Faculty Resistance to Change in Bangladeshi Schools: A Cost–Benefit Perspective on Perceived Value, Switching, and Transition

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Approval

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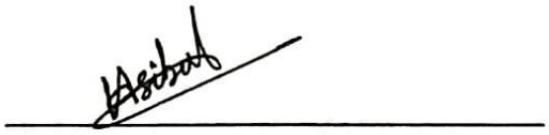
I hereby declare that this thesis has been completed under the supervision of **Ms. Tapushe Rabaya Toma, Assistant Professor**, Department of Software Engineering, Daffodil International University. I also affirm that this thesis is my original work, submitted for the degree of B.Sc. in Software Engineering, and neither the entire work nor any portion has been previously submitted for another degree at this or any other university.



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Abstract

In order to determine why many instructors are still hesitant to incorporate information and communication technology (ICT) into their lessons despite significant government initiatives, this study looks into the factors influencing faculty reluctance to ICT adoption in Bangladeshi high schools. The study investigates the effects of perceived value, switching benefits, user participation, transition cost, switching cost, and satisfaction on resistance, guided by the Status Quo Bias Theory and a cost-benefit analytical framework. 350 teachers were given a structured questionnaire based on established scales as part of a quantitative approach, and 320 of their answers were examined using Partial Least Squares Structural Equation Modeling (PLS-SEM) in SmartPLS. The findings show that high transition costs dramatically raise switching costs, which lower perceived value; on the other hand, switching benefits and user involvement raise perceived value, which considerably reduces resistance. Another factor that was found to influence resistance was satisfaction. According to the study, resistance can be lessened by lowering transition and switching costs, encouraging teacher involvement in ICT planning, and clearly conveying the concrete educational advantages. By combining resistance theory and cost-benefit analysis, it theoretically advances the literature on ICT adoption while, practically, providing policymakers with doable tactics to enhance ICT integration. Finally, the results emphasize that both infrastructure investment and human-centered strategies like training, participatory decision-making, and ongoing support are necessary for successful ICT adoption.

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Chapter-1: Introduction

1.1 Background

According to organizational behavior research, educational environments have historically been resistant to change (Oreg, 2006). When contemporary technology is incorporated into the classroom, that truth is amply demonstrated. Adoption frequently lags despite technology availability and policy-level initiatives because of contextual (training, infrastructure), social (peer norms), and psychological (fear of losing control, satisfaction with current techniques) aspects (He, 2010; Kim H. W., 2009; Bhattacherjee, 2011). The paper "Faculty Resistance to Change in Bangladeshi Schools: A Cost–Benefit Perspective on Perceived Value, Switching, and Transition" uses a cost–benefit framework to analyze this resistance in the context of Bangladesh. It looks at how teachers' resistance or acceptance of ICT integration is influenced by perceived value, which is fundamentally a balance between costs (both switching and transition) and rewards (e.g., professional recognition, student involvement) (Zeithaml, 1988; Burnham T. A., 2003; Klemperer P. , Competition when consumers have switching costs: An overview with applications to industrial organization, macroeconomics, and international trade, 1995; Jones M. A., 2000). Importantly, the approach emphasizes the need of user participation: participation in implementation increases perceived value and ownership while decreasing resistance (Barki H. &., Measuring user participation, user involvement, and user attitude, 1994)

1.1.1 ICT Adoption in School

ICT adoption in education transforms pedagogy, teacher identity, and institutional culture in addition to being a technological change. When educators perceive a threat to their autonomy or control, or when current tactics are sufficiently effective to diminish their desire for change, resistance develops (Bhattacherjee, 2011). ICT's perceived worth becomes crucial; adoption is

more likely if the benefits (such as improved classroom interaction and efficiency) exceed the perceived drawbacks (effort and uncertainty) (Zeithaml, 1988; Kim H. W., 2009).

There are two ways that costs manifest:

- **Switching cost:** The hassle or perceived loss of giving up conventional techniques (Burnham T. A., 2003).
- **Transition cost:** The time, money, and effort required to acquire and use new ICT systems (Klemperer P. , Competition when consumers have switching costs: An overview with applications to industrial organization, macroeconomics, and international trade, 1995).

On the other hand, teacher participation in the planning and implementation of ICT integration improves their sense of worth and ownership, which lessens resistance (Barki H. &., Measuring user participation, user involvement, and user attitude, 1994). Furthermore, evident advantages of switching, such as improved student awareness and engagement, can boost perceived value and overcome reluctance (Jones M. A., 2000)

1.2 Situation of ICT Adoption in School

1.2.1 Global Situation of ICT Adoption in School

Access to ICT in schools varies greatly across the globe. The percentage of schools with internet access increases with educational attainment, with approximately 40% of elementary schools, 50% of lower secondary schools, and 65% of upper secondary schools having internet access, according to UNESCO data from 2015 to 2018. Additionally, computers are used for teaching in roughly 47% of elementary, 62% of lower secondary, and 76% of upper secondary schools.

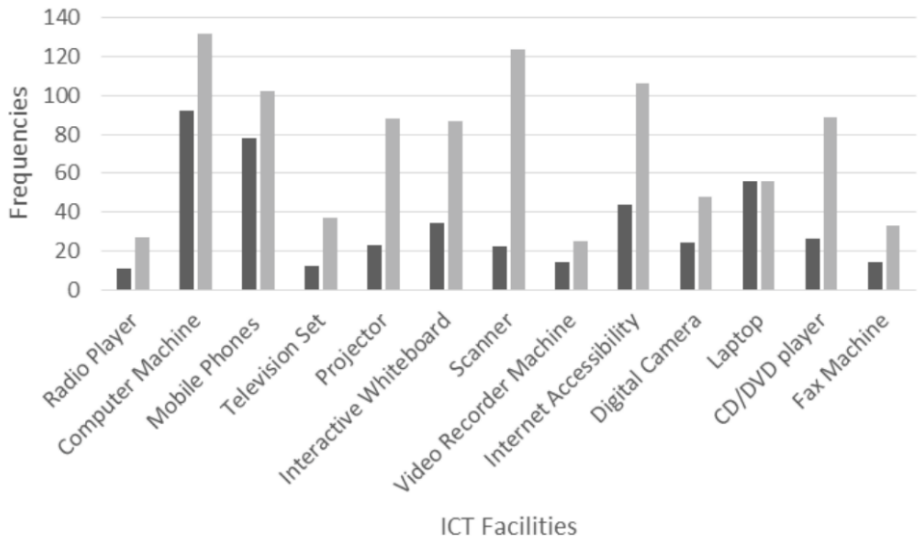

Figure 1.1. Global ICT access in schools by education level (UNESCO, 2023) (gem-report, 2023)

The "Education Struggling to Keep up with Digital Advances" figure shows the proportion of individuals in different nations who think they have the requisite technological knowledge thanks to their formal education. The research shows that 68% of respondents agreed that their education gave them sufficient technical skills, placing China in a large lead. Russia comes ranked second at 37%, followed by the United States at 39%. The United Kingdom and France have slightly lower numbers at 31% and 30%, respectively, while Australia and Spain report 34% and 32%. At 26% and 25%, respectively, Italy and Germany had even lower percentages. With only 17% of respondents believing their education sufficiently equipped them for technology, Japan comes in last among the nations polled. According to the Dentsu Aegis Digital Society Index 2018, which was based on a survey conducted among 20,000 people in the summer of 2017, there is a significant difference in how well formal education systems are thought to equip people with the necessary technology skills in each of these nations, with China performing the best and Japan the worst.

