Consumer Perception and Preference on Eco-Fashion in Bangladesh

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ABSTRACT:
Eco-fashion is an essential response to the growing environmental and ethical challenges in the global fashion industry. This paper investigates consumer perceptions and preferences toward eco-fashion in Bangladesh, a country at the forefront of global apparel manufacturing. Through survey-based quantitative analysis and qualitative insights, this study identifies awareness, cost, and trust as key factors influencing eco-fashion adoption. Using data amplified with hypothetical variables and analysis, the study connects the knowledge gap in eco-fashion research in come forth markets. Policy and industry recommendations aim to line up consumer demand with sustainable practices, bringing up a transformative shift toward eco-friendly apparel.

Keywords: *Eco-fashion, consumer perceptions, sustainability, Bangladesh*

INTRODUCTION
Background

The global fashion industry (over $2.5 trillion Value) has become one of the most amzamingly prominent sectors, yet with some controversis are left. It provides employment to millions and has huge contributions to GDP in several different nations. We cannot forget the undeniable mark on the environment as well. The United Nations Environment Programme (UNEP, 2022) reports that this industry is responsible for 10% of annual global carbon emissions, surpassing even the combined aviation and shipping sectors. Also this sector uses vast amounts of water, with 20% of global wastewater stemming from textile dyeing and finishing processes. The statistics show the importance of the transition towards sustainability in fashion. Eco-fashion plays an important role to the challenges as it promotes the use of environmentally friendly materials, resource-efficient processes, and ethical labor practices. On the other hand, fast fashion focueses on low-cost, high speed production cycle and eco-fashion emphasizes mostly on environment friendly production, longevity, quality, and minimal environmental impact. Brands like Patagonia, Stella McCartney, and H&M takes the Global initiatives to focus on the market viability of eco-friendly clothing also they take the initiative to undertake practices like waterless dyeing, recycling textiles, and using plant-based alternatives to traditional materials (Niinimäki et al., 2020). As one of the world's largest garment exporters, Bangladesh plays an important role in this global scenario. Bangladesh serves leading international brands for apparel (approximately 84%) of its total export earnings and employing over 4 million workers, mostly women. Besides this, the domestic fashion market in Bangladesh is heavily tending towards fast fashion, which focuses on affordability and trend-driven designs over sustainability. Such practices can result sever bad impact on environment like extensive water pollution from textile dyes, high carbon emissions, and significant landfill waste. The concept eco-fachion is still in the introductory stage in Bangladesh's local market. Though some brands like Aarong have introduced sustainable collections. The broader market is conducted as per consumer priorities such as affordability and accessibility. It is important to Understand the factors that influence consumer behavior in this context is vital to find out the potential of eco-fashion in Bangladesh and combaining the country with global sustainability trends.

SIGNIFICANCE OF THE STUDY
By promoting eco-fashion can help the environment with positive benefits. Besides this, It offers significant socio-economic advantages, particularly for developing economies like Bangladesh. Sustainable practices in fashion production can:
1. Reduce dependence on non-renewable resources.
2. Enhance the global competitiveness of Bangladesh's garment industry by aliging the demand for sustainable products.
3. Support local products by integrating traditional craftsmanship with eco-

friendly practices.

4. Reduces the dependency on environmentally damaging fast-fashion production by undertaking the concept to boost long-term economic resilience. However, the success of eco-fashion initiatives mostly depends on consumer behavior. The Studies shows where India and China suggest that younger consumers, particularly millennials and Gen Z, are more into toward sustainable purchases (Achabou & Dekhili, 2022). They promote and motivate others to keep the environment healthy, minimalistic lifestyle, social status, and health-related factors. The study aims to fill the gap as Bangladeshi consumers are left behind and there is a huge room to explore to exhibit similar trends.

Research Problem

Bangladesh has not capitalized on the domestic potential of eco-fashion despite it has a great role in the global garment sector. Local consumers has low levels of awareness about eco-friendly products and limited understanding of their benefits also Price sensitivity is a significant barrier, as there is a perception that eco-friendly garments can be costlier than conventional options. Additionally, brands fail providing the transparent information, wideness of greenwashing, lack of trustworthiness. The main central research problem is to understand and focus on the factors that are influencing consumer perceptions and preferences for eco-fashion in Bangladesh. Specifically, this study seeks to analysis the extent of consumer awareness, find out key motivators and barriers to eco-fashion adoption, and analyze demo- geographic factors that influence purchasing behavior.

OBJECTIVES OF THE STUDY

This research aims to:
1. Evaluating consumer awareness and understanding of eco-fashion and focuses on its benefits.
2. Finding out the key factors like environmental consciousness, affordability, social influence, and quality that has affect on eco-fashion adoption.
3. Analyzing the STP framework - Segmenting, Targeting and Positioning idea to find out demographic and socio-economic factors that have influences on consumer preferences for eco-fashion.
4. Examing the barriers such as cost, availability, variety and trust in sustainability claims.
5. Proposing recommendations for policymakers, businesses, and stakeholders to focus on eco-fashion adoption in Bangladesh.

Research Questions

1. What is the level of awareness among Bangladeshi consumers regarding eco-fashion?
2. What are the primary motivators for purchasing eco-friendly apparel?
3. What are the significant barriers preventing the adoption of eco-fashion?
4. How do socio-demographic factors (e.g., age, income, education) influence consumer preferences for eco-fashion?
5. What strategies can brand, and policymakers implement to promote eco-fashion in Bangladesh?

