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ORGANIZATIONAL EFFECTIVENESS FOR ACCOUNTING INFORMATION SYSTEM PRACTICE: A STUDY ON SOME SELECTED READY-MADE GARMENTS FACTORIES OF CHATTOGRAM IN BANGLADESH

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ABSTRACT

In today's rapidly evolving global business environment, implementing Accounting Information Systems (AIS) effectively is essential for improving financial reporting accuracy and operational efficiency. Despite its importance, the relationship between AIS practices and organizational effectiveness remains insufficiently explored, particularly within Bangladesh's ready-made garments (RMG) industry. This study aims to examine the impact of AIS on organizational effectiveness within the RMG sector of Chattogram, Bangladesh. Data were collected from 400 respondents using a purposive sampling method, with responses measured on a five-point Likert scale. The study evaluated AIS across multiple dimensions, including financial reporting accuracy, timeliness of decision-making, data security, ease of accessibility, regulatory compliance, and user satisfaction. Organizational effectiveness was assessed in terms of cost efficiency, integration with other systems, decision support, adaptability to change, training and support, innovation, and system upgrades. Factor analysis was performed to validate the data, and reliability was tested through Cronbach's Alpha. A structural equation model (SEM) was developed using IBM SPSS AMOS 22 to analyze the relationship between AIS and organizational effectiveness, ensuring that the model met convergent and discriminant validity requirements. The results revealed a significant positive relationship between AIS practices and organizational effectiveness. AIS contributed to improved decision-making, enhanced financial reporting accuracy, streamlined operational processes, and greater overall efficiency. These findings underscore AIS's crucial role in promoting organizational success within the RMG sector, highlighting its potential to boost performance, productivity, and overall effectiveness.

INTRODUCTION

The contemporary business landscape is undergoing a significant shift, given the crucial role of technology in shaping and enhancing organizational processes. In this context, Accounting Information Systems (AIS) have emerged as a critical tool in finance and accounting. An AIS integrates various components, including people, procedures, and technology, to facilitate an organization's seamless collection, processing, and dissemination of financial information. Understanding the profound influence of AIS on organizational effectiveness is crucial for businesses striving to stay competitive in the dynamic global market (Salehi et al., 2010). This research paper, therefore, undertakes a comprehensive exploration of how AIS impacts organizational effectiveness, using a quantitative empirical research approach to delve into the specific context of Ready Made Garments (RMG) manufacturers in Chattogram, Bangladesh.

Bangladesh's garment manufacturing sector has witnessed a remarkable expansion in recent decades, establishing itself as a significant player in the international textile and clothing industry. To effectively navigate the challenges of this ever-evolving business landscape, integrating sophisticated information systems, notably AIS, has become necessary for efficient financial management and maintaining competitiveness. This research aims to augment the current understanding by offering valuable insights into how implementing AIS influences the overall effectiveness of garment manufacturers in Chattogram.

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Many research endeavors have explored how AIS influences the performance of organizations, shedding light on its role in improving decision-making, streamlining processes, and enhancing the accuracy of financial reporting. The seminal work of Romney and Steinbart (2017) underscores the critical importance of AIS in furnishing timely and relevant financial information crucial for decision-making. Simultaneously, Hall (2019) highlights its pivotal role in internal control mechanisms. Scholars like Gelinas et al. (2018) have emphasized the significance of AIS in improving operational efficiency and reducing costs, further emphasizing the importance of this research in the broader framework of organizational efficiency.

In the context of Bangladesh, research on the integration and impact of AIS in the Ready-Made Garments sector is notably scarce. However, given the unique challenges and opportunities businesses face in this region, investigating the specific effects of AIS implementation becomes paramount. The study zeroes in on Chattogram, a pivotal hub for RMG manufacturers, aiming understand how AIS influences organizational effectiveness within the local business landscape. Chattogram's RMG sector serves as a microcosm for exploring the broader implications of AIS on organizational effectiveness. Factors such as technology adoption and organizational culture will be meticulously examined to offer a comprehensive understanding of the intricate dynamics at play. Through an in-depth quantitative empirical research study, this research endeavours to uncover the nuances of AIS utilization and its tangible impact on organizational effectiveness within the selected RMG manufacturers in Chattogram.