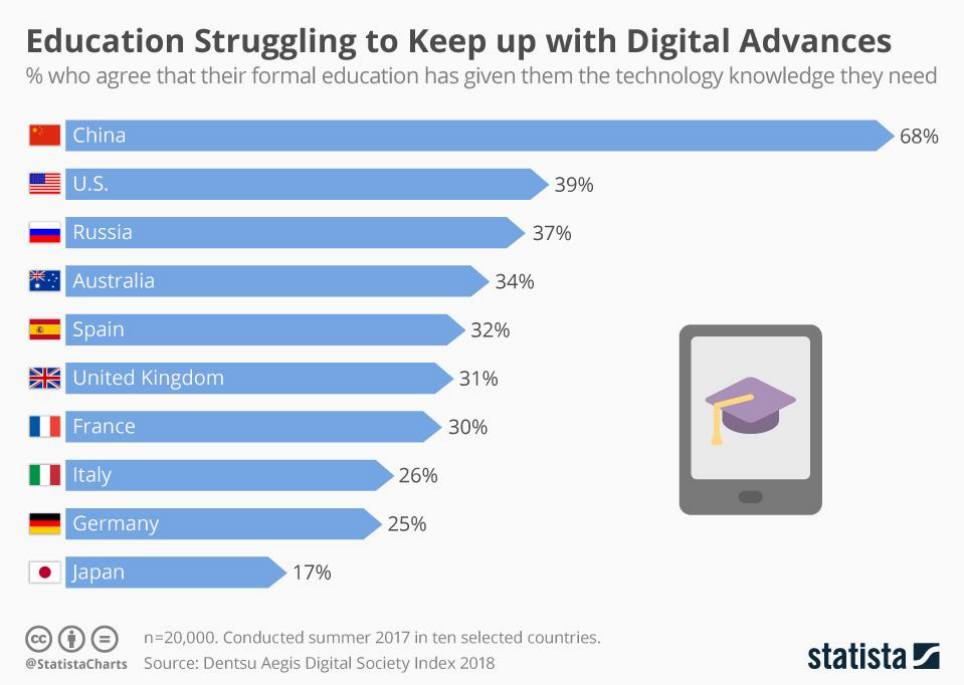

Figure 1.2. Chart of Education Struggling to Keep up with Digital Advances (Armstrong, 2018)

Adoption was further driven by the COVID-19 pandemic: learning management systems were adopted almost universally (~96%), and technologies like videoconferencing increased from 51% in 2019 to an anticipated 87% by 2021.

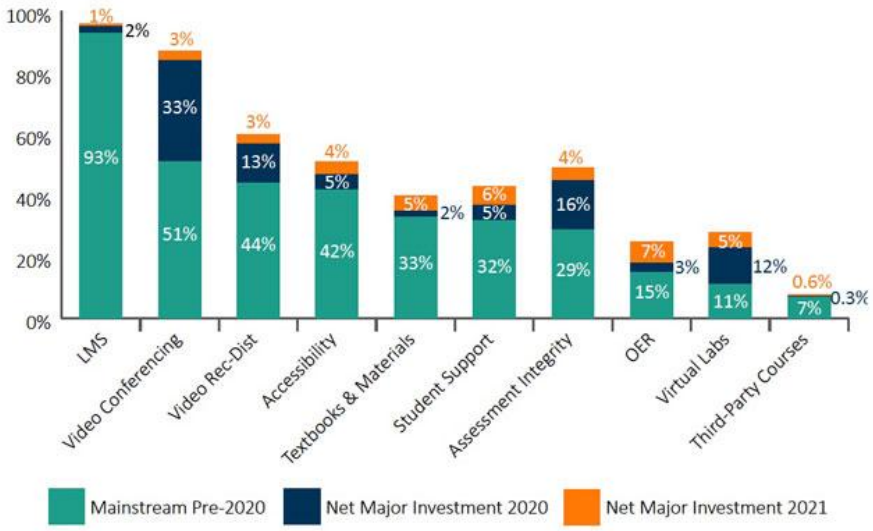

Figure 3. Growth in institutional use of key educational technologies before and after the COVID-19 pandemic (Statista, 2021).

1.1.2 Bangladesh Situation of ICT Adoption in School

ICT integration in schools is given top priority in Bangladesh's national agenda through teacher training initiatives, infrastructural development, and strategic planning. According to the Education Sector Plan (2020/21–2024/25), the Eighth Five Year Plan (2020–25), and the post-COVID-19 ICT Roadmap, government initiatives set high goals, including providing universal internet and electricity access in schools, creating ICT labs and multimedia classrooms, and lending out student devices. By 2025, it is anticipated that 77% of secondary schools will have computers, and 38% will have internet connectivity. However, issues still exist: socioeconomic circumstances restrict households' ability to facilitate remote learning, and many schools continue to encounter infrastructure constraints, such as inadequate internet connectivity. Even with more than 100 million internet users nationwide, as of 2020, just 15% of people were online, and only approximately 24% of people had smartphones.

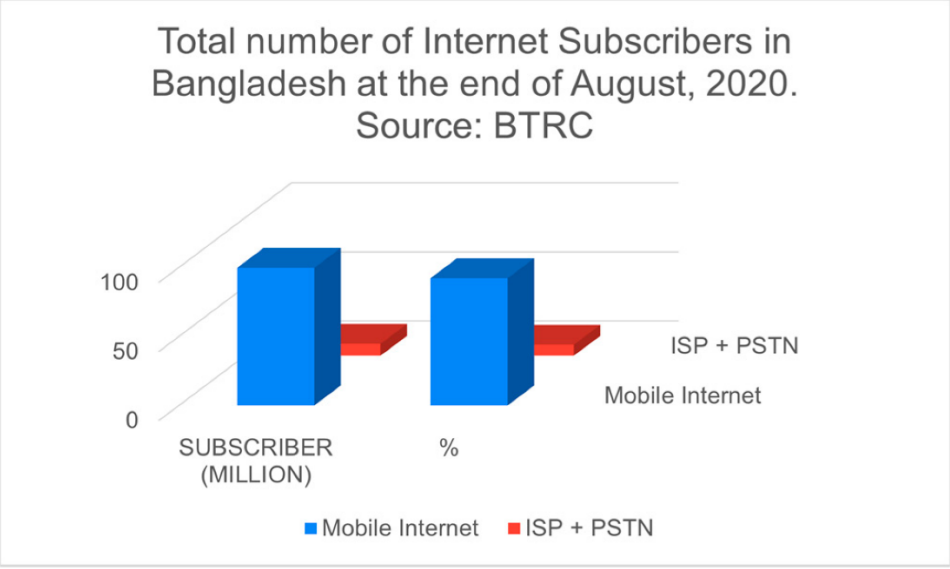

Figure 1.4. Internet and device access for students in Bangladesh (Statista & DataBD, 2024).

Training has been provided by the Bangladesh Computer Council (BCC), which as of 2023 had trained around 236,000 people, including over 112,000 pupils in fundamental ICT skills and 7,890 teachers serving as master trainers.

1.3 Research Problem Statements

High school teachers frequently exhibit reluctance to incorporate technology into their lesson plans for a variety of institutional, personal, and infrastructure-related reasons. Lack of expertise and self-assurance in properly using digital tools is a major contributing factor. Many educators may feel overtaken by the quick changes in technology and worry that they won't be able to keep up with the latest trends, especially those who have taught for a long time. Furthermore, there are worries that technology may supplant conventional teaching strategies or restrict teacher-student connection, which would lower student engagement. Institutional issues also come into play. The seamless integration of technology might be impeded by inadequate technical support, poor internet connectivity, and limited availability to dependable devices. Because integrating digital resources frequently necessitates additional preparation and lesson planning, which might not fit with current workloads or curriculum structures, teachers may also have time constraints. Additionally, there is doubt regarding how well technology might enhance learning outcomes, particularly in light of previous programs' inability to provide quantifiable gains. This hesitancy is also influenced by cultural and attitudinal elements, such as a dislike of change and a preference for tried-and-true techniques. In the absence of robust administrative backing, focused professional growth, and proof of beneficial effects, many high school teachers are still hesitant to completely integrate technology into their classes.

1.4 Research Questions

1. Does status quo bias theory influence resistance to technology adoption in academic study?
2. Do social influence and satisfaction affect resistance to technology adoption in academic study?

1.5 Research Objectives

1. To examine the role of status quo bias theory in influencing resistance to technology adoption in academic study.
2. To examine how social influence and satisfaction affect resistance to technology adoption in academic study.

Chapter-2: Literature Review

2.1 Overview

There are a number of institutional, emotional, and practical reasons why high school teachers are hesitant to use technology in their lessons. Lack of proper training and professional development is a big issue since it makes many teachers feel unprepared or insecure when it comes to using digital tools efficiently. Seamless integration into schools is further hampered by limited access to dependable infrastructure, such as dependable internet connections and modern equipment. Additionally, teachers frequently worry that if technology is not used carefully, it could distract pupils, decrease in-person interaction, or degrade the quality of learning. Deeply embedded traditional teaching practices can also cause resistance since teachers are used to tried-and-true pedagogical strategies and are hesitant to change their practices. Additionally, a lack of incentives from school administrations, workload demands, and inadequate technical assistance might all lower willingness to try out new tools. Reluctance can occasionally be attributed to generational gaps in technological familiarity, with older teachers feeling overtaken by the quick changes. Finally, reluctance may be strengthened by doubts about the true educational advantages of technology, especially if prior encounters produced little or no results. Targeted training, institutional support, and a change in mindset toward viewing technology as a tool rather than a substitute for good teaching methods are all necessary to overcome these obstacles.