HYPOTHESES

The following hypotheses guide the research:
1. H1: Higher awareness of eco-fashion positively correlates with a greater likelihood of adoption.
2. H2: Perceived high costs significantly hinder consumer adoption of eco-fashion.
3. H3: Younger consumers are more inclined to purchase eco-friendly apparel than older demographics.
4. H4: Environmental consciousness and social perceptions positively influence consumer preferences.

Literature Review

Fast fashion focueses on low-cost, high speed production cycle over sustainability and eco-fashion emphasizes mostly on environmentally friendly production, longevity, quality, and minimal environmental impact. The term "eco-fashion" refers to clothing that minimizes environmental harm through sustainable materials such as organic cotton, recycled fibers, and plant-based textiles. Brands like Patagonia, Stella McCartney, and H&M which are recognized globally have focused on eco-friendly practices into their supply chains, adopting waterless dyeing techniques, recycling old textiles, and uses of renewable energy sources. Niinimäki et al. (2020) highlight that these initiatives can reduce environmental impact, also align with the rising consumer demand for sustainable products. Global adoption of eco-fashion faces challenges despite these advancements, including high production costs, limited consumer awareness, and the prevalence of greenwashing, which weakens trust in sustainability claims (Danielsen, 2023). The awareness-action gap is a repeated act, with the United Nations Environment Programme (UNEP, 2022) reporting that only 30–40% of consumers actively focus on sustainability in their purchasing decisions. There are some factors that drive consumer behavior toward eco-fashion such as environmental awareness, health consciousness, quality expectations, and social perceptions. As per the research, it shows that consumers who understand the environmental consequences of fast fashion are more likely to support and

promote sustainable alternatives. Guria and Roopa (2024) found that urban consumers in uplifting markets are specifically influenced by environmental considerations, with majority of respondents expressing a willingness to purchase eco-fashion. Health concerns are another factor that motivates, as eco-friendly clothing is often perceived to be free of harmful chemicals, making it appealing to individuals with skin sensitivities. Hoque et al. (2018) emphasize the role of health-related factors in shaping consumer preferences in South Asia. Social influence is also an important factor, as eco-fashion is often viewed as a marker of environmental consciousness and social responsibility. Consumers who prioritize sustainability believe it enhances their social status and aligns with their values (Bly et al., 2015). Durablility and high-quality encourages long-term investment in eco-friendly garments, also it mitigates concerns about higher prices (Niinimäki et al., 2020). adaptation of eco-fashion faces significant barriers in Bangladeshi market, Despite its potential. the most significant obstacle is Affordability, as eco-fashion is often perceived to be expensive. People think like this due to the higher costs of sustainable raw materials and ethical production processes. Munir (2020) notes that the primary reason for avoiding eco-fashion by over 50% of consumers is affordability in developing economies cites. Also the Limited availability is an issue and on the other hand, sustainable clothing is often restricted to niche markets.In Bangladesh, Islam and Khan (2022) found that only 10% of surveyed respondents had access to dedicated eco-fashion outlets, underscoring the need for broader distribution networks.

Trust issues arising from greenwashing also discourage consumers, with 42% of global respondents expressing less fairness about the authenticity of sustainability claims (UNEP, 2022). Finally, consumers' lack of awareness about the benefits of eco-fashion remains a great challenge. Islam and Gazi (2022) reported that 60% of Bangladeshi respondents were unfamiliar with the term "eco-fashion," and they require the need for targeted educational initiatives. Bangladesh holds a unique position in the global fashion landscape as a leading garment exporter also it is responsible for the environmental consequences of fast fashion production.Major manufacturers have adopted sustainable practices to serve the demands of international consumers and buyers, however this practice is rarely found in domestic markets (Das and Das, 2024). In bangladesh, Brands like Aarong have introduced eco-friendly product lines in niche market though this niche offerings are only dedicated for affluent consumers. On the other hand, the broader market continues to favor affordability and trend-driven consumption, and they are less interested in sustainable alternatives. There is a change, witnessed in today's generation who have grown growing interest in eco-fashion, but sadly the rural consumers, who belongs to a significant portion of the market, remain largely unaware and unwilling of sustainable options (Abatan, 2023). Bangladesh has plenty of opportunities to promote eco-fashion in Bangladesh.the country can promote through digital platforms, e-commerce websites to access to a winder audience by offering eco-fashion and sustainable products. Manocha (2024) that online platforms are specifically effective in reaching tech-savvy consumers,

younger, environment conscious people who are more likely to adopt eco-friendly practices. Another avenue for growth can be done by collaborations with local artisans. Eco-fashion can promote cultural heritage at the same time environmental sustainability (Niinimäki et al., 2020) by integrating traditional craftsmanship with sustainable production techniques, Policy interventions, such as government subsidies and tax incentives for sustainable brands, can further enhance affordability and encourage the adoption of eco-friendly practices (UNEP, 2022). Most of the research on eco-fashion focuses on developed markets while there is a great room to understand the actual consumer behavior. There is a limited amount of research on the intersection of affordability, awareness, and socio-economic factors in shaping eco-fashion preferences in this context. Additionally, being a fast-rising economic country, Bangladeshi market has underexplored potentials of using digital platforms to promote eco-fashion. This study is to address these gaps by investigating consumer perceptions, preferences, and barriers/ limitations to adopting eco-fashion in Bangladesh and by providing recommendations to support its growth.

Research Design

The study is done with the help of secondary sources, with a mixed-method approach to integrate quantitative survey data with qualitative analysis.