As businesses in the ready-made garments industry grapple with increasing pressures to adapt and excel in a globally competitive market, understanding the profound influence of accounting information systems on organizational effectiveness emerges as a pivotal imperative. This research paper, adopting a quantitative empirical research approach, delves into the specific context of RMG manufacturers in Chattogram, Bangladesh, contributing not only to academic literature but also offering practical insights crucial for businesses to thrive in the ever-evolving landscape of financial information management. The findings of this study are anticipated to bridge the existing gaps in understanding the intricacies of AIS implementation and its far-reaching consequences on organizational effectiveness in the vibrant business environment of Chattogram.

In the following sections, this paper systematically explores the impact of AIS on organizational effectiveness within the RMG industry in Chattogram. Firstly, the literature review synthesizes key studies and theoretical insights on AIS, organizational effectiveness, and their intersection while highlighting the research gaps and formulating the purpose of this study and its hypotheses. Secondly, the materials and methods section outlines the approach for selecting the study population and sample, as well as data collection and analysis techniques. Thirdly, this article presents a descriptive analysis, factor analysis, and structural equation modeling to examine the significant impact of accounting information system practices on organizational effectiveness, supported by reliability, validity, and model fit assessments. Fourthly, this study demonstrates the significant role of AIS in enhancing organizational effectiveness within Chattogram's RMG industry, emphasizing its impact on financial reporting accuracy, decision-making, operational efficiency, and regulatory compliance while highlighting avenues for future research on AIS adoption and its long-term effects. Lastly, the study concludes that AIS significantly enhance organizational effectiveness in Chattogram's RMG industry. However, limitations in industry focus, self-reported data, and unexplored moderating variables suggest the need for broader, mixed-method research to validate these findings further.

LITERATURE REVIEW

Accounting information is critical for improving organizational effectiveness in today's global competitive climate. It is a strategic asset for informed decision-making, performance evaluation, and strategy planning (Anthony & Reece, 2006). According to Kaplan and Norton (1992), the balanced scorecard is vital in assessing organizational performance by combining financial and non-financial variables. Chenhall and Langfield-Smith (2003) underline that accounting information aids strategic objectives through budgeting and forecasting. Furthermore, Dechow and Dichev (2002) emphasize its relevance in promoting openness and credibility, which are critical for acquiring investor trust and access to finance. Recent studies by Islam (2023) and Otley (2001) emphasize the importance of accounting information in internal controls and management control systems across various companies and organizations. Despite problems including changing standards and complexity (Leuz et al., 2003), accounting information remains critical for sustaining organizational efficiency and meeting global competitive challenges (Borthick & Clark, 1990; Yusoh et al., 2024; Al-Matari et al., 2022).

Organizational effectiveness is an organization's capacity to fulfill its goals and objectives while retaining high efficiency and flexibility. It is a complicated notion with several elements, including leadership, structure, culture, procedures, and performance. Achieving organizational effectiveness necessitates a deliberate and comprehensive strategy that considers the interactions of many factors inside the company (McKinsey & Company, 2021). Leadership is an essential factor in determining organizational performance. Influential leaders are critical in steering the business toward its goals, cultivating a positive and collaborative culture, and making sound decisions. In addition to providing a clear vision, leadership entails inspiring and coordinating the efforts of all employees to work toward shared objectives. Leadership philosophies that foster openness, communication, and empowerment are essential contributors to organizational effectiveness (Yukl, 2013). Another critical factor influencing effectiveness is the organizational structure. A well-designed structure guarantees that tasks are arranged and assigned effectively, fostering accountability and clear lines of communication. Various organizational structures, such as functional, divisional, or matrix, may be appropriate for various contexts (Daft, 2015). The organization's size, industry, and strategic objectives influence the structure selection. Culture is a crucial component of organizational effectiveness. It consists of shared values, beliefs, and norms that influence individual employee behaviour within the organization. Employee engagement, creativity, and flexibility are encouraged by a friendly and upbeat work environment, which increases the effectiveness of the company as a whole (Schein, 2010). An

organization's internal procedures and processes are also crucial in determining its performance. Redundancy is decreased, productivity is increased, and effective and well-designed procedures streamline operations. Establishing robust performance evaluation, feedback, and communication mechanisms helps organizations become more effective over time (Hammer & Champy, 1993; Jahan, 2023). Technology is a catalyst for organizational performance in the digital era. Organizations use state-of-the-art solutions like artificial intelligence (AI) apps and enterprise resource planning (ERP) systems to improve decision-making and expedite procedures. Technology academics like Andrew McAfee and Erik Brynjolfsson's writings provide insight into how technology might change contemporary businesses.