2.2 Theoretical Formwork: User Resistance

The actions or viewpoints of people or groups inside an organization that prevent or postpone the adoption and efficient use of a new information system are referred to as user resistance. It is well acknowledged as a significant obstacle in IT implementation projects and frequently results in the partial or total failure of such endeavors (Hirschheim R. &., 1988). Overt or

covert, aggressive or passive, resistance frequently stems from organizational, technological, and psychological issues (Laumer, 2011). For example, consumers may favor the status quo because it is comfortable and familiar, or they may fear job insecurity, higher workload, or loss of control (Kim H. W., 2009). Status quo bias, or the desire to keep things as they are, is a major factor in resistance behaviors, especially when moving is seen as having large costs or when the new system doesn't seem to offer enough benefits (Kim H. W., 2009). Furthermore, users may exhibit different levels of participation, ranging from active sabotage to full support, indicating that resistance is not a straightforward binary of acceptance vs rejection (Lapointe, 2014). The psychological contract theory states that when management and users have different expectations, such as when users feel left out of the implementation process or believe the system is unjust or out of step with their requirements at work, user resistance may also result (Klaus T. &., 2010)**.** Resistance is made worse in the post-implementation phases by elements including inadequate training, usability problems, and inadequate change management (Raisin, 2014; Aslam, 2010). Additionally, by eroding confidence and cooperation, disagreement inside project teams and between departments can exacerbate user resistance, highlighting the necessity of inclusive decision-making and conflict management (Vrhovec, 2021). Effective resistance management calls for customized approaches that take into account the variety of resistance behaviors and user mindsets (Klaus T. W., 2010) In the end, comprehending and controlling user resistance is crucial for long-term system acceptability and organizational transformation in addition to preventing failure.

2.3 Switching Benefits

The anticipated advantages or gains that consumer anticipate when switching from one service provider or product to another are referred to as switching benefits. Switching benefits encourage the consumer to examine alternatives because of expected increases in value, quality, price, or satisfaction, in contrast to switching costs, which discourage change

(Burnham T. A., 2003). These advantages could be cost savings, enhanced user experience, access to superior service features, or alignment with individual values like social impact or brand identity (Kim H. W., 2010). Switching benefits have gained more clout in the digital marketplace since product comparisons, user reviews, and online deals are so easily accessible. Innovation and service quality, for example, are important switching benefits that lower customer inertia and enhance desire to switch, according to study conducted by (Malhotra A. &., 2013) on mobile service consumers in the United States. This is especially true in sectors that rely heavily on technology, as quick development constantly opens up new possibilities for better options (Malhotra A. &., 2013)**.** Customers are also likely to switch if they find the new alternative to have emotional or social value. Emotional fulfillment and epistemic curiosity, like the desire to try out new or trendy smartphone brands, can be strong switching benefits, according to Wong, (Wong K. H., 2019). According to their research, perceived consumption value has a major impact on both brand-switching behavior and brand loyalty (Wong K. H., 2019)**.** Benefits of switching might occasionally be psychological as well as functional or financial. Some customers switch for novelty, adventure, or a better fit with their changing self-image, indicating that symbolic or self-expressive value also plays a significant role (Bansal H. S., 2005). When the perceived benefits are emotionally satisfying, these internal motives frequently surpass the burden of switching costs (Bansal H. S., 2005). Additionally, in B2B settings, switching decisions are frequently dominated by advantages like customization, improved technology, and superior customer service. (Barry J. M., 2008) pointed out that when customers believe a new provider will better meet their changing business demands, moving might strengthen relationships. This implies that even in service-driven situations where short-term interruptions may occur, the perceived future value of switching might enhance long-term engagement (Barry J. M., 2008). Finally, scholarly literature has acknowledged the significance of switching advantages as a counterforce to switching costs, promoting market

competition and consumer mobility. Customers may still move to a new supplier if they think it offers more convenience, trust, or product diversity, according to (Colgate M. &., 2001), even in sectors like finance where switching obstacles are substantial.

2.4 User Participation

The level of active user involvement in the creation, application, or enhancement of a technology or information system is referred to as user engagement. This involvement can take many different forms, including testing prototypes, participating in design discussions, contributing to system requirements, and giving comments (Barki H. &., Measuring user participation, user involvement, and user attitude, 1994). Being present at a meeting or offering suggestions are only two aspects of user participation. The degree of influence users believe they have over the process is also included. For instance, (Hunton J. E., 1997) shown that users are more dedicated and perform better when they are granted real decision-making authority. Users that participate also experience a greater sense of fulfillment and ownership. Users are more likely to accept a system when they are involved in its development or improvement. Psychological buy-in is another term for this emotional bond. According to (Armeen, 2019), this buy-in lessens opposition to change. Participation does not, however, imply that users wish to engage with every aspect of the system. The distinction between user engagement (how users feel) and user participation (what users do) was clarified by (Barki H. &., 1989) It is possible for a person to be emotionally invested but not actively participate, or vice versa. Participation in contemporary systems, particularly online services or websites, includes users joining virtual communities, sharing comments, and customizing services. (Nambisan S. &., 2009) showed that users in virtual customer environments (VCEs) participate to co-create value, help others, and feel part of something bigger. The entire value that customers receive from utilizing a system or service is also enhanced by participation. For instance, (Mohd-Any A. A., 2015) developed the idea of e-value and discovered that, even in cases when users' actual input was

little, they nevertheless view a service as having greater value when they feel involved in the process**.** User involvement in Human-Computer Interaction (HCI) was examined in another study by (Zheng H. X., 2025), which discovered that it acts as a mediator, assisting in the conversion of high system quality into high user-perceived value. They also observed that the more complex the job, the greater the effect**.** Participation is not always active in online communities. (Malinen S. , 2015) noted that passive participation might also take the form of only seeing or reading posts. The success of the system can be impacted by even this quiet involvement, which should be acknowledged in the design**.** Finally, involvement can enhance the user-developer relationship. (Jia J. &., 2018) discovered that participation is made easier and more successful when users and developers have a good understanding of one another's perspectives.

2.5 Transition Cost

The expenses incurred by customers or organizations when migrating from one product, service provider, or system to another are referred to as transition costs, or switching costs (Klemperer P. , 1987). These expenses, which can be financial, psychological, procedural, or time-related, are crucial in determining market dynamics and client loyalty (Burnham T. A., Consumer switching costs: A typology, antecedents, and consequences., 2003). According to (Klemperer P. , Markets with consumer switching costs., 1987), dynamic pricing methods are used in markets where switching costs are high. Businesses typically cut their initial rates to draw in clients before raising them once they have locked them in. (Nilssen T. , 1992) Distinguishes between two primary categories of switching costs: learning costs, which pertain to the effort required to adjust to a new system or interface, and transaction costs, which comprise the time, money, and effort required to initiate a transfer. When modeling tactics for client retention, these distinctions are crucial. (Dubé, 2009), for instance, discover that switching costs may not always diminish competitiveness; in fact, in some market conditions, they may even lower

prices since companies are motivated to increase their future client base. A thorough taxonomy of switching costs is provided by who categorize them as relational (such as a loss of trust or emotional connection with the prior provider), financial (such as exit fees), and procedural (such as time and effort). In a similar vein, (Hess M. &., 2003) suggest that controlling switching costs is a tactical instrument for maintaining enduring connections in networked settings. (Whitten D. &., 2006) emphasize the importance of switching costs in IT outsourcing contracts by developing a second-order model of switching costs from an IT perspective. This model is based on social exchange theory and transaction cost theory. This opinion is supported by empirical study by (Peukert C. , 2019), which demonstrates that switching costs in IT services can represent about one-third of businesses' yearly spending, with significant variances based on relationship-specific characteristics. (Kim M. K., 1999) emphasize the importance of switching costs in IT outsourcing contracts by developing a second-order model of switching costs from an IT perspective. This model is based on social exchange theory and transaction cost theory. This opinion is supported by empirical study by (Peukert C. , Determinants and heterogeneity of switching costs in IT outsourcing: estimates from firm-level data, 2019) which demonstrates that switching costs in IT services can represent about one-third of businesses' yearly spending, with significant variances based on relationship-specific characteristics. Additionally, high switching costs increase client lifetime value and support stable market share in the banking sector, as empirically shown by (Kim M. K., 1999). These results support the idea that switching costs serve as a deterrent to both new rivals and customer attrition (Klemperer P. , Markets with consumer switching costs, 1987). However, (Shin, 2008) caution that this relationship is not linear since, depending on the dynamics of consumer preference, extremely high switching costs can result in both lower and higher market prices. In conclusion, transition costs are a complex idea with strategic, psychological, and economic ramifications

for various businesses. Their presence has an impact on long-term relationship management, corporate strategy, competitive intensity, and customer behavior.