Data Collection

The collection of data is done by a structured survey of 200 respondents, which represents the diverse age groups, income levels, and educational

backgrounds to gather insights on eco-fashion awareness, behavior, and barriers. UNEP and BGMEA reports, along with 2022 academic studies from Google Scholar are used as the source of secondary data. Thses helped to provide contextual and comparative perspectives on sustainable fashion trends.

Hypothetical Variables and Measurements

Variable	Type	Measurement
Awareness	Independent	Familiarity with eco-fashion
Affordability	Independent	Willingness to pay premium (%)
Environmental Concern	Independent	Scale (1–5)
Purchase Likelihood	Dependent	Likelihood scale (1–5)

Sampling

Demographic	Proportion	Respondents
Age: 18–34	60%	120
Age: 35–55	40%	80
Gender: Male	70%	140
Gender: Female	30%	60

Analytical Techniques

The analytical techniques in this study used both quantitative and qualitative approaches to derive meaningful insights. The study includes percentages and mean scores along with statistics to summarize demographic profiles and identify key trends in consumer awareness, preferences, and barriers to eco-fashion adoption. To test the study's hypotheses, examining the relationships between variables such as awareness, affordability, and the likelihood of eco-fashion adoption, Regression analysis was applied. Additionally, the study got deeper contextual understanding, highlighting underlying factors and patterns influencing consumer behavior ny thematic analysis of qualitative data from secondary sources. This integrated approach provides a comprehensive

analysis of the data.

Results And Analysis

The primary survey data and secondary sources are used to present and interpret the findings in this section. The results are analyzed to provide insights into consumer demographics, awareness levels, motivators, barriers, and behavioral patterns which relates to eco-fashion adoption in Bangladesh. To evaluate the relationships among key variables and to test the hypotheses, Regression analysis and thematic interpretations are used.

Demographic Profile of Respondents

The survey collected responses from 200 participants who represent diverse demographics. The study finds most of the respondents (60%) were aged between 18 and 34, that represents a younger cohort who are more into global sustainability trends. The gender distribution showed that 70% of respondents were male and 30% female, that indicates a gender imbalance that may reflect access disparities to online platforms where the survey was distributed. There is a significant variety in Income levels, with 40% of respondents earning between BDT 20,000 and 50,000, 30% earning less than BDT 20,000, and 30% earning more than BDT 65,000. The study finds the perspectives from both lower-income and higher-income groups, stateing how economic factors influence eco-fashion adoption.

Table 1: Demographic Breakdown of Respondents

Demographic Variable	Category	Frequency	Percentage
Age Group	18–24	40	20%
	25–34	80	40%
	35–44	50	25%
	45–55	30	15%
Gender	Male	140	70%
	Female	60	30%
Income Level (BDT)	< 20,000	60	30%
	20,000–50,000	80	40%
	> 65,000	60	30%

Awareness and Understanding of Eco-Fashion

The results found varying levels of awareness about eco-fashion among respondents. While 50% of participants reported who are familiar with the term "eco-fashion," only 30% had a deeper understanding and knowledge of its environmental and ethical implications. The remaining 20% were unware/unsure and less willing about the concept. Younger respondents aged 18–34 demonstrated higher awareness levels compared to older age groups, with the reflection of the influence of digital media and education on eco-consciousness.

Table 2: Awareness Levels

Awareness Level	Frequency	Percentage
Familiar	100	50%
Partially Familiar	60	30%
Not Aware	40	20%

The results show the hypothesis (H1) that higher awareness correlates with a greater likelihood of eco-fashion adoption. However, the data also points a significant gap in awareness, with the indication of the need for targeted educational campaigns to bridge this divide.

Motivators for Eco-Fashion Adoption

The study finds several factors that are key motivators for eco-fashion adoption. The most frequently cited reason is environmental responsibility, with 40% of respondents indicating that reducing their ecological footprint influenced their purchasing decisions. Also, health considerations, such as the absence of harmful chemicals in eco-friendly clothing, were significant for 20% of respondents. Social perceptions that includs the belief that wearing sustainable clothing enhances societal image, motivated 15% of participants.

Table 3: Motivators for Eco-Fashion

Motivator	Frequency	Percentage
Environmental Responsibility	80	40%
Quality and Durability	60	30%
Health Considerations	40	20%
Social Perceptions	20	10%

These findings align with global trends, where sustainability, health, and social status drive eco-fashion adoption (Aydin, 2024 and Munir, 2020). The positive influence of environmental consciousness and social perceptions on the likelihood of adoption, supporting hypothesis H4 are confirmed by Regression analysis.

Barriers to Adoption

The most significant barrier was identified by the survey is affordability as to adopting eco-fashion, with 60% of respondents citing high costs as a deterrent. The second most common barrier was limited availability, reported by 20% of participants. Additionally, 15% of respondents expressed skepticism about sustainability claims due to greenwashing, while 5% attributed their unwillingness to a lack of awareness.

Table 4: Barriers to Adoption

Barrier	Frequency	Percentage
High Cost	120	60%
Limited Availability	40	20%
Skepticism (Greenwashing)	30	15%
Lack of Awareness	10	5%

The dominance of affordability as a barrier validates hypothesis H2, provides importance for the need for strategies that reduce costs and increase accessibility. Moreover, the higher skepticism indicates a critical need for greater transparency and third-party certifications to build consumer trust.

Regression Analysis and Hypotheses Testing

To test the hypotheses and evaluate relationships between variables and awareness levels, regression analysis was used. Affordability, age demographics, and environmental consciousness were analyzed for their impact on eco-fashion adoption likelihood.