Organizational practices have undergone a tremendous transformation as AIS has developed, going from simple record-keeping tools to sophisticated systems that improve operational efficiency and decision-making. At first, the primary purpose of AIS was to assist with financial reporting and compliance. However, as new technologies like AI and machine learning have emerged, these systems have grown into all-encompassing frameworks that combine operational and financial data, increasing the precision and effectiveness of financial reporting (Rozhkova & Blinova, 2023; Polenova et al., 2019). Recent research has demonstrated how important AIS is for improving operational effectiveness, especially in industrial settings. For example, it has been demonstrated that using AIS to automate repetitive procedures may improve operational accuracy and efficiency (Wang et al., 2020). Findings that highlight the AIS's integration of AI and machine learning, which permits real-time data processing and sophisticated analytics, provide more credence to this. With these tools, businesses may go from gathering data to strategically using it to make decisions (Xiong, 2022). By streamlining procedures and improving accounting information dependability, AI technology integration with AIS lowers the risks related to economic volatility and unpredictability (Polenova et al., 2019; Sharif et al., 2022). Furthermore, the capacity of AIS to deliver precise and timely financial information highlights how well it works to enhance organizational decision-making. Since businesses depend more on data-driven insights to manage complex business settings, this is essential for strategy planning and resource allocation (Troshani et al., 2018). Furthermore, by implementing strong internal controls and audit trails—crucial for upholding corporate integrity and accountability—AIS improves compliance with legal requirements and minimizes financial risks (Rozhkova & Blinova, 2023). Cloud computing with AIS enhances data security and facilitates remote access, providing adaptable and scalable solutions that augment corporate efficacy. This enables smooth cooperation and information exchange across several locations, which is especially advantageous for businesses with operational or geographic restrictions (Rozhkova & Blinova, 2023). The move to cloud-based AIS systems indicates a more significant digital transformation trend in which businesses use technology to enhance efficiency and optimize operations (Troshani et al., 2018). Automation of routine accounting tasks through an AIS leads to increased efficiency, performance, and productivity. Manual processes are prone to errors and can be time-consuming. An AIS automates data entry, processing, and reporting, allowing employees to focus on more value-added activities. A study investigated how different factors of AIS affect decision-making in commercial banks in Bangladesh. The results demonstrated that the links between the AIS facility's technological capabilities, operational comparability, understandability, relevance, and dependability and their effects on decision-making effectiveness were not all the same. Additionally, demographic factors such as gender, banking sector, AIS training, experience levels, and participation in decision-making significantly influenced perceptions and contributions to AIS-based decision-making practices, ultimately contributing to organizational performance (Chowdhury et al., 2024). According to (Lutfi et al., 2022) AIS automates financial operations and offers comprehensive insights into performance measures, which greatly aid in decision-making and cost management. For RMG companies functioning in a worldwide market, compliance with international accounting standards is critical, and thus, automation not only simplifies operations but also improves the accuracy of financial reporting (Sarker et al., 2023). Alam et al. (2023) underline how AIS enhances internal controls, which are critical to preserving the RMG industry's operational integrity and effectiveness.

There is a clear study gap in the literature that focuses on the effects of AIS on organizational effectiveness in the RMG sector of Chattogram, Bangladesh. Although research has demonstrated the overall advantages of AIS, more empirical data needs to be collected to show how it affects effectiveness and performance in this particular setting (Kabir et al., 2022). For example, Ahad et al. (2021) talk about the general effects of technology adoption in the RMG industry, but they need to detail the particular effects of AIS. Although AIS can potentially increase operational efficiency, a lack of specific research suggests that its practical implementation may be limited by the unique challenges that RMG firms in Chattogram face, such as infrastructure limits and worker training (Fontana, 2017). Additionally, the labour-intensive nature of Bangladesh's RMG industry and the requirement for constant adaptability to market demands make AIS integration more difficult (Swazan & Das, 2022). Due to the intense rivalry brought about by the industry's rapid expansion, adopting AIS and other technologies will require a more calculated approach (Lutfi et al., 2022). However, some of the unique contextual aspects that impact the application of AIS in the RMG sector are overlooked by the current research, such as workers' level of digital literacy and cultural attitudes towards technology (Sarker et al., 2023). Thus, to close the observed gap, this study examines the special difficulties and advantages of AIS in Chattogram's RMG sector, offering insights suited to the particular requirements of this sector and region.