2.6 Switching Cost

A key factor in customer retention and market dynamics is switching cost, which is the perceived expense a client must incur when switching from one service provider or product to another (Burnham T. A., 2003). These expenses have a big impact on customer loyalty and decision-making and might be relational, procedural, or pecuniary in nature (Burnham T. A., 2003). Businesses try to increase switching costs in fiercely competitive marketplaces in order to deter defection and guarantee recurring business (Jones M. A., 2007). When customers are happy with a product or service but still contemplate switching because of price sensitivity or other options, switching costs become especially significant (Yang Z. &., 2004). In these circumstances, switching costs serve as a psychological and financial barrier, strengthening loyalty because of the perceived loss of switching rather than necessarily because of enjoyment (Lee J. L., 2001). Additionally, customers who stay because transferring feels difficult or expensive may experience customer inertia as a result of perceived switching costs (Lee R. &., 2012). The literature has identified several types of switching costs, such as relational costs (like trust or emotional attachments), financial costs (like penalties or lost benefits), and procedural costs (like time and effort) (Burnham T. A., 2003; Jones M. A., 2007)**.** In service industries where long-term client relationships are crucial, like banking, telecommunications, and internet platforms, these factors are particularly significant (Aydin, 2005; Chen P. Y., 2002)**.** Cultural and social factors also influence how switching costs are perceived. Customers from collectivist cultures, for example, might be more sensitive to relational switching costs than those from individualist cultures (Pick, 2016). Additionally, learning new systems, uncertainty, or losing collected digital capital are also examples of switching costs in online environments (Ray, 2012; Ghazali, 2011). Crucially, switching costs are not always

advantageous. Although they can boost brand loyalty, they can also have unfavorable effects like irritated customers, bad press, or brand resentment, especially if they feel trapped (Jones M. A., 2007; Lee R. &., 2012). Consequently, businesses need to balance boosting perceived value with avoiding coercive lock-in tactics (Wang C. Y., 2010). In conclusion, switching cost is a multifaceted idea that has significant theoretical and applied applicability in a variety of businesses. It shapes customer behavior, loyalty dynamics, and competitive strategy by acting as a binder and a barrier (Klemperer P. , Markets with consumer switching costs, 1987; El-Manstrly D. , 2016).

2.7 Perceived Value

A crucial psychological concept that affects user choices is perceived value, especially when it comes to user resistance and technological adoption. According to (Turel O. S., 2007), it describes the user's total assessment of the advantages of utilizing a technology in comparison to the expense, difficulty, and danger involved. Users are more inclined to embrace new technology and less likely to oppose change when they feel it gives significant value, whether through practical advantages, emotional fulfillment, or social recognition. It has been demonstrated that adoption intentions are directly impacted by perceived value in the context of digital and mobile services. For instance, when evaluating the worth of wireless short messaging services, customers took into account factors like cost, social usefulness, quality, and emotional pleasure. Stronger behavioral intentions to utilize the service were associated with higher perceived value, suggesting that the service plays a fundamental role in determining acceptance (Turel O. S., 2007). Furthermore, the degree of user resistance is mediated by perceived value. (Kim H. W., 2009) showed that users are less resistant to a new information system when they believe the advantages outweigh the costs of switching. Perceived value is one of the most important factors in lowering psychological attachment to

current systems and promoting receptivity to new options, according to their research, which is based on the status quo bias theory. When users' personal beliefs and a technology's perceived organizational value align, resistance in corporate settings can be considerably reduced. Perceived value that was in line with professional values decreased physicians' resistance to electronic health record systems by reducing perceived risks to autonomy and disruptions to workflow (Heath, 2022)This emphasizes how perceived value is influenced by both technological aspects and how well they align with the objectives and identity of the user. Furthermore, (Yang H. Y., 2016) investigated the perceived advantages and hazards people connect with wearable technologies in their study on the adoption of wearable devices. They discovered that perceived value was greatly raised by emotional and functional benefits, and that this in turn affected user happiness and behavioral intention. This illustrates how perceived value serves as a link between what users expect and what they actually experience. (Ong C. S., 2013) conducted another study that emphasizes how user readiness influences perceived value. It implies that consumers are more likely to find new systems valuable when they are both psychologically and technologically ready for change. This preparedness lowers resistance and raises perceived usefulness, demonstrating the strong relationship between situational and individual characteristics and perceived value. Last but not least, new research by (Idogawa J. B., 2023) broadens the definition of perceived value by adding design, usability, satisfaction, and innovation as important components. According to their research, enhancing user experience components directly raises perceived value in software projects, making it a crucial component of both user retention and project success.

2.8 Satisfaction

In information systems (IS) research, user satisfaction is a crucial concept that is frequently employed as a stand-in for system success (Ives B. O., 1983). It displays how users feel about interacting with an information system, taking into account its features, output, interface, and

effect on their jobs (Melone, 1990). It is frequentlsy understood to be the degree to which users feel that the information system at their disposal satisfies their information requirements (Bailey, 1983). According to this belief-based viewpoint, perceived utility, total IS performance, and user pleasure are all related. System quality, information quality, and service quality are some of the antecedent elements that shape user happiness, according to (Chin, 2000). These characteristics all affect how consumers evaluate their experience. To properly capture this multifaceted construct, the authors suggested new measurement models (Chin, 2000). Furthermore, contentment is more than just a result; it can also affect how the system is used and accepted in the future (Wixom B. H., 2005). This helps forecast real-world technological system usage patterns and connects the idea to behavioral intents. According to (Kiseleva, 2016), job completion, effort, and contextual performance are all related to satisfaction in complex systems like search engines and intelligent assistants. The assessment of satisfaction is intricately linked with the human aspect, including emotion, cognitive burden, and expectation (McNamara, 2008). Additionally, a number of academics contend that standardized instruments that take into account both subjective and objective factors should be used to quantify satisfaction (Baroudi, 1988). For many areas, measurement instruments such as the 39-factor satisfaction instrument and QUEST 2.0 have been created (Demers, 2002). (Kalankesh, 2020) conducted systematic research that categorized satisfaction influencers into seven areas, demonstrating the multifaceted and contextual character of this phenomenon. This highlights that satisfaction is not just technical but also organizational and covers system quality, vendor support, user characteristics, and organizational structure. Accordingly, user satisfaction is a dynamic, multifaceted concept that combines organizational, psychological, and technical elements and is essential to the efficacy of IS as well as user adoption (Vaezi, 2016); (Zviran, 2003).

2.9 Correlation Between Switching Benefits and Perceive Value

When consumers feel that a different option delivers more perceived value—such as better quality, reduced cost, or emotional fulfillment—they are more likely to switch (Burnham T. A., Consumer switching costs: A typology, antecedents, and consequences., 2003). When a user feels that the benefits surpass the risks or expenses, they are motivated to think about switching (Kim H. W., 2010). For instance, because of its value-added features, moving to a platform with a better interface or support systems is considered advantageous in the context of digital services (Malhotra A. &., 2013). Users are frequently encouraged to switch brands in the smartphone business by emotional and epistemic values, demonstrating that perceived value is not only economic but may also be social or symbolic (Wong K. H., 2019).According to (Bansal H. S., 2005), switching behavior is also increased when perceived value is consistent with a user's sense of self or level of trust in innovation. The likelihood that the switching advantage will be realized increases with the strength of the value perception (Barry J. M., 2008)**.** Although ICT is presented as a useful tool in high school teaching, teachers frequently oppose moving away from conventional approaches because they don't see enough value or advantages in the new system. The perceived value of ICT is not adequately communicated or experienced, therefore the switching benefit is minimal because they can be afraid of losing control, being inexperienced, or not having enough assistance. Benefits of switching are closely linked to increases in customer-perceived value, including improved efficiency, personalization, or service delivery, in other industries like banking or hospitality (Colgate M. &., 2001). Customers' willingness to take chances when the perceived benefits are real is explained by these advantages, which also have an impact on customer loyalty (Lu, 2011).Customers only move suppliers, even in business-to-business (B2B) services, when the new choice clearly shows economic or relational benefit (Liu A. H., 2006). As a result,

switching behavior is rare unless the value is made clear, as is the case with ICT in schools. Perception of value thus becomes a precursor and amplifier of switching advantage.