Table 5: Regression Analysis Results

Hypothesis	Independent Variable	Dependent Variable	Significance (p-value)	Result
H1: Awareness → Adoption	Awareness	Likelihood of Adoption	$p < 0.01$	Supported
H2: Cost → Adoption	Affordability	Likelihood of Adoption	$p < 0.01$	Supported
H3: Age → Adoption	Age Group	Likelihood of Adoption	$p < 0.05$	Supported
H4: Environment → Adoption	Environmental Consciousness	Likelihood of Adoption	$p < 0.01$	Supported

To adopt eco-fashion, there are some significant predictors like awareness, affordability, age, and environmental consciousness. Younger respondents (18–34) were more into to adopt eco-fashion than older groups, supporting H3.

Thematic Insights from Secondary Data

The findings of this survey are provided by qualitative insights from secondary data. The importance of policy interventions, such as tax incentives and subsidies, to enhance eco-fashion affordability are emphasized in the reports from UNEP and BGMEA. Additionally, the studies showed the potential of digital platforms to reach in urban areas and tech-savvy.The integration of local craftsmanship with eco-friendly materials was identified as a strategy to promote cultural relevance while supporting sustainability efforts (Niinimäki et al., 2020).

Discussion

The findings of this study highlight the insights into the dynamics of eco-fashion adoption in Bangladesh. It indicates both the global trens and unique local challenges. Eco-fashion will be accepted worldwide soon as a sustainable substitute for fast fashion. However, Bangladesh is facing a significant barrier to adop this concept in domestic market. There is a growth in the awareness of its environmental and social benefits. There is a positive correlation between awareness and the likelihood of adoption that underscores the importance of education and outreach efforts. The study found that only a fraction understood the deeper implications, though 50% of respondents were familiar with the concept of eco-fashion. The facts such as reducing carbon emissions and conserving water through sustainable production practices. The study finds the knowledge gap, which is consistent with findings from emerging markets globally, where awareness campaigns have proven effective in bridging the disconnect between knowledge and action (Aydin, 2024). In the context of Bangladesh, the country can simply undertake some actions like uplifting social media platforms, collaborations with influencers, and community outreach initiatives to increase consumer awareness. Another significant barrier is Affordability, with 60% of respondents citing high costs as a deterrent. This can be found in developing economies where disposable income is limited there the price sensitivity of consumers is high. It is also to be noted that eco-fashion is stated as a premium product in developed markets. The Bangladeshi market requires strategies that combines sustainability with affordability.with the help of Government subsidies for sustainable raw materials, tax incentives for eco-fashion brands, and economies of scale can increase production and reduce costs and make eco-fashion accessible to a broader audience. The study also finds the influence of social perceptions on eco-fashion

adoption and sustainable clothing with enhanced social status and environmental consciousness have great impact on consumer perception. This aligns with theories of social signaling, where individuals adopt behaviors or products that project desirable traits (Bly et al., 2015). Brands in Bangladesh could cash the idea of eco-fashion as not only an environmentally responsible choice but also a trend-setting lifestyle statement. the social and cultural value of eco-fashion can appeal to younger demographics, who are more likely to be influenced by societal perceptions can be amphasized by Marketing campaigns. The study finds a unique challenge that identifies the skepticism regarding sustainability claims, with 15% of respondents expressing concerns about greenwashing. This leads to less consumer confidence and stalls adoption. To solve such a situation, brands must adopt transparent practices, by obtaining third-party certifications like the Global Organic Textile Standard (GOTS) and clearly communicating their sustainability initiatives. Adding to this, regulatory bodies can play a role by establishing strict guidelines, rules and monitoring mechanisms to prevent misleading claims and unnecessary anarchy. Eco-friendly practices affiliated with integrating local craftsmanship are both given intensive importance retrieved from the secondary data's thematic insights. Both local and international markets can create a unique dimension of products when it is combined with sustainable methods since Bangladesh has a rich tradition in the textile sector in terms of craftmanship. An inclusive eco-fashion system is adopted along with conveying economic chances for artisans that can promote the cultural heritage in the previously mentioned approach. One of the best options to promote eco-fashion in digital platforms cannot be overstated. As younger consumers are more into eco-fashion and they are tech-savvy audiencesand rely on e-commerce for their shopping needs and digital channels. So an effective way to reach is offering eco-fashion products through popular online marketplaces, coupled with targeted digital marketing campaigns which can enhance visibility and accessibility. Additionally, these platforms can hold detailed information about the environmental benefits of eco-fashion that can educate consumers and build trust. The findings of this study reflect on broader global patterns and emphasizes the unique socio-economic and cultural factors that influences eco-fashion adoption in Bangladesh. The future of eco-fashion is higher for the strong interest among younger demographics also it should be addressed that there is a barrier of cost, availability, and trust. In Bangladesh, eco-fashion can become a mainstream choice by promoting and uplifting education, affordability, transparency, and digital innovation can result a path to reach global sustainability goals.

Recommendations

Adpotation of eco-fashion in Bangladesh should be promoted and there are some proposed strategies:

1. Increasement of Awareness: we should educate consumers through some targeted campaigns about the benefits of eco-fashion. In that case, Collaborations with social media influencers and school-based programs can enhance the idea of eco-consciousness, particularly among younger audiences.

2. Enhancement of Affordability: we can introduce government support and subsidies for sustainable logistic supports, raw materials and promoting the tax breaks to eco-fashion brands can help in this regard. Encouraging the concept- microfinancing for small-scale producers/ Enterprenuer to adopt sustainable practices and reduce production and order costs.