In summary, although AIS shows promise for enhancing organizational effectiveness in the RMG sector, especially regarding decision-making and compliance, further research is needed to understand the implementation problems in Chattogram, Bangladesh, fully. By tackling these issues, the RMG industry may better utilize AIS to improve operational performance and preserve its competitive edge in the global market.

In the context of Chattogram, Bangladesh's RMG industry, this research aims to thoroughly investigate the link between AIS and organizational efficiency. Given AIS's crucial role in contemporary business operations, this research evaluates how well-implemented AIS might affect important business performance outcomes. In order to ascertain how these features contribute to improving organizational effectiveness, the study looks explicitly into several AIS dimensions, such as financial reporting accuracy, timeliness of decision-making, data security, ease of accessibility, regulatory

compliance, and user satisfaction. Several essential characteristics are used to assess organizational performance, including cost efficiency, system integration, decision support, flexibility to changing business contexts, personnel training and support, and the capacity to innovate and update systems. The study aims to determine how AIS practices improve decision-making, financial correctness, operational efficiencies, and productivity. This study uses a purposive sample strategy and collects data from 400 respondents in the RMG sector to give empirical evidence of AIS's direct and indirect effects on organizational effectiveness. The study uses factor analysis, reliability testing (Cronbach's Alpha), and a structural equation model (SEM) constructed with IBM SPSS AMOS 22 to ensure thorough data validation and statistical analysis to back up its conclusions. Finally, this study aims to give practical insights for RMG firms intending to use AIS to boost overall performance, competitiveness, and flexibility in a fast-changing global business context. Thus, this study proposes the following hypothesis:

Null Hypothesis (H_0): Accounting Information System has no significant effect on organizational effectiveness.

Alternative Hypothesis (H_1): Accounting Information System has a significant effect on organizational effectiveness.

MATERIALS AND METHODS

Study Population and Sample Population

This study focuses on employees working in Ready-Made Garment (RMG) manufacturing firms located in Chattogram, Bangladesh. The study, in particular, targets 400 key employees from 55 chosen firms who use Accounting Information Systems as part of their job tasks. This includes a confidence level of 95%, a margin of error of 5%, and a population proportion of 50% with an infinite population size.

Purposive Sampling Approach

A purposive sampling approach was employed to ensure a targeted and representative sample. In this study, purposive sampling was chosen to select participants with relevant experience and expertise in using Accounting Information Systems (AIS) within the RMG manufacturing sector. This method allows for a focused investigation into the population of interest (Bryman, 2016).

Face-to-Face Data Collection

The chosen data collection method involves face-to-face interactions with the respondents. This method makes a deeper comprehension of the participants' observations and points of view possible. This direct engagement method enhances the reliability and richness of the gathered data (Creswell & Creswell, 2017).

Utilization of Likert-Type Scale

The questionnaire consisted of twelve well-crafted questions, employing a Likert-type scale with five response options ranging from 'agreed' to 'strongly disagreed,' including an 'indifferent' option. This scale allows for a nuanced assessment of participants' opinions, comprehensively understanding their attitudes towards using AIS in their job responsibilities (Likert, 1932).

Data Analysis Method

The gathered data undergo screening and correction processes to be transformed into Excel and SPSS formats. Descriptive analysis is then applied to compute the values for each variable in the survey responses. Subsequently, the normality of the data for each variable is assessed using both the Kolmogorov–Smirnov and Shapiro–Wilk tests. Following this, factor analysis is performed, including the assessment of Cronbach's Alpha values and the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy, to group all response variables into two categories: the use of accounting information systems and organizational effectiveness. To determine the substantial impact of accounting information system practices on organisational success, a Structural Equation Model (SEM) is then constructed. Finally, the model's validity is verified through convergent and discriminant validity tests, following established methodologies (Fornell & Larcker, 1981; Hair et al., 2019; Kline, 2015; Royston, 1982).

Hypothesis Testing

After thoroughly analyzing the responses from the administered questionnaires, the next step is testing the hypotheses.

RESULTS

Descriptive Analysis

Table I displays the descriptive statistics (including sample size, minimum, maximum, and median values) and the outcomes of normality tests (Kolmogorov-Smirnov Test and Shapiro-Wilk Test) for each variable associated with the use of accounting information systems and their impact on organizational effectiveness.

