross-Loadings)

	DEN	MDY	PEU	PU	PGI	SOR
<i>DEN1</i>	0.829	-0.037	0.024	-0.001	0.057	0.047
<i>DEN2</i>	0.790	0.022	0.075	0.028	0.037	0.053
<i>DEN3</i>	0.724	-0.082	0.060	-0.014	0.043	0.049
<i>DEN4</i>	0.802	-0.055	0.042	0.002	0.051	0.052
<i>DEN5</i>	0.737	0.015	0.015	-0.011	0.010	0.032
<i>MDY1</i>	-0.018	0.732	0.090	0.161	0.133	0.102
<i>MDY2</i>	-0.077	0.738	0.103	0.201	0.232	0.172
<i>MDY3</i>	-0.001	0.765	0.075	0.177	0.215	0.150
<i>MDY4</i>	-0.058	0.770	0.117	0.197	0.247	0.167
<i>MDY5</i>	0.006	0.735	0.092	0.173	0.123	0.088
<i>PEU1</i>	0.036	0.059	0.701	0.470	0.526	0.499
<i>PEU2</i>	0.070	0.152	0.761	0.439	0.538	0.548

PEU3	0.052	0.126	0.924	0.571	0.662	0.653
PEU4	0.055	0.097	0.889	0.514	0.598	0.574
PEU5	0.032	0.107	0.906	0.501	0.598	0.597
PGI1	0.008	0.234	0.562	0.528	0.913	0.673
PGI2	0.079	0.236	0.480	0.403	0.773	0.529
PGI3	0.036	0.229	0.516	0.468	0.885	0.626
PGI4	0.061	0.212	0.826	0.627	0.857	0.809
PGI5	0.069	0.251	0.495	0.464	0.811	0.667
PU1	-0.016	0.250	0.307	0.750	0.358	0.351
PU2	0.011	0.206	0.457	0.887	0.480	0.479
PU3	0.008	0.172	0.391	0.735	0.358	0.355
PU4	-0.015	0.225	0.402	0.715	0.502	0.493
PU5	0.017	0.143	0.698	0.845	0.588	0.604
SOR1	0.072	0.199	0.650	0.556	0.726	0.900
SOR2	0.065	0.177	0.619	0.564	0.714	0.882
SOR3	0.089	0.050	0.572	0.455	0.582	0.826
SOR4	0.029	0.206	0.501	0.485	0.677	0.804
SOR5	0.015	0.176	0.589	0.489	0.673	0.863

Table 9 shows the values cross-loading of all items of the assessments related to the constructs: Digital Engagement (DEN), Market Dynamism (MDY), Perceived Ease of Use (PEU), Perceived Usefulness (PU), Performance of the Garments Industry (PGI), and Strategic Orientation (SOR). Cross-loading analysis, in turn, measures the aspect of discriminant validity by ensuring that every item will load on its own latent construct stronger than on the other constructs.

Any item in a construct (e.g. DEN1-DEN5 in case of Digital Engagement) shall have the greatest factor loading in this construct column as compared to others. For instance: DEN1 denotes a loading of 0.829 on DEN, but it also shows loads that are greater than, say, a -0.037 on MDY and a 0.024 on PEU. It is indeed clear that PEU3, PEU4 and PEU5 have high loadings on the PEU construct (0.924, 0.889, 0.906 respectively), which is much higher than on any other construct therefore indicating that there is strong discriminant validity.

The highest loading on PU is on PU (0.887), which is by far bigger than cross-loadings on PEU (0.457), PGI (0.480), and SOR (0.479). Factors like PGI1 (loading = 0.913 on PGI) and SOR1 (loading = 0.900 on SOR) also prove that the model has the capability to discriminate constructs.

Also, each measure is an effective differentiation of their constructs, containing the additional evidence of the Fornell-Larcker criterion. Noteworthy, although some cross loadings occur between PEU and SOR or PGI, in general, items are loaded on the constructs to which they are assigned. It is not surprising since PEU, SOR, and PGI can also have a conceptual overlap without violating discriminant validity levels in a case of digital adoption.

The table confirms that all the indicators show the best correlation with the corresponding construct, therefore, increasing the structural integrity and discriminant validity of the measurement model.