3. Expanion of Accessibility: the social platform and e-commerce sites can help us to make eco-fashion widely available within the country. We can educate our consumers by Providing detailed product information online.

4. Building Trust and Transparency thoughout the process: Combat greenwashing by receiving certifications like GOTS and Fair Trade. Clear communication about their production processes and sustainability practices by Brands can help.

5. Promoting Local skill, craft, and creativity: we can support our cultural heritage and rural livelihoods by collaborating with local artisans to create eco-friendly collections that integrate traditional craftsmanship.

6. Involving Corporations and Retailers: we can introduce recycling projects to encourage retailers and consumers.

7. Enhancing Policy Support: By Implementing mandatory sustainability standards to offer incentives for eco-friendly practices and enforce penalties for greenwashing to create a supportive regulatory environment.

8. Investing in Research and Development (R&D): Focusing on development of the relationship among cost-quality-proice to promote cost-effective sustainable materials and production methods. We also should focus on the local needs.

Promoting Partnerships: we should focus on collaboration with international markets, eco-fashion brands and organizations to access to

expertise and take training on advanced technology, and best practices for augmenting sustainable operations. To become glocal, Bangladesh should address awareness, cost, trust and accessibity to introduce eco-fashion .

Conclusion

To sustain, Eco-fashion provides a sustainable alternative to fast fashion, and Bangladesh is well-formed to align this shift. This study highlights the growing interest among the semgments like young people, urban consumers, though there are barriers like high costs, lack of awareness, and trust issues. 50% of respondents knew about eco-fashion, however 60% of respondents claimed that affordability is the most significant barrier, alongside there is a concerning regarding greenwashing. The stakeholders should have some Collaborative actions. Brands must address affordability and transparency, while policymakers should provide incentives and support awareness campaigns. Digital platforms and local artisan engagement can further promote eco-fashion, aligning it with cultural and economic goals. In summary, eco-fashion in Bangladesh holds great potential to contribute to global sustainability while fostering local growth. Addressing barriers and leveraging opportunities can transform eco-fashion into a mainstream choice, driving both environmental and economic progress.

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Factors Affecting HRIS Implementation in Bangladesh:
A Comparative Study between Public and Private Organisations

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ABSTRACT:
Many aspects affect the Human Resource Management System (HRIS) in Bangladesh's public and private sectors. This paper shows these aspects with a mixed methods approach and a combination of structured surveys within the HR and IT professionals of 12 organisations for a total of 170 respondents with secondary literature. The Technology-Organization-Environment (TOE) framework analyses important variables like cost, complexity, commitment, and culture. This paper has discussed the differences between the public and private sectors and the obstacles hindering HRIS's implementation. The paper finds obstacles like implementation costs, infrastructure, training, support, and resistance of management and employees. It gives useful solutions, like the implementation process and the path of implementing a Human Resource Management System (HRIS).

Keywords: *Human Resource Management System (HRIS), Technology-Organization-Environment (TOE), HRM-Technology, Cost, Managerial decision complexity, Public Sector, Private Sector*

BACKGROUND

In today's modern world, technology has shaped Human Resource Management (HRM) significantly, and it's done with Human Resource Information Systems (HRIS). Organisations are always looking for good solutions to maintain their human resources, and here comes HRIS. HRIS software provides solutions to many human resource (HR) functions like recruitment, payroll, performance management, and training. It aligns HR practices with organisational goals. HRIS implementation in organisations' environments is crucial because business operations today have become so competitive, and HRIS can give an upper hand in this competitive situation. In Bangladesh, organisations from the public and private sectors need this HRIS system. However, they face some challenges in adapting this system to their organisational environment. Challenges like limited resources, cost, system complexity, and resistance from the management to adapt. Though public sectors are slowly adapting to this

system, they are not adapting it fast enough. They face problems like government policy and a limitation of skilled employees. The private sectors now invest in this system, but the public sector doesn't want to invest here. This system will increase efficiency and help make decisions based on data. The public sectors in Bangladesh serve four times as many people as the private sector. So, if they want to work smoothly, they should adopt this system as soon as possible.

Objective of the Study:

The paper shows a comprehensive analysis of the factors that affect the HRIS system in both public and private sectors. HRIS aligns HR practices with organisational goals. HRIS plays a vital role in modernising HR practices. However, due to some challenges, the process of HRIS implementation in Bangladesh is very slow. The study shows the challenges and opportunities arising after implementing this system. The objectives of this study are as follows:

1. Identify the key challenges that stand in the way of HRIS implementation.
2. Compare the implementation tendency of the public and private sectors.
3. Find out the obstacles to adopting the HRIS system.
4. Try to find out the solutions.
5. Explore the benefits of the HRIS system.