Table 1. Descriptive statistics and normality test result

Sl. No.	Survey Questions	Variable name	N	Min	Max	Kolmogorov–Smirnov Test (Sig)	Shapiro–Wilk Test (Sig)	Median
1.	**Practice of Accounting Information System**							
1. (a)	The AIS accurately reflects the financial status of our organization	AIS1	400	2	5	0.212 (0.000)	0.866 (0.000)	4
1. (b)	Information from the AIS is provided in a timely manner for decision-making	AIS2	400	2	5	0.226 (0.000)	0.872 (0.000)	4
1. (c)	I feel confident in the security and integrity of data within the AIS	AIS3	400	2	5	0.274 (0.000)	0.844 (0.000)	4
1. (d)	Accessing information from the AIS is convenient and user-friendly	AIS4	400	2	5	0.249 (0.000)	0.865 (0.000)	4
1. (e)	Our AIS complies with relevant accounting and regulatory standards	AIS5	400	2	5	0.223 (0.000)	0.867 (0.000)	4
1. (f)	Overall, I am satisfied with the functionality of the AIS	AIS6	400	2	5	0.265 (0.000)	0.861 (0.000)	4
2.	**Effectiveness of Organization**							
2. (a)	The AIS is cost-effective in terms of the benefits it provides	Effect1	400	2	5	0.235 (0.000)	0.868 (0.000)	3
2. (b)	The AIS seamlessly integrates with other organizational systems	Effect2	400	2	5	0.215 (0.000)	0.876 (0.000)	3
2. (c)	The AIS significantly contributes to effective decision-making in our organization	Effect3	400	2	5	0.197 (0.000)	0.869 (0.000)	3
2. (d)	The AIS can adapt well to changes in our organizational environment	Effect4	400	2	5	0.213 (0.000)	0.878 (0.000)	3
2. (e)	Training and support for AIS users are sufficient and effective	Effect5	400	2	5	0.211 (0.000)	0.869 (0.000)	3
2. (f)	Our organization regularly innovates and upgrades the AIS to meet changing needs	Effect6	400	2	5	0.198 (0.000)	0.865 (0.000)	3

The minimum and maximum values for accounting information system practice and organizational effectiveness are 2 and 5, respectively. The Kolmogorov-Smirnov and Shapiro-Wilk test statistics of every single variable range from 0.212 to 0.274 and 0.197 to 0.235, respectively, and are all significant at the 0.000 level. This suggests that the survey response data do not follow a normal distribution. Consequently, median values were utilized to compare mean ranks. The median value of the practice of accounting information system is 4, and the effectiveness of an organization is 3. Now, factor analysis is being utilized to assess the questionnaire and categorize its components into distinct factors.

Factor Analysis

The Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy yielded a value of 0.883 ($p = 0.000$) in our factor analysis, indicating that the data is appropriately suitable for conducting factor analysis and categorizing the questionnaire responses into separate factors (refer to Table 2).

Table 2. Cronbach's Alpha, Factor Analysis, and the outcome of the Convergent Validity Test

Rotated Component Matrix[a]					**Convergent**	**Square**
	Component		**Variable**	**Cronbach's**	**Validity**	**Root of**
	1	**2**	**Name**	**Alpha**	**(AVE)**	**AVE**
Effect1	0.911		Practice of Accounting	0.861	0.526	0.725
Effect2	0.903		Information System			
Effect3	0.884					
Effect5	0.875					
Effect6	0.847					
Effect4	0.835					
AIS1		0.935	Effectiveness of	0.941	0.729	0.854
AIS4		0.765	Organization			
AIS2		0.746				
AIS5		0.740				
AIS6		0.718				
AIS3		0.673				
Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.						
a. Rotation converged in 3 iterations.						

The survey response values from the factor analysis table are grouped into two main factors: the practice of accounting information systems (with factor loadings ranging from 0.835 to 0.911) and organizational effectiveness (with factor loadings ranging from 0.673 to 0.935). Since all factor loadings are above 0.400, this suggests that the indicators for each factor exhibit strong reliability.

The Cronbach's Alpha values for the factor variables, namely 'practice of accounting information system' and 'effectiveness of the organization,' are 0.861 and 0.941, respectively, exceeding the 0.7 thresholds. This suggests that the survey responses concerning these factors are reliable, consistent, and valid.