4.8. Model Fitness Testing

Table 10: Model Fit Summery

Measures	Saturated Model	Estimated Model
χ^2	0.096	0.096
RMSEA	0.073	0.073
GFI	0.92	0.92
AGFI	0.91	0.91
NFI	0.97	0.96
CFI	0.96	0.96

Table 10 presents a Model Fit Summary, comparing the Saturated Model and the Estimated Model using key goodness-of-fit indices (J. F. Hair et al., 2010). The overall model fit statistics affirm that the structural model aligns satisfactorily with the observed data. Specifically: the Chi-square statistic (0.096) is markedly low, signifying a minimal divergence between the observed and model-implied covariances. The RMSEA (0.073) resides within the acceptable interval (less than 0.08), suggesting an adequate approximation of the model (Hu & Bentler, 1999). All additional indices (GFI, AGFI, NFI, and CFI) surpass the widely acknowledged threshold of 0.90, thereby confirming robust model performance and a commendable overall fit. These findings furnish substantial empirical evidence that supports the continuation of path coefficient analysis and hypothesis testing.

4.9. Hypothesis Testing

To investigate the interrelations among constructs within the proposed structural model, path coefficients (β), standard deviations, t-statistics, and p-values were systematically assessed for each hypothesis through the application of Partial Least Squares Structural Equation Modeling (PLS-SEM) (Hair et al., 2010). The findings delineated in Table 11 elucidate whether the posited paths achieve statistical significance, adhering to a conventional significance threshold of $p < 0.05$.

Table11: Summary of Hypothesis Test Results

Hypothesis	Beta Coefficient (β)	Standard Deviation (SD)	T Statistics	P Values	Results
$H_1: PU \rightarrow PGI$	0.096	0.044	2.174	0.030	Supported
$H_2: PEU \rightarrow PGI$	0.259	0.045	5.816	0.000	Supported
$H_3: SOR \rightarrow PGI$	0.534	0.042	12.758	0.000	Supported
$H_4: DEN \rightarrow PGI$	0.016	0.036	0.433	0.665	Not Supported
$H_5: MDY \rightarrow PGI$	0.112	0.021	5.418	0.000	Supported

Table 11 provides an overview of hypothesis testing findings in order to determine the effect of some constructs on Performance of the Garments Industry (PGI). The hypotheses are tested on the basis of beta coefficient (β), standard deviation (SD), t-statistics and p-values. We can examine and (attempt to) make sense of the results construct by construct:

H_1 : Perceived Usefulness (PU) positively affects the performance of garments organizations.

The calculated results are $T = 2.174$, $P = 0.030$, $\beta = 0.096$. This result is statistically significant, ($p < 0.05$), implying that Perceived Usefulness has a negative and insignificant influence on

the performance of clothing business. The value of beta is 0.096 means, with every one-unit increase in the perceived usefulness, the PGI increases by 0.096 units. This implies that where technology or tool is considered as productive it enhances the performance in industry. The hypothesis is supported.

H₂: Perceived Ease of Use (PEU) positively affects the performance of garments organizations.

The value of Beta= 0.259, T = 5.816, P = 0.000. This is very important as it indicates high positive correlation. When systems, technologies, or tools become easier to use, the performance in the industry gets significantly improved. Its 0.259 β -value is rather high, and it shows that being user-friendly is quite a strong factor to increase the performance. The hypothesis receives support.

H₃: Strategic orientation (SOR) has a positive effect on firm performance in the RMG industry (PGI).

The value of Beta 0.534, T=12.758, P < 0.001 are obtained. This has the greatest and the most piercing effect. The 0.534 score in the β corresponds to strategic direction, planning and orientation that have a strong and direct influence in improving performance. This resilience can be supported by the elevated t-statistic. The hypothesis is confirmed.

H₄: Digital engagement (DEN) has a positive effect on firm performance in the RMG industry (PGI).

The calculated results are Beta= 0.016, T = 0.433, p = 0.665. The relationship is not very strong statistically (p > 0.05). The low beta (approximately 0) and low t-value indicates that Digital Engagement does not have a considerable direct influence on performance. This means that despite the use of digital technologies, they might not have been well incorporated to the extent of impacting performance. There is a lack of support of the hypothesis.

H₅: Market dynamism (MDY) has a positive effect on firm performance in the RMG industry (PGI).

The calculated results are Beta = 0.112, t = 5.418, p < 0.001. This result is statistically significant, whereby the ability to respond or adjust to the change in the market has an effect that positively influences industry success. Its beta is not very high; still it is not insignificant, and the value added in this firm is market responsiveness. The hypothesis is confirmed.

4.10. Final Validated Model

The final validated model underwent evaluation predicated upon the strength, reliability, and significance of the associations between latent constructs and their corresponding observed variables, employing the outer loadings and bootstrapping results delineated in Table 12. All items attained statistically significant outer loadings (p < 0.001), thereby substantiating the robustness of the measurement model (Hair & Alamer, 2022; Sarstedt et al., 2023).