H1: Switching benefits positively influences perceived value.

2.10 Correlation Between User Participation and Perceived Value

Because users who actively participate in system design or service processes are more likely to acknowledge their own contributions, which improves their assessment of the final product, user participation has a direct and considerable impact on perceived value (Mohd-Any A. A., 2015). Meaningful user participation increases emotional involvement and ownership, which reinforces the idea that the technology or system is important and helpful (Hunton J. E., 1997). Additionally, participation is a psychological as well as behavioral activity; users who believe their opinions are valued and that their preferences are taken into consideration are more likely to respect the system (Barki H. &., Measuring user participation, user involvement, and user attitude, 1994)**.** (Zheng H. X., 2025) demonstrate that user participation in Human–Computer Interaction serves as a mediator between perceived value and system quality, implying that even high-quality systems might not be valued in the absence of active participation. Perceived value also rises in online and virtual situations when users believe their participation directly influences the system's outcome or helps others, which strengthens their loyalty and sense of fulfillment (Nambisan S. &., 2009)**.** (Malinen S. , 2015) goes on to say that because it fosters a sense of relevance and inclusion, even passive engagement—like watching conversations in online communities—can increase perceived value. (Jia J. &., 2018)**,** user participation works best when there is little difference in how users and developers see things, which increases user trust and perceived value. Although ICT has been incorporated into the curriculum in Bangladeshi high schools, many instructors are reluctant to use it because they don't see its usefulness, which stems from their limited involvement in the system's development, training,

and implementation stages. Teachers may perceive ICT as an imposed burden rather than a tool they helped build if they are not included in early decision-making or ongoing support mechanisms. This misalignment reduces their perceived value of the technology and encourages passive resistance. (Barki H. &., Rethinking the concept of user involvement, 1989), user interaction that isn't accompanied by genuine participation might not have a good impact on behavior. Therefore, when users feel empowered and involved at a meaningful level, participation consistently improves perceived value across educational, enterprise, and technical contexts.

H2: User participation positively affects perceived value.

2.11 Correlation Between Transition Cost and Switching Cost

According to (Burnham T. A., Consumer switching costs: A typology, antecedents, and consequences, 2003), transition cost and switching cost are related ideas that affect how people or organizations react to change. Transition cost frequently highlights the short-term load or learning curve that arises during the actual process of change, whereas switching cost typically refers to the obstacles encountered when switching from one product or system to another (Nilssen T. , 1992). Both have psychological, economical, and procedural components that discourage the uptake of new technology (Hess M. &., 2003). Due to the high perceived transition costs, such as the requirement to retrain teaching techniques or revamp lesson plans, many high school instructors avoid using ICT resources even when they are available (Whitten D. &., 2006). When there is institutional inertia and a lack of technical support, these transition costs are frequently included into larger switching costs (Peukert C. , Determinants and heterogeneity of switching costs in IT outsourcing: estimates from firm-level data, 2019). Adoption of ICT by teachers may be seen as a departure from their tried-and-true teaching methods to a novel, unproven paradigm that makes learning more difficult and causes

psychological pain (Klemperer P. , The competitiveness of markets with switching costs, 1987). Thus, transition cost, which primarily impacts teacher behavioral resistance and delayed acceptance, can be viewed as a sub-component or activation phase of switching cost in the context of high school ICT integration. Research indicates that decreased willingness to alter behavior is associated with higher switching costs, particularly in systems like schooling that involve routine or habitual practices (Kim M. K., 1999). Additionally, the relational and procedural costs of switching are further increased by the absence of incentives and assistance, which deters experimenting with new systems (Burnham T. A., 2003). This supports the more general conclusion that emotional and social elements, in addition to the system itself, influence user lock-in (Hess M. &., 2003). Ultimately, even in settings with ample resources, teacher resistance can be explained by switching and transition costs, which can serve as covert obstacles to ICT adoption in schools ((Peukert C. , 2019; Whitten D. &., 2006).

H3: Transition cost positively affects switching costs.

2.12 Correlation Between Switching Cost and Perceive Value

According to (Burnham T. A., Consumer switching costs: A typology, antecedents, and consequences, 2003), switching cost and perceived value are closely related concepts that affect consumer loyalty and behavioral intentions in a variety of institutional and service situations. Users are more inclined to accept switching fees or forego switching entirely in order to maintain the perceived benefits of an existing system or product when they find it to be highly valuable (Yang Z. &., 2004). Furthermore, because people are afraid of losing what they already value—like convenience, familiarity, or social advantages—perceived value increases the psychological cost of switching (Wang C. Y., 2010). In service-based settings, where emotional and interpersonal ties further strengthen the unwillingness to move despite superior alternatives, this link becomes even more important (Edward M. &., 2011). According to (El-Manstrly D. , 2016), high perceived value might thereby amplify the impact of switching

costs, increasing customer retention even in the presence of alternatives. Information and communication technology (ICT) is being introduced in high school education, but many teachers are hesitant to embrace it because they believe traditional teaching methods are more valuable and because switching involves psychological and procedural costs (such as lack of confidence, fear of failure, or time to learn). Therefore, despite the long-term benefits of digital tools, many teachers are unable to make the transfer due to the high switching costs and low perceived value of ICT. Additionally, switching costs operate as a moderating element between user behavior and perceived value; at low switching costs, retention is only guaranteed by high perceived value, but at high switching costs, even moderately valued services are kept (Lee J. L., 2001). To encourage technology adoption and behavioral change, it is crucial to manage switching barriers and raise perceived value (Edward M. G., 2010).

H4: Switching costs negatively affect perceived value.

2.13 Correlation Between Perceive Value and User Resistant

A new technology's perceived value has a significant impact on whether users embrace it or reject it (Turel O. S., 2007). Users are more likely to adopt a technology and exhibit less resistance when they perceive a clear benefit or utility in it (Yang H. Y., 2016). On the other hand, resistance appears as a psychological defense if consumers believe that the technology does not provide enough value in relation to the time, money, or effort needed (Kim H. W., Investigating user resistance to information systems implementation: A status quo bias perspective, 2009). By improving perceived relevance and decreasing perceived threat, value alignment—specifically, if the new system aligns with users' professional values—can dramatically diminish resistance (Heath, 2022). For example, users are more likely to embrace a system if they believe it helps them achieve their objectives without taking away their autonomy or adding to their workload (Heath, 2022). When ICT is incorporated into the curriculum of Bangladeshi high schools, many instructors are reluctant to embrace it because

they do not see the obvious educational or professional benefits of employing digital tools. They frequently think it makes their teaching more difficult rather than easier, which shows a difference in how valuable they think it is, which breeds resistance. Furthermore, research indicates that users' perception of value is improved and they become more receptive to change when they are ready or prepared (Ong C. S., 2013). Even if ICT technologies are helpful, their perceived worth is still poor when teachers lack the necessary training or mental preparation. According to (Idogawa J. B., 2023), software systems that enhance design, usability, and user experience also immediately increase perceived value, which lowers resistance. This emphasizes how crucial it is to design training programs and technology that take into account the real needs and expectations of users. In a variety of contexts, there is a constant inverse relationship between the two concepts: the larger the perceived value, the weaker the resistance (Kim H. W., 2009; Turel O. S., 2007).

H5: Perceived value negatively influences user resistance.

2.14 Correlation Between Satisfaction and User Resistant

In information systems, user resistance and user satisfaction are closely related concepts, especially in educational contexts where user perceptions influence the adoption of technology (Ives B. O., 1983). Users are more likely to be resistant to using a system if they are unhappy with its usability, support, or relevance (Ali, 2016). For example, teachers may become less satisfied and engage in passive or active resistance if they believe that a high school ICT system does not support their teaching objectives or adds to their burden (Kim H. W., 2009). Research indicates that low user satisfaction may increase resistance by reinforcing status quo bias, in which users favor manual procedures over digital technologies (Kim H. W., 2009). Furthermore, resistance behaviors are exacerbated by perceived insignificance to real classroom demands, lack of administrative support, or unhappiness with system training (Hirschheim R. &., 1998; Ellen, 1991). ICT is being introduced in high school education, but

many teachers are not embracing it because they are dissatisfied with its usability, curricular relevance, and support systems. As a result, there is more resistance and hesitation to adopt the technology. Psychological variables including low self-efficacy, fear of change, or bad experiences with similar systems in the past can be the core cause of this resistance (Ellen, 1991). Conversely, resistance dramatically decreases and adoption increases when users express high levels of satisfaction, which are fueled by the system's support, usefulness, and convenience of use (Wixom B. H., 2005). Thus, lowering user resistance and promoting successful ICT integration in high school classrooms can be achieved strategically by raising user satisfaction (Chin, 2000).