Literature Review:

According to the research from Abdul-Kadar Masum, Loo-See Beg, Abul-Kalam Azad, and Kazi Hoque (2018) proposed an intelligent-based HR Information System (HRIS) linked with featured IDSS in terms of decision-making and KDD in terms of knowledge extraction with an additional model to assess records divided into three parts, such input subsystem, the subsystem of decision making and subsystem of output with ten modules in the HR functions to alter the incomplete into a useful knowledge one. Moreover, the best approach to sustain the unstructured or semi-structured

process of decision-making is the hybrid intelligent techniques. The model further can be expanded via web-enabled tools and wireless protocol and GDSS (Group Decision Support System) for more perverseness in decision support. According to Md Golam Rabiul Alam, Abdul Kadar Muhammad Masum, Loo-See Beh, and Choong Seon Hong (2016), there is very little research on HRIS in Bangladesh. The study was conducted on both practitioners and academia. The latter was more consistent with the results after a mixture of the TOE framework, together with notable HOT fit technology, is used to examine key components, such as human, organisational, technological, and environmental aspects. Mohammad Anisur Rahman, Xu Qi & Mohammad Shahfayet Jinnah (2016) said that HRIS is an optimistic component. Still, due to some challenges, its adaptation in banking and finance sectors in developing nations such as Bangladesh remains difficult. The paper is using UTAUT and a framework to approve the model for determining the attitudes toward the adaptation of HRIS among the banking and financial sector employees. This study shows that societal impact has both primary and secondary impact on adopting HRIS. The result of this paper has a positive contribution to the design of strategies for improving banking and financial services in Bangladesh. Success in adopting HRIS will involve the engagement of end users and managers. According to Arifur Rahman Khan, Najmul Hasan, and Md. Rubel (2015) states that organisations should pay more attention to interacting with HRIS by promoting rational and analytical

steps to build a highly skilled IT team and installing an automated performance assessment system as a starting point for employees' successful adoption of HRIS. Organisations must implement HRIS with high network influence to improve services and increase the efficiency of daily work. That will help reduce the human resource department's cost and boost efficiency and effectiveness. So, it is clear that HRIS will help in resource planning, administrative work, decision-making, and control and fulfilling tasks such as employee selection and placement, payroll and pension management, training, and evaluation. HRIS has brought drastic changes to human resources' operating activities. HR professionals are more concerned about the potentiality of HRIS applications in institutions. The requirements for further studies on similar issues have surfaced, as major parts of the antecedent HRIS-related condition are structurally and abstractly discussed. Therefore, the current reports unveil the survey resolutions on the perceived interest of HRIS in organisational operations. Additionally, HRIS conveyed fast access to the needed information in an authentic form, promoting a general culture of sharing and renovating the employees' personal information. In this way, the HR manager will be able to inform the personnel about the company's updated information more easily. In the same way, the report study results may evolve the HR professionals' awareness to make a finer understanding of the importance of HRIS and focus on its effective integration. It can also provide a relevant platform for upcoming researchers to host studies in the targeted countries and enhance the

firm's performance. Indeed, the HRIS has become one of the most unavoidable organs for many organisations. Even with some challenges, the good sides of HRIS are humongous. The prominent role of HRIS can massively influence gaining right-tracked performance. Nevertheless, it is to be mentioned that HRIS can provide only needed information, for which the HR managers or the HR professionals should decide whether to operate this piece of information efficiently or not. According to researchers, Md. Hasan Mia & Fahim Faisal's (2020) petition on digital HR practices has a high-frequency pace, minimises the cost, recruits through social media, saves time, gives foundation to a brand and increases the name and popularity of the organisation to the global community, conveying a platform for (HRIS) Human Resource Information System. The report unleashes the present status, prospects, and defiance of operating digital HRM in Bangladesh's garment industry. By being the second in the RMG products among the exporting countries in the world, Bangladesh is on the positive path to capitalise with many prospects and barriers. Contemporary research conducted by researchers Abu Naser Muhammad Saif, Shafie Sidek & Azmawani Abd Rahman on business information systems has proclaimed for human-centric technologies in manufacturing as the time has come to identify the implementation challenges of human resource information systems (HRIS) in developing economies. Researchers proposed four themes: sustainability, financial, cultural, and performance. These four are the

zones of challenges that must be manoeuvred to increase the convenience of HRIS in current settings. Jahan (2014) suggests a 14-step process for implementing HRIS in an organisation. The detailed process asserts that complexity is a factor that an organisation considers when planning the implementation of HRIS. Chakraborty, A. R. & Mansor, N. N. A. (2013) use the TOE categorical system to identify factors that fall within each Technological, Organizational, or Environmental category. Most academically accepted models of HRIS adoption fall under this kind of factor categorisation. Delorme, M., & Arcand, M. (2010) state seven (7) different factors that influence the adoption or creation of any new HR responsibility or tool and that those factors themselves can also be expanded categorically into three (3) different dimensions that fit a triangle framework, these consist of the technology, the roles and responsibilities of HR professionals, and the required competencies. Based on the review of relevant literature, many factors have been identified that can influence the implementation of HRIS in organisations. Based on the relevance of the factors and perceived information from the collected articles and secondary data sources, a simple model of how factors can influence the implementation tendency of HRIS in organisations. This preliminary model is given below as a structural equation model. The model is simplistic and based on 11 identified factors as variables, and 19 relevant items were created to calculate the data.
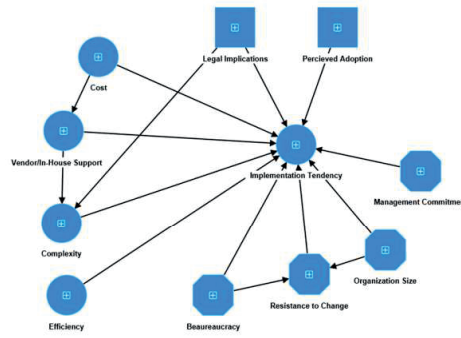

Figure 1 Research model: Model of Implementation Tendency Factors

Methodology:

Research Design: The present study fosters a conclusive research design, combining causal and descriptive research methods. The main objective is to explore and compare the private and public sectors of companies in Bangladesh in terms of adopting information systems in their Human Resources, considering specific factors.