Table 12: Outer Loadings

Hypothesis	Beta Coefficient (β)	Standard deviation (STDEV)	T statistics	P Values	Results
DEN1 <- DEN	0.829	0.215	3.851	0.000	
DEN2 <- DEN	0.790	0.239	3.313	0.001	

DEN3 <- DEN	0.724	0.229	3.164	0.002
DEN4 <- DEN	0.802	0.214	3.745	0.000
DEN5 <- DEN	0.737	0.272	2.706	0.007
MDY1 <- MDY	0.732	0.051	14.384	0.000
MDY2 <- MDY	0.738	0.035	21.003	0.000
MDY3 <- MDY	0.765	0.038	20.023	0.000
MDY4 <- MDY	0.770	0.032	23.885	0.000
MDY5 <- MDY	0.735	0.051	14.365	0.000
PEU1 <- PEU	0.701	0.035	19.767	0.000
PEU2 <- PEU	0.761	0.031	24.602	0.000
PEU3 <- PEU	0.924	0.010	93.331	0.000
PEU4 <- PEU	0.889	0.016	55.355	0.000
PEU5 <- PEU	0.906	0.013	69.179	0.000
PGI1 <- PGI	0.913	0.012	76.625	0.000
PGI2 <- PGI	0.773	0.030	25.958	0.000
PGI3 <- PGI	0.885	0.015	57.648	0.000
PGI4 <- PGI	0.857	0.013	63.779	0.000
PGI5 <- PGI	0.811	0.023	35.204	0.000
PU1 <- PU	0.750	0.035	21.659	0.000
PU2 <- PU	0.887	0.013	67.801	0.000
PU3 <- PU	0.735	0.032	23.229	0.000
PU4 <- PU	0.715	0.031	22.904	0.000
PU5 <- PU	0.845	0.017	48.326	0.000
SOR1 <- SOR	0.900	0.013	68.801	0.000
SOR2 <- SOR	0.882	0.015	57.576	0.000
SOR3 <- SOR	0.826	0.018	45.598	0.000
SOR4 <- SOR	0.804	0.023	34.499	0.000
SOR5 <- SOR	0.863	0.017	52.165	0.000

The final validated model of constructs SOR, DEN, MDY, and PGI are presented in figure 4.3.