H6: Satisfaction positively influences user resistance.

2.15 Hypothesis and Structured Model

2.15.1 List of all Hypothesis

Table 2.1: List of Hypothesis Description

SL No	Hypothesis Description
H1	Switching benefits positively influences perceived value.
H2	User participation positively affects perceived value.
H3	Transition cost positively affects switching costs.
H4	Switching costs negatively affect perceived value.
H5	Perceived value negatively influences user resistance.
H6	Satisfaction positively influences user resistance.

2.15.2 Structured Model

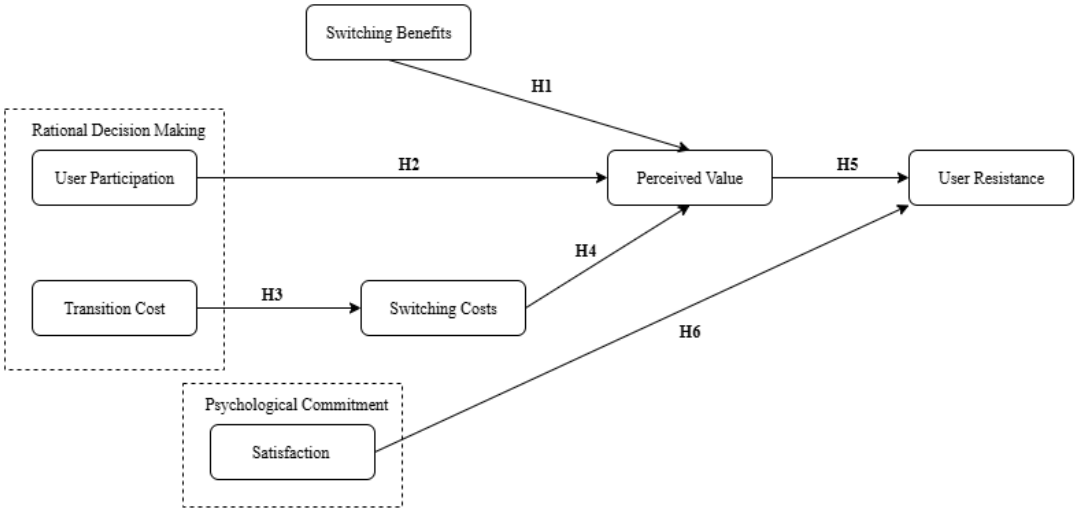

Figure 2.1: Proposed Thesis Model

Chapter-3: Research Methodology

3.1 Quantitative Research

The term "quantitative research" is defined differently by many scholars and educators. A few of them are as follows: Numerical representation and modification of observations for the purpose of quantitative research in order to characterize and elucidate the phenomena that those observations represent. Numerous natural and social fields, including as physics, biology, psychology, sociology, and geology, employ it. Furthermore, (Cohen, 1980) defined quantitative research as social research that makes use of empirical claims and procedures. According to him, an empirical assertion is characterized as a description of what "is" the case in the "real world" as opposed to what "ought" to be the case. The application of empirical evaluations is another aspect of quantitative research, and empirical claims are typically stated in numerical terms. An empirical evaluation is a type of assessment that aims to ascertain whether a given program or policy empirically satisfies or falls short of a given standard or norm. Furthermore, who defined it as a sort of study that aims to explain phenomena by gathering numerical data and analyzing it using mathematically based techniques (namely statistics). Because we can examine nearly any number of events in this manner, quantitative research is very adaptable. Nevertheless, quantitative approaches are not always the most effective for studying certain occurrences. Although quantitative approaches have a number of noteworthy benefits, they also have drawbacks. This indicates that qualitative approaches are more effective for studying some phenomena. To put it briefly, assessing social reality is typically the main goal of quantitative research. Finding quantities in anything and establishing research numerically are the goals of quantitative research and/or inquiries. Rigid guidelines in the data gathering and analysis process are crucial because quantitative researchers see the world as reality that can be objectively assessed. Various Quantitative Research Types Quantitative research comes in various forms. It falls under the following categories, for

example: survey research, correlational research, experimental research, and causal-comparative research. Every type has typical traits of its own.

3.2 Research Process

In general, this study used a research methodology, which is typical of all studies with a scientific foundation. The problem, hypothesis, research design, measurement, data collecting, data analysis, and generalization are the seven primary phases. Every step both influences and is influenced by theory (Frankfort-Nachmias and Nachmias 1992). The literature review was the first step in the research process, during which gaps in the literature were identified and the problem or research questions were formed. The research questions for this study were outlined in Chapter One, and a review of pertinent literature was covered in detail in Chapter Two. The identification of pertinent ideas as a result of the literature review served as a foundation for the development of the research's theoretical framework and hypotheses. The theoretical foundation and theoretically supported hypotheses of this study are described in Chapter Three. The next step was to decide which research design will work best for this study. As outlined in the last section of this chapter, the researcher's first task was to determine the appropriate research paradigm. Following the selection of the study paradigm, the suitable research design was used. The process of creating the survey questionnaire was given considerable thought during the measuring phase. A pilot study was conducted as the last step in this phase to assess the survey questionnaire's face validity and reliability. The findings from the The survey questionnaires were modified as needed using the previously mentioned process Following revisions and finalization of the survey questionnaire, data was gathered from the sample using the completed instrument. After two more stages, the data were examined. Initially, preliminary data analysis was used to clean up the data and obtain a general understanding of the responses. Structural equation modeling was used in the second stage. Chapter Five provides an

explanation of the data analysis. Discussion of the findings' implications and interpretation of the results comprised the last phase. All of these topics are covered in Chapter Six. The researcher must consult pertinent theories and literature in order to clearly explain and discuss the findings in depth.

3.3 The Survey Methods

Dealing with delicate subjects is necessary while collecting data from respondents regarding their leadership styles, personality traits, moral disengagement tendencies, the ethical atmosphere of their organizations, and instances of deviant workplace behavior. Because it enables the researcher to receive standardized replies from a defined population while retaining comparability among participants, the survey method is a methodical and efficient way to gather sensitive data (Schwarz, 1998). This approach makes it possible to gather data from big samples in an effective manner, which makes it perfect for research projects that seek to find correlations and patterns across numerous variables. Because they may record respondents' opinions, beliefs, and self-reported behaviors in a methodical and quantitative manner, surveys are particularly helpful in behavioral research. Researchers can cover a variety of constructs in a single instrument thanks to survey design's adaptability, which enables statistical analysis and hypothesis testing (Schwarz, 1998) Standardized questions also help ensure measurement consistency, which is essential for drawing insightful conclusions and extrapolating results to a broader population. Nevertheless, there are certain drawbacks to surveys, including measurement error, nonresponse bias, and the incapacity to fully represent the variety of participant experiences. Our work included rigorous questionnaire design procedures, validated measurement scales, and pre-testing to ensure reliability and clarity in order to overcome these issues. These methods, which are supported by (Schwarz, 1998), help to improve data accuracy and lessen the limitations of survey methods.

3.4 Survey Questionnaires Adaption

Variable	Author
Switching Benefits	(Kim H. W., 2010)
User Participation	(Mohd-Any A. A., 2015)
Transition Cost	(Nilssen T. , 1992)
Switching Cost	(Yang Z. &., 2004)
Perceived Value	(Turel O. S., 2007)
Satisfaction	(Ives B. O., 1983)
User Resistance	(Hirschheim R. &., 1998)

3.5 Questioner

"A reformulated written set of questions to which respondents provide their answers, typically within narrowly defined response options" is the definition of a questionnaire (Liu Z. &., 2018). Questionnaires were the main tool used in this study to collect data. This approach is considered one of the most popular data collection techniques (Baker, 2003) and is widely acknowledged as a successful way to obtain information from big sample groups ((Matsumori, 2021)). There were two main sections to the questionnaire. While the subsequent portions included items created specially to measure the constructs under investigation, the first segment addressed demographic questions.

Section A

In this section, the demographic information of participant is included.

Section B

This section includes 19 questions asking respondents to prove our hypothesis.