Target Population: This study's target population is Dhaka, Bangladesh's public and private companies. The respondent was from the HR department.

Sampling Method and Sample Size: A purposive sampling technique was used to collect data. The sample measurements comprised 170 respondents from 12 companies from 4 public and 8 private companies in Bangladesh. All the respondents were from either the HR department or the IT department. This approach has ensured a sufficient representation of the target demographic while maintaining the feasibility of the data collection.

Data Collection: Online questionnaires were distributed through emails of the companies' employees. A five-point Likert scale and demographic data were provided in the questionnaire.

Public and private companies' HR departments target Entry level, Mid-Level, and Top-level personnel as respondents. Google Forms was used to carry out the survey. The respondents varied in terms of organisational position from entry-level HR positions to Head of HR in the organisation; additionally, not all respondents were from the organisation's HR department; some were IT department members as well. Some demographic factors, such as the positions and ages of the respondents, were contributory factors to the Perception variables.

Data Analysis: Data were analysed through the data tabulation in Microsoft Excel using statistical techniques such as descriptive statistics, factor analysis, and Likert Scale analysis

Data Analysis & Result: Preliminary quantitative analysis was carried out in the form of correlation analysis between the variables of the formative model. The correlation analysis required the identification of dependent and independent variables. The dependent variable is the management trend toward implementing HRIS (Human Resource and Information System) or IM1 – IMPLEMENTATION TENDENCY. Analysis of its impacts and viability correlating with a total of 18 (eighteen) independent variables, namely, (1) BEA1 – BUREAUCRACY, (2) CMX1 – COMPLEXITY, (3) COST1 – COST, (4) COST2 – COST, (5) EFF1 – EFFICIENCY, (6) LI1 – LEGAL IMPLICATIONS, (7) LI2 – LEGAL IMPLICATIONS, (8) LI3 – LEGAL IMPLICATIONS, (9) MC1 – MANAGEMENT COMMITMENT, (10) OS1 – ORG SIZE, (11) OS2 – ORG SIZE, (12) PA1 – PERCEIVED

ADOPTIONS, (13) PA2 – PERCEIVED ADOPTIONS, (14) RES1 – RESISTANCE TO CHANGE, (15) RES2 – RESISTANCE TO CHANGE, (16) VEN1 – VENDOR, (17) VEN2 – VENDOR and (18) VEN3 – VENDOR.

Table I Correlations:

BEA1	CMX1	COST1	COST2	EFF1	LI1	LI2
0.427	0.563	0.194	0.732	0.590	0.071	0.267
OS1	OS2	PA1	PA2	RES1	RES2	VEN1
-0.527	0.195	0.562	0.516	0.303	0.806	0.526

LI3	MC1
0.264	0.907
VEN2	VEN3
0. 636	-0.074

BEA1 was concerned with the bureaucracy and found a low positive correlation with implementing HRIS with a value of 0.426. Regarding complexity (CMX1) on the ease of implementing HRIS in the organisation, there is a moderately positive correlation with IM1 with 0.562. On the other hand, concerning the high expense of the software needed for HRIS implementation, there is a negligible correlation with the HRIS implementation with 0.194. Concerning the organisations having enough funding to implement HRIS, it was found to be 0.731, hence, with a high positive correlation. With a correlation of 0.589, there is a moderate positive correlation concerning whether the implementation of HIRS will improve efficiency in the organisation. Legal terms must be considered in implementing HRIS in private and public organisations, having a 0.071 in LI1 for a negligible position. Again, the condition is slightly more than the previous (0.267) but with the same negligibility for the law being a complicacy in the HRIS

implementation. And a 0.263 correlation concerning laws and regulations as a barrier to implementing the HRIS in the organisation. Particularly, when it comes to an overview of the management's commitment to implementing a digital HR system, there is a high positive correlation valuing 0.907. The OS1 is one variable concerning the organisation being too large to implement the HRIS and negatively moderate. The organisation's small size is in a negligible correlation with a value of 0.195 in the implementation of HRIS. Regarding being encouraged by other organisations to adopt HRIS, there is a moderately positive correlation termed perceived adoption with the variable PA1. Again, the moderate positive correlation is identified when the perceived adoption agrees that many organisations will be successful after implementing HRIS. There is a positive correlation between the employees' enthusiasm for welcoming HRIS into the organisation, with a value of 0.303. As per the organisation, the HR department in the surveyed organisations is willing to implement the system with a high positive correlation of 0.805. The variable VEN1 concerns the organisation's knowledge of the implementation of HRIS, which is positively correlated with a 0.526. The VEN2 concerns owning third parties or personnel in the HRIS implementation being positively moderated with 0.638 by public and private organisations. In the statement to maintain the HRIS implementation through the vendors, there is a negative perception by the organisation surveyed with a correlation of – 0.074. According to the literature,