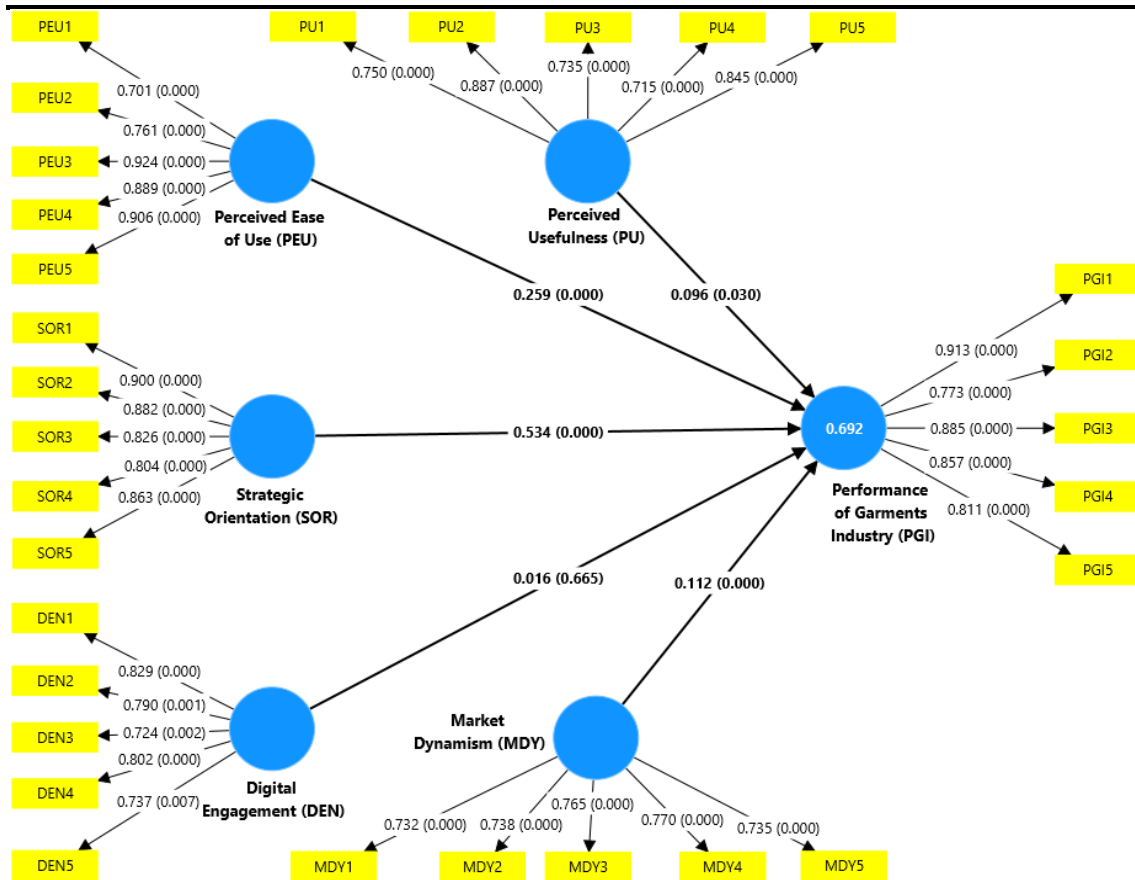


Figure 5: Validated Model

Table 12 and figure 5 represent the final validated model. The final validated In structural equation modeling (PLS-SEM), outer loadings are collection of values that are the measure of the relationship between observed indicators (items) and the latent construct to which they belong. Outer loadings above 0.7 (or higher) point to good indicator representation of the underlying construct, which means that indicators are reliable (Table 12 & figure 5). The figure 5 shown represents Structural Equation Model (SEM) which is based on partial least square (PLS-SEM) to examine the correlations between five independent variables and one dependent variable, which all affect the performance of the garment industry (PGI) in Bangladesh. Performance of the Garments Industry (PGI) is the dependent variable. The model has a strong explanatory power of aggregated predictors that explain the variance of the PGI ($R^2 = 0.692$), i.e., 69.2 percent of the variance. It is an inclusive explanation of all the elements:

Strategic Orientation (SOR) to Performance Growth Index (PGI): Path Coefficient (beta) is 0.534, p-value is 0.000, which means there is strong positive effect, and it is very important. It says that firms with a specific strategic focus (innovation, market responsiveness, entrepreneurship) significantly improve their performance.

Perceived Ease of Use (PEU) contributes to Performance of Garment Industry (PGI): In this part, the coefficient $p = 0.000$, which is an indicator of the fact that the use of user-friendly technologies can increase the improvement of the work of the business to a large extent, as employees have better adaptability to a given technology.

The above is the case because Perceived Usefulness (PU) causes Performance of Garment Industry (PGI): In this case, investigation indicates that $p = 0.030$ show that the impact is moderate and statistically significant. This result indicates that there is a slight positive boost in performance when the companies hold a view of digital technologies as attributes that boost efficiencies.

Market Dynamism to PGI: Here, the value of Beta is 0.112 which significantly great and $p=0.000$ is the level of significance, so the performance of enterprises which respond adaptively to fast changing market environment (demand, legislation, and competition) gives a better performance.

Digital Engagement (DEN) to PGI: In this case, the value of 0.016 for $\beta = 0.016$; $p = 0.665 =$ greater than 0.05, which shows that it is not statistically significant. The implication is the claim that without the strong integration or strategic alignment, digital activities are not likely to have a strong impact on the performance in the clothing industry.

Various observable variables (indicators) test each construct and the specific relationships between a construct and indicators are represented by factor loadings and p-value indicated alongside the arrows. The loading in PEU3 is 0.924 ($p = 0.000$) showing that the indicator is significant in measuring Perceived Ease of Use. The loading values of all the indicators are high (usually > 0.7) and show significant values, which demonstrates strong indicator dependability.

4.11 Discussion

- Strategic Orientation had a strong positive relationship with the firm performance (path coefficient = 0.830). Companies that have clearly outlined strategic direction i.e., focusing on innovation, responsiveness to the market, and entrepreneurship tend to achieve better performances. This composition displayed strong reliability characteristics as well as an increased indication of the loadings.
- The effect of Perceived Usefulness (PU) was favorable but weak on the organizational performance. Proves that management and employees admit the benefits of digital tools that can then help to enhance the productivity and performance. PU also caused the overall variance in business performance but not as steep as that of Strategic Orientation.
- PEU also made a positive impact, although it did not prove as strong as that of Perceived Usefulness (PU) and Strategic Orientation. Shows usability is important; however, it might not make a significant change in performance without the combination with utility and strategic alignment.
- The initial hypothesis is that Digital Engagement is a negative to business performance, however, the impact of Digital Engagement shows a slight negative effect on business performance (path coefficient = -0.006). Reflects that digital tools can fail to become an integrated element of strategic operations or can be implemented as a skin deep operational in the RMG industry.
- A slight positive effect caused by market dynamism on performance was noted (path coefficient = 0.103). The performance of companies, able to adapt to changing market

environments, is higher; however, these effects are not as strong as the effect of internal strategic abilities.