Based on the factor analysis, the variables are defined by the following characteristics: (1) Practice of Accounting Information System is identified as (a) Financial Reporting Accuracy (AIS1), (b) Timeliness of decision making (AIS2), (c) Data Security- Integrity (AIS3), (d) Ease of Accessibility (AIS4), (e) Regulatory Standards Compliance (AIS5) and (f) User Satisfaction (AIS6) (2) Effectiveness of Organization is identified as (a) Cost Effectiveness (Effect1), (b) Integration with other Systems (Effect2), (c) Decision Support (Effect3), (d) Adaptability to Change (Effect4) (e) Training and Support (Effect5) and (e) Innovation and Upgradation (Effect6).

Based on the results of the factor analysis, a structural equation model has been created to assess the effectiveness of organizations about their accounting information system practices (see Figure)

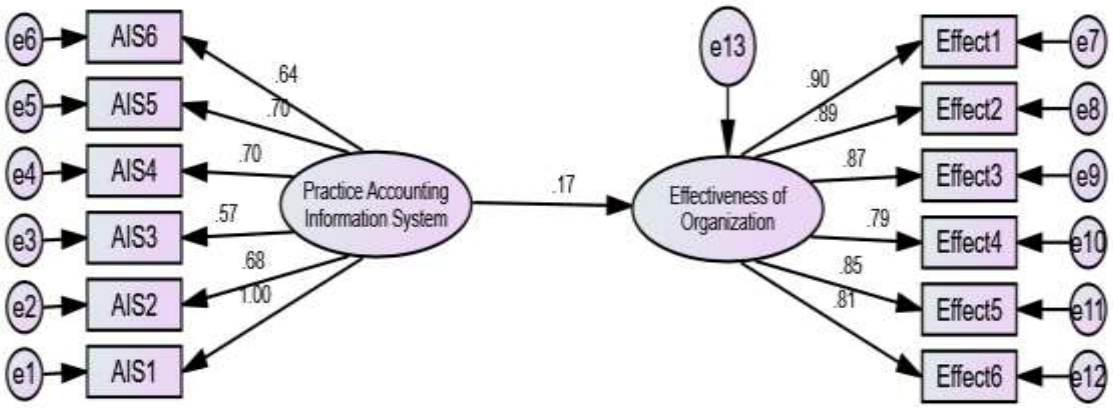

Figure 1. Model of structural equation for accounting information system effectiveness

In the structural equation model examined, the standardized regression coefficients for utilising accounting information systems range from 0.57 to 1.00, while those for organizational effectiveness range from 0.79 to 0.90, all falling between -1 and 1. All factor loadings are exceptionally high and statistically significant, with p-values less than 0.05.

In the selected model, the fit indices indicate a well-fitting model. Specifically, the $\chi 2/df$ ratio is 2.189, below the 3.0 threshold. The Comparative Fit Index (CFI) is 0.981, exceeding the recommended 0.9. The Incremental Fit Index (IFI) also stands at 0.981, above the 0.9 threshold. The Tucker-Lewis Index (TLI) is 0.976, the Normed Fit Index (NFI) is 0.965, and the Relative Fit Index (RFI) is 0.956, all of which are greater than 0.9. Additionally, the Root Mean Square Error of Approximation (RMSEA) is 0.055, which is below the 0.08 cutoff. Therefore, all the model indices meet the standard criteria, confirming the model is well-fitted.

We checked the average variance extracted (AVE) values to verify the selected model's convergent validity. The AVE for the accounting information system's practice is 0.526, and for the organization's effectiveness, it is 0.729. Since both AVE values are above 0.5, this suggests that the model demonstrates convergent validity.

To assess discriminant validity, the maximum shared variance (MSV) between the practice of accounting information systems and organizational effectiveness is 0.168. This value is lower than both the square root of the Average Variance Extracted (AVE) for the practice of accounting information systems (0.725) and the square root of the AVE for organizational effectiveness (0.854) (as shown in Table 2). Therefore, the model in question demonstrates satisfactory discriminant validity.

With a significance level of $p = 0.001$, the route coefficient in the structural equation model that represents the impact of information systems for accounting practices on organizational effectiveness is 0.17. So, the practice of accounting information systems significantly contributes to the organisation's effectiveness (as the p-value is less than 0.05). So, the null hypothesis is rejected. As a result, the practice of accounting information systems contributes significantly to the effectiveness of an organization (Fornell & Larcker, 1981; Hair et al., 2019; Kline, 2015; Royston, 1982).

DISCUSSIONS

The findings of this study underscore the critical role that AIS play in enhancing organizational effectiveness, particularly within the context of the RMG industry in Chattogram, Bangladesh. Through a meticulous examination of various dimensions, including financial reporting accuracy, timeliness of decision-making, data security integrity, ease of accessibility, regulatory standards compliance, and user satisfaction, the research illuminates the multifaceted impact of AIS

on organizational operations.