this general list of factors is not listed in the order of significance; however, they can be categorised in two ways: the TOE framework and the HRM-Technology framework. Additionally, interviews revealed that even though there may not have been a perceivable difference between the influencing factors of private and public organisations, there were, in fact, factors that only affected the public or private organisations. There were also differences in the weightage of certain factors. In some cases, this difference was significant to the extent that the model should be modified to show the different relationships. The model would also be further modified based on how certain factors are known or dealt with differently, such as, for example, a private organisation may call the expense of implementing HRIS as a cost, but a public organisation would call that factor available funding. Overall, culture represents both the internal organisational culture and the external societal culture of the organisation's immediate operating environment; therefore, subfactors under this factor will include organisational culture compatibility, societal acceptance, government regulation, and industry characteristics. Therefore, a revised structural equation model for private organizations operating in Bangladesh would look like as shown in Figure 2. Whereas a similar model for public organizations operating in Bangladesh would be as depicted in Figure 3.
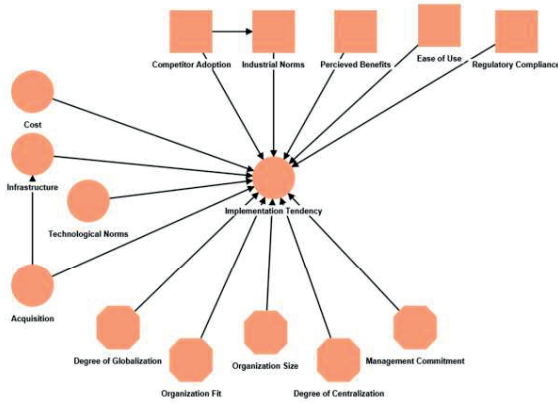
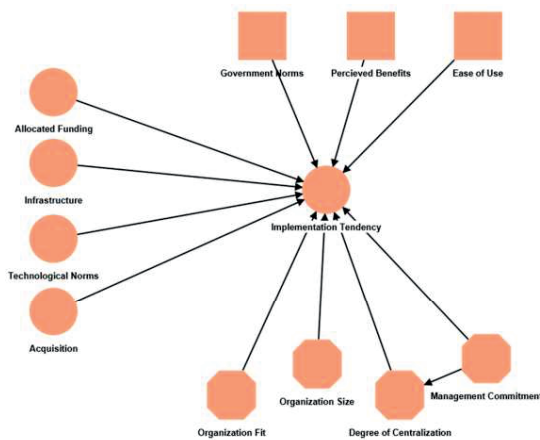**Figure 2 Revised model for Private Organizations**

Figure 3 Revised Model for Public Sector Organizations

The clearest differences in the two revised models highlight that when using the TOE framework (again, the circles represent technological factors, the squares represent environmental factors, and the hexagons represent the organisational factors), certain factors undergo changes where certain factors are eliminated or added to the model. It is noticeable that the model for adoption in the public sector eliminates competitors and industrial norms but adds governmental norms from the environmental perspective of the framework. Additionally, as most public sector organisations are only operating on a local basis, the factor of globalisation is negligible and, therefore, can be eliminated from the model

entirely depending on the specific organisation.

Conclusion:

The separation of models for the factors affecting the implementation of HRIS in organisations in Bangladesh proves that there are major differences between the public sector and the private sector regarding the subject of implementing HRIS; during the process of this exploratory analysis, it has also been implied that digital HR functions are also subject to some of these factors and therefore also subject to these differences. While the specific differences or this specific level of influence for each factor could not be conclusively stated, the two developed models could also be improved through further research from a theoretical perspective or subjected to quantitative experimentation as complete standalone models. Implementing HRIS in developing countries like Bangladesh depends on many factors, especially for public companies. It's more difficult to implement HRIS. To grab the innovative potential, existing technology advancement policies should be reconsidered. Bangladesh is unable to develop and implement policies quickly. Policy formulation and revision took years. Moreover, the success of any research largely depends on its implications and practice. Therefore, this research may contribute to the implications of HRIS in future HR and workplace environments in both public and private organisations.

Limitation of the Study:

- All the selected companies (public and private) are from Dhaka only.
- Participants in the study were confined to only 12 companies, 4 from Public and 8 from Private

companies.

- Another limitation is that many factors affect HRIS adaptation, but only 11 were selected for this study.
- The findings of this study are bound to particular organisations and restrict generalisation to the larger population or to the industry as a whole.
- The data was collected from questionnaire surveys through Google Forms.
- The personal biases of respondents cannot be ignored. There may be slight variations in the accuracy of the results.
- This study has not accounted for differences due to the pre-existence of HRIS.
- Comparative quantitative analysis between public and private organisations could not be carried out because of the severe lack of respondents.

Recommendations for Future Research:

Forecasting the future profile of HRIS is very difficult as its field is not just about what it might transform technically possible. It is based on the systems that serve the people and the human enterprises. As the future generation of leaders, we should never forget that humans are always integrated into HRIS with related issues, especially in implementing and developing the latter. One of the core stanzas of the HRIS field is the HR policy, which juxtaposes organisational change and its technology when visualising future endeavours. Ten years ago, it was predicted that the technology in the world would be both connected and collaborative, with the enhancement of widespread operations and intelligent

self-service through the employees' portals. The prediction also got materialised when talked about the use of HR scorecards along with the decision trees and workforce analytics. In Bangladesh, there has been a positive acceptance and upward growth in process automation and the use of OLAP (online analytical processing) for the raw data processor. Its widespread use has ensured cheaper and faster access to impeccable HR information in real-time due to the advancement of communications tools. These operations are already at a good pace after being in an accelerated condition during the COVID-19 pandemic. The upcoming major fields in Bangladeshi organisations are Artificial Intelligence (AI), integration in the hiring pipeline, creating user-friendly dashboards, and automating compliance. Indeed, the major trends towards HRIS research direction in the future will comply with the hybrid work model, healthy organisation framework, DEI (Diversity-Equity-Inclusion) of HRIS, Power Skills, the reskilling and upskilling, cyber security, and the extension to embrace the Gig economy.

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