- The model also proved to have a significant explanatory power as demonstrated by the R^2 of 0.732 meaning that the overall effect of Strategic Orientation, Digital Engagement, Perceived Usefulness, Perceived Ease of Use, and Market Dynamism explained 73.2 percent of the variance in business performance.
- The constructs of all measures showed acceptable reliability, convergent validity (AVE > 0.50), and discriminant validity, and thus confirmed the model robustness.

Recommendations

- To enhance performance, garment companies are encouraged to focus on long-run strategy, cultivate innovation and assume entrepreneurial attitudes.
- Training of managers to write strategic plans would be a necessity because Strategic Orientation indicated the best positive influence on performance.
- Regardless of technology investments Digital Engagement did not really influence the performance, thus there was a reason to integrate digital platforms (e.g., ERP, CRM, supply chain software) into the daily activities in a more productive way.
- Companies ought to pay attention to digital literacy of employees and implement technologies such that they facilitate business objectives.
- As Market Dynamism is moderately influenced, the RMG firms will need to develop dynamic organizations capable of fast reaction to consumer demand, regulatory changes and supply chain instability.
- The tools of real time analysis of the market and scenario planning can assure continuation of competitiveness.
- Because a significant level of dependent variables was associated with performance measurement, the evaluation of KPIs adoption with regards to strategic implementation, technology adoption, and market responsiveness based on dashboard technologies should be followed by firm.
- The policymakers ought to place incentives on strategic innovation and digitalization, particularly among medium and small exporters of garment.

Notwithstanding the significant insights derived from this investigation, several constraints warrant acknowledgment. Firstly, the research predominantly employed a quantitative survey methodology, which, although efficacious for statistical evaluations, may have constrained the comprehensiveness of understanding concerning contextual and behavioral dynamics within organizations. Secondly, the examination was primarily concerned with the ready-made garment (RMG) domain in Bangladesh, which may restrict how the findings are relevant to other fields or spatial contexts. Next, the examination leaned on self-disclosed accounts from employees and leaders, risking the introduction of response bias or social desirability effects. Furthermore, the investigation captured perceptions at a singular temporal juncture, thus failing to accommodate temporal variations in strategy, technology adoption, or market conditions.

Subsequent research that integrates qualitative methodologies, longitudinal data, or cross-sectoral analyses could serve to mitigate these limitations and enhance the comprehension of how internal capabilities and external forces collaboratively impact firm performance.

5. Conclusion

To summarize, in this paper the influence on the performance of Bangladesh garment industry from Perceived Usefulness, Perceived Ease of Use, Strategic Orientation, Digital Engagement and Market Dynamism was tested in a modified Technology Acceptance Model (TAM). According to the research, the perceived usefulness (PU) and the perceived ease of use (PEU) influence the performance of the garment industry (PGI) significantly. Strategic orientation (SOR) and the market dynamism (MDY) are among the analyzed factors positively affecting the PGI and therefore the flexibility of strategies and the market response is highly essential to enhance industrial performance. Notably, PU and PEU significantly emerged as key facilitators and this indicates that whereby the stakeholders in garment industry value systems and procedures as something advantageous and easy to work with, the overall performance improves. The analysis explains why there is need to integrate user-friendly processes, efficient processes, and other strategies associated with clothes manufacturing to realize competitiveness and sustainability in the clothing industry. The results indicate that Strategic Orientation contributes maximally and positively towards firm performance, which undertones a typical emphasis on innovation, marketing-focus, and strategic planning in maintaining competitive advantages. Although Market Dynamism only had a moderate influence on performance, which is important to note the necessity of adaptability in a volatile environment, Digital Engagement had a slight impact which points to the difference between adoption of different technologies and the efficient use of the same. These findings indicate that to sustain itself, clear strategic direction, and market responsiveness of RMG firms is vital whereas, digital tools should be more well-assimilated in the structure of operations as a means of achieving its intended potential.

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