The structural equation model (SEM) developed in this study provides valuable insights into how AIS influences organizational effectiveness. The high standardized regression weights and statistically significant factor loadings underscore the robustness of the model. Moreover, the model's fit indices, including $\chi 2/df$, CFI, IFI, TLI, NFI, RFI, and RMSEA, demonstrate its appropriateness for the dataset, thereby enhancing the credibility of the findings. Furthermore, validating the model through convergent and discriminant validity tests further bolsters the study's credibility. The attainment of convergent validity, as evidenced by the average variance expected (AVE) values exceeding the recommended threshold of 0.5, supports the measurement model's consistency and reliability. Similarly, the confirmation of discriminant validity, as indicated by the lower maximum shared variance (MSV) compared to the square roots of AVEs, underscores the distinctiveness of the latent constructs under investigation. Overall, the findings suggest that RMG organizations in Chattogram, Bangladesh, benefit significantly from adopting and effectively utilising AIS. Organizations can bolster their overall effectiveness and competitiveness in the global marketplace by leveraging AIS capabilities to improve financial reporting accuracy, facilitate timely decision-making, ensure data security and integrity, and enhance user satisfaction.

The results indicate a significant positive relationship between the practice of AIS and organizational effectiveness. Adopting and utilising AIS methodologies can improve decision-making processes, streamline operations, and enhance financial reporting accuracy within RMG organizations. These findings resonate with broader literature suggesting that technological advancements can yield tangible benefits for organizational performance when effectively integrated into business processes. Research has consistently illustrated the advantages of AIS in optimizing operations and enhancing decision-making frameworks. This aligns with Andrade and Tumelero (2022), who emphasized the strategic importance of AIS in achieving operational excellence. The results are also supported by Kareem et al., (2021), who noted that managers in small and medium enterprises leverage AIS to enhance efficiency, reliability, and quality, collectively contributing to improved performance outcomes. In addition, research has continuously substantiated the link between AIS and organizational success, emphasizing the system's importance in improving key operational areas. Grande, Estébanez, and Colomina (2011) underlined that implementing AIS improves decision-making by delivering fast and accurate financial data, resulting in better planning and control mechanisms. Furthermore, Kouser et al. (2011) discovered that AIS adoption considerably enhances internal corporate operations by improving financial procedures, decreasing mistakes, and boosting effective resource allocation. These benefits are consistent with the results of Nicolaou (2000), who found that organizations that use AIS have enhanced organizational coordination and better alignment between operational and strategic goals. Furthermore, AIS improves reporting capabilities, which contributes to greater openness and accountability inside businesses (Kanellou & Spathis, 2013). This transparency is vital for building trust with stakeholders and ensuring regulatory compliance, both of which are required for long-term organizational performance. Similarly, Grabski, Leech, and Schmidt (2011) found that integrating AIS improves performance monitoring and control, directly influencing operational efficiency and overall company success. The cumulative evidence from these studies illustrates that adopting AIS is a technological upgrade and a strategic imperative that can significantly enhance organizational capabilities and competitiveness across various sectors. The literature consistently supports that AIS is crucial in enhancing operational efficiency and decision-making processes, thereby contributing to overall organizational effectiveness. The integration of AIS is shown to yield tangible benefits, such as improved compliance with standards and enhanced financial performance, making it an indispensable asset for organizations aiming to thrive in competitive environments.

This study extends these findings to the context of the RMG industry in Chattogram, Bangladesh, indicating that the advantages of AIS are not confined to specific sectors or geographical areas but are universally applicable. The increasing complexity and competitiveness of the RMG sector necessitate sophisticated information management tools, which AIS provides. As organizations face mounting pressures to comply with regulatory standards and meet customer demands, the role of AIS in improving accuracy, speed, and security in financial reporting becomes even more critical (Brodny, 2022). The ability of AIS to enhance organizational efficiency is particularly relevant in industries where operational transparency and timely information are paramount.

Moreover, the technological advancements and heightened awareness within the industry contribute to the growing adoption of AIS. Organizations increasingly recognize the need for transparency and improved operational control, viewing digitization as essential for survival in the global market (Rasethuntsa, 2022). This study's clear correlation between AIS and user satisfaction underscores the importance of accessible, accurate, and timely information in achieving higher organizational performance levels. This aligns with findings from (Mihai et al., 2023), who noted that digital transformation driven by AI technologies significantly enhances operational capabilities in various sectors, including textiles (Mihai et al., 2023).