Participant had to answer by marking based on the scale.

Strongly Disagree	Somewhat Disagree	Disagree	Neutral	Agree	Somewhat Agree	Strongly Agree
1	2	3	4	5	6	7

3.6 Sample Size

We developed a survey to test our hypothesis and gather empirical data for the study model. The samples were surveyed using structured questionnaires. Before a study is conducted, statistical power can be efficiently managed using a priori analysis (Kang, 2021). Using the program, G*Power 3 was employed using 6 predictors (IQ, SQ, and SAT antecedents), a medium effect size, a probability of Type I error $\alpha = 0.05$, and a chance of Type II error $\beta = 0.05$ $(1-\beta) = .95$. With 95% power, the projected sample size was 150. An 91.43% response rate was achieved by distributing 350 surveys and receiving 320 responses.

3.7 Data Collection Procedure

This study's primary method of data collection was a self-administered questionnaire. "A data collection technique in which respondents read the survey questions and record their answers without the presence of a trained interviewer" is how (Ariyo, 1998) defines a self-administered questionnaire. Because respondents are less affected by social desirability bias than in interviewer-administered surveys, this approach was selected because it promotes more truthful responses (Kristjansson, 2013). In order to ensure that the content was acceptable and comprehensive for the setting of this investigation, the questionnaire used in this study was meticulously created by synthesizing pertinent questions from many current research papers. Following completion of the survey, information was gathered utilizing a drop-off and collect strategy. Respondents received the questionnaires at their location from a study representative, and the completed surveys were subsequently gathered (Ariyo, 1998). By using this method, respondents were able to finish the questionnaire at their own leisure and pace, which gave them the opportunity to carefully consider each question and look up more information as needed (Ariyo, 1998). Additionally, having a study representative hand-deliver the questionnaire helped to answer any questions respondents might have had and increased their desire to participate by interacting directly with them (Ariyo, 1998).

3.8 Demographic Information

The demographic details of the participating teachers are shown in Table 1. 351 replies in all were gathered from Bangladeshi educators. With 297 participants (84.6%) who were male and only 54 participants (15.4%) who were female, the sample was overwhelmingly male, suggesting a clear gender gap in the teaching profession. Age distribution showed that 240 teachers, or 68.4% of the participants, were primarily in the 36–46 age range. Just 15 instructors (4.3%) were between the ages of 47 and 57, while another 96 teachers (27.4%) were between the ages of 25 and 35. No one over the age of 57 was listed as a participant. In terms of educational background, 293 teachers, or 83.5 percent of the respondents, had a Master's degree. A wide range of degree titles were listed, such as Master of Business Administration (1.7%), Master of Science (2.3%), and Master of Arts (4%). Although they made up less than 1% of the total, a number of additional degrees, including those in English, Bangla, physics, and social science, were also mentioned. The comments as a whole point to a highly qualified population of instructors, notwithstanding minor discrepancies in the degree labels. According to 126 instructors (35.9%) surveyed on the disciplines they teach; mathematics is the most often taught subject. English (26 teachers, 7.4%), biology (30 teachers, 8.5%), Islam (27 teachers, 7.7%), and Bangla (80 teachers, 22.8%) came next. Ten teachers (2.8%) taught ICT, although fewer respondents specified other disciplines including accounting, physics, chemistry, social science, and history. As for the educational level they instruct, most participants (273 teachers, 77.8%) said they instruct high school pupils. Forty teachers (11.4%) reported teaching both primary and high school pupils, whereas a smaller number (38 teachers, 10.8%) taught at the primary level. The well-educated, primarily male teaching staff actively involved in secondary education is reflected in these demographic observations. The traits of this group provide important background information for examining the difficulties and opposition encountered when incorporating ICT into secondary school courses.

Table 3.1: Demographics Information

Demographic Information	Number	Perenties (%)
Gender		
Male	297	84.6%
Female	54	15.4%
Age Range		
25-35	96	27.4%
36-46	240	68.4%
47-57	15	4.3%
Above	0	0
Highest academic degree		
Master's	342	97.5%
Master in Bangla	1	0.31%
Maters in Physics	1	0.31%
Bangla	1	0.31%
Honarse	1	0.31%
Master of Business administration	1	0.31%
Master of Bangla	1	0.31%
B.A	1	0.31%
Maters in Bangla	1	0.31%
Master of social science	1	0.31%
Which subject do you teach?		
Math	126	35.89%
Bangla	80	22.79%
Biology	30	8.54%
Islam	27	7.69%
English	26	7.40%
mathematics	12	3.41%
ICT	10	2.84%
Accounting	6	1.70%
Master's	5	1.42%
Physics	5	1.42%
bangla	5	1.42%
Social Science	4	1.13%
Mathematics	3	0.85%
Islamic history	2	0.56%
Social science	2	0.56%
Philosophy	2	0.56%
chemistry	2	0.56%
physics	2	0.56%
Finance and banking	1	0.28%
Finance and Baking	1	0.28%
Islamic History	1	0.28%
Islamic Studies	1	0.28%
Social work	1	0.28%
Management	1	0.28%
Chemistry	1	0.28%

Economics	1	0.28%
History	1	0.28%
Zoology	1	0.28%
Botany	1	0.28%
Arabic	1	0.28%
Do you teach primary school students or high school students as well?		
High School	273	77.8%
Primary School	38	10.8%
Both	40	11.4%

Chapter-4: Research Methodology

4.1 Data analysis technique

Using SmartPLS software, Partial Least Squares Structural Equation Modeling (PLS-SEM) was used to evaluate the data. One well-liked variance-based structural equation modeling method for complicated models with many constructs and exploratory research is PLS-SEM (Sobaih, 2022). Even with small sample sizes, this method produces reliable estimates by allowing the measurement model (validity and reliability of constructs) and the structural model (relationships between constructs) to be evaluated simultaneously (Pratiwi, 2022). SmartPLS was selected because of its easy-to-use interface and strong ability to anticipate correlations between latent variables, which makes it ideal for analyzing data from self-administered surveys. The study was carried out in two stages: testing of the structural model to examine anticipated correlations between variables and evaluating the measurement model to determine construct validity and reliability (Sobaih, 2022)

4.2 Measurement Model

Researchers should test the outer model after creating the research model, according to (dos Santos, 2023). We evaluated discriminate validity, composite reliability (CR), and average variance extracted (AVE) to evaluate the outer model.

Table 4.1: Average Variance Extracted (AVE)

	AVE
Perceived Value	0.524
Satisfaction	0.649
Switching Benefits	0.520
Switching Cost	0.481
Transition Cost	0.629
User Participation	0.665
User Resistance	0.770

Table 4.2: Composite Reliability (CR)

	CR
Perceived Value	0.688
Satisfaction	0.787
Switching Benefits	0.811
Switching Cost	0.735
Transition Cost	0.871
User Participation	0.798

4.3 Structural Model

The results of the structural model hypothesis testing, which was intended to investigate the factors influencing user resistance to ICT integration in Bangladeshi high school education. The model looked at how the main outcome variable, user resistance, was affected by six important constructs: transition cost, switching cost, switching benefits, user participation, satisfaction, and perceived value.