Despite the consistency of these results with prior research, certain contextual factors unique to Chattogram's RMG sector may account for outcome variations. Bangladesh's rapidly evolving regulatory environment, characterized by increased global scrutiny on labor practices and sustainability, may compel companies to adopt AIS as part of broader compliance and reporting frameworks (Vărzaru, 2022). This regulatory pressure can drive organizations to enhance their information systems to meet local and international standards, thereby improving their overall effectiveness.

Looking forward, several avenues for future research emerge from this study. While the direct impact of AIS on organizational effectiveness has been established, exploring the mediating roles of factors such as employee skill development, leadership practices, and external market conditions could yield deeper insights into enhancing AIS effectiveness (Ge et al., 2022). Expanding research beyond the RMG sector to other industries in Bangladesh or across South Asia could further elucidate how different industrial contexts influence AIS practices. Additionally, investigating the long-term impacts of AIS adoption will be crucial to understanding whether organizations continue to experience sustained operational improvements or face diminishing returns over time (Xiao & Boschma, 2022). As the global push for digital

transformation accelerates, examining the role of emerging technologies like AI and blockchain in optimizing AIS functions will also be of great significance (Chatterjee, 2020).

Overall, this study not only highlights the critical role of AIS in enhancing the effectiveness of RMG organizations in Chattogram, Bangladesh but also lays the groundwork for future research to explore the evolving dynamics of technology and organizational performance in this rapidly changing industrial landscape

CONCLUSIONS

In conclusion, this study provides compelling evidence of the positive impact of AIS on organizational effectiveness within the RMG industry in Chattogram, Bangladesh. The findings highlight the importance of integrating technological advancements, such as AIS, into organizational processes to drive efficiency, productivity, and performance. By recognizing the pivotal role of AIS in enhancing decision-making processes, streamlining operations, and ensuring regulatory compliance, organizations can position themselves for sustained success in today's dynamic business environment.

The structural equation model's robustness, validated through convergent and discriminant validity tests, lends credence to the study's findings and underscores the reliability of the relationships observed. As such, policymakers, industry practitioners, and organizational leaders are encouraged to prioritize investments in AIS infrastructure and capabilities to harness its full potential for organizational advancement and competitiveness.

While the research methodology is robust, several limitations should be acknowledged. Firstly, the study focuses on a specific industry in a particular geographical location, limiting the generalizability of findings to other industries or regions. Moreover, the organisation size, nature and type variation may distort the result. Additionally, relying on employee self-reported data may introduce response bias, as participants might provide socially desirable answers. Employing mixed-method approaches or incorporating objective performance metrics could mitigate these concerns and enhance the robustness of future research endeavours. Furthermore, the study does not explore the potential moderating or mediating variables that could influence the relationship between AIS and organizational effectiveness.

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APPENDICES

Appendix A: Questionnaire

Title: Organizational Effectiveness for Accounting Information System Practice: A Study on Some Selected Ready Made Garments Factories of Chattogram in Bangladesh

A.	Name of the respondent						
B.	Respondent Organization						
Sl. No.	Questionnaire	Variable Name	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1.	Practice of Accounting Information System						
a.	The AIS accurately reflects the financial status of our organization	Financial Reporting Accuracy					
b.	Information from the AIS is provided in a timely manner for decision-making	Timeliness of decision-making					
c.	I feel confident in the security and integrity of data within the AIS	Data Security- Integrity					
d.	Accessing information from the AIS is convenient and user-friendly	Ease of Accessibility					
e.	Our AIS complies with relevant accounting and regulatory standards	Regulatory Standards Compliance					
f.	Overall, I am satisfied with the functionality of the AIS	User Satisfaction					
2.	Effectiveness of Organization						
a.	The AIS is cost-effective in terms of the benefits it provides	Cost Effectiveness					
b.	The AIS seamlessly integrates with other organizational systems	Integration with other Systems					
c.	The AIS significantly contributes to effective decision-making in our organization	Decision Support					
d.	The AIS can adapt well to changes in our organizational environment	Adaptability to Change					
e.	Training and support for AIS users are sufficient and effective	Training and Support					
f.	Our organization regularly innovates and upgrades the AIS to meet changing needs	Innovation and Upgradation					