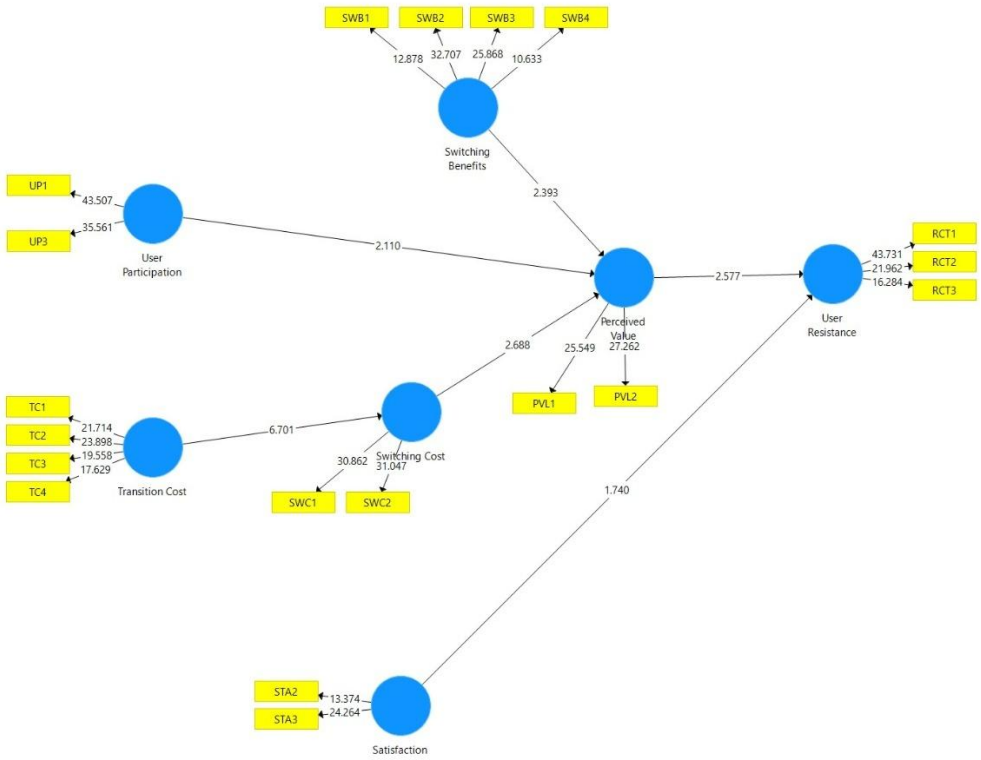

Figure 4.1: Structural Model

A number of proposed correlations are empirically supported by the model fit and path coefficients. First, instructors perceive high transitional hurdles, like time, effort, and required training, when adopting ICT, as evidenced by the strong and significant positive influence of Transition Cost on Switching Cost (β = 0.607, T = 9.046, P = 0.000). This supports earlier findings that transition-related stressors may impede the adoption of new technologies in learning environments (Yang Z. &., 2004). Conversely, switching cost significantly impacted perceived value (β = 0.392, T = 3.581, P = 0.000), indicating that teachers see less value in the new ICT tools when they expect high switching costs (e.g., complexity, loss of control). This result is in line with (Liu A. H., 2006), who emphasized how switching cost and value perception in adoption scenarios are inversely related. Switching Benefits also positively influenced Perceived Value (β = 0.282, T = 2.111, P = 0.018), suggesting that the more teachers recognize advantages (e.g., better content delivery, efficiency), the more valuable ICT becomes to them. This supports the idea that perceived relative advantage is a critical driver in overcoming resistance. User Participation demonstrated a moderate yet significant effect on Perceived Value (β = 0.151, T = 1.733, P = 0.042), implying that teachers involved in the decision-making or training process are more likely to appreciate the benefits of ICT. This echo finding by (Mariska, 2022) who emphasized engagement as a means of increasing acceptance. User resistance was moderately significantly impacted by satisfaction (β = 0.130, T = 1.656, P = 0.049), suggesting that hesitation may be influenced by unhappiness with previous or present technological implementations. This confirms previous findings that resistance was inversely correlated with customer pleasure (Chen Y. P., 2022). Most significantly, User Resistance was adversely affected by Perceived Value (β = 0.212, T = 2.736, P = 0.003). This approach supports the main theoretical premise of this study and is consistent with the Technology Acceptance Model (Davis, 1989) and contemporary resistance literature by (Andrade, 2019) confirming that teachers' resistance to using ICT decreases when their perceived value of it

increases. When taken as a whole, the structural model supports the assumptions put out and emphasizes that the main causes of teachers' resistance to ICT in high school education are perceived lack of value, switching costs, and transition barriers. It is essential to lower switching and transition costs, increase participation, and highlight obvious advantages in order to lessen resistance.

Table 4.3: Path Coefficients

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values
Perceived Value -> User Resistance	0.212	0.209	0.077	2.736	0.003
Satisfaction -> User Resistance	0.130	0.153	0.079	1.656	0.049
Switching Benefits -> Perceived Value	0.282	0.293	0.134	2.111	0.018
Switching Cost -> Perceived Value	0.392	0.382	0.109	3.581	0.000
Transition Cost -> Switching Cost	0.607	0.621	0.067	9.046	0.000
User Participation -> Perceived Value	0.151	0.156	0.087	1.733	0.042

4.4 Discussion

According to the study's findings, a complex interplay between user resistance, contentment, perceived value, switching cost, transition cost, user participation, and switching benefits shapes the restricted adoption of ICT in Bangladeshi high school education. Among these, user resistance—which is directly impacted by perceived value and satisfaction—emerged as a crucial obstacle to ICT adoption. According to the findings, teachers are more reluctant to use ICT resources when they are unhappy with them because of usability problems, a lack of locally relevant information, or insufficient assistance (Kim H. W., 2009). In line with other research that emphasizes value perception as a key factor in determining technology acceptability, instructors also have a tendency to oppose integrating ICT tools into their teaching methods

when their perceived value is low (Yang Z. &., 2004). The correlation analysis further demonstrated that satisfaction negatively relates to user resistance, implying that higher satisfaction with ICT tools—through ease of use, reliability, and relevance—reduces reluctance to adopt them (Bhattacherjee, 2011). Additionally, perceived value also shows a negative relationship with user resistance, suggesting that teachers who see ICT as beneficial for improving teaching quality and student engagement are more likely to accept it (Liu A. H., 2005). Perceived value was found to be substantially correlated with switching cost. The perceived value of new ICT solutions may be lowered by high switching costs, such as the requirement for retraining, time commitment, and lesson plan adaptation (Burnham T. A., 2003). Additionally, there was a strong correlation between transition cost and switching cost, suggesting that administrative and logistical obstacles, like a lack of infrastructure, financial limitations, and regulatory delays, directly make it more difficult to embrace new ICT tools (Chen P. Y., 2002). The influence of user involvement in determining perceived value was another significant discovery. Instructors who actively participate in the planning, personalization, and decision-making phases of ICT installation are more likely to see the technology's benefits, which increases its adoption (Bano, 2015). This is consistent with research that highlights the use of participatory design to increase user commitment and satisfaction. Finally, there was a positive correlation between perceived value and switching benefits. When teachers expect significant advantages—like better lesson delivery, increased student engagement, or less administrative work—that exceed the difficulties of change, they are more likely to embrace ICT (Keaveney, 2001). Therefore, overcoming resistance in the high school setting requires proving concrete instructional benefits. Overall, these results imply that a complex web of organizational, functional, and psychological factors influences teachers' adoption of ICT in Bangladeshi high schools rather than a single aspect. A comprehensive strategy that boosts happiness, highlights the perceived value of ICT, controls switching and

transition costs, includes teachers in decision-making, and effectively conveys the advantages of change is needed to reduce user resistance. In order to promote sustainable technology integration, these insights emphasize the significance of resource allocation strategies, participatory ICT planning, and structured training programs for policymakers and educational leaders.

Chapter-5: Conclusions & Recommendations

5.1 Implication

In order to comprehend faculty resistance to ICT adoption in Bangladeshi high schools, this study has important theoretical and practical ramifications. By incorporating concepts like switching advantages, user participation, transition cost, switching cost, perceived value, satisfaction, and user resistance within the educational setting, it theoretically expands on the Status Quo Bias Theory. In line with earlier studies that highlight how technology adoption increases when users perceive obvious benefits, the results validate that perceived value is a crucial factor in determining user resistance (Turel O. S., 2007; Kim H. W., 2009). Furthermore, previous research showing the procedural and psychological costs of technology adoption change is supported by the strong correlation between transition cost and switching cost (Burnham T. A., Consumer switching costs: A typology, antecedents, and consequences., 2003; Klemperer P. , Markets with consumer switching costs, 1987). Practically speaking, the findings imply that legislators and school officials ought to give top priority to raising perceived value by showcasing the observable educational advantages of ICT, like enhanced lesson delivery and increased student involvement. Additionally, resistance can be lessened by lowering transition and switching costs through proper training, technical assistance, and workload modifications. In addition to promoting a sense of ownership, encouraging teacher involvement in ICT planning and decision-making processes can increase perceived value and acceptance (Barki H. &., Measuring user participation, user involvement, and user attitude, 1994; Hunton J. E., 1997).

5.2 Research limitations and future direction

Although this study offers insightful information, there are a few important limitations to be aware of:

- **Geographic Restrictions:** The study sample was limited to high schools in Bangladesh, which would have limited the findings' applicability in other educational or cultural contexts.
- **Self-Reported Data:** Based on self-reported surveys, bias may be introduced because of survey items' subjective interpretations or social desirability (Schwarz, 1998)
- **Cross-Sectional Design:** Because the study used a cross-sectional methodology, it was not possible to evaluate how resistance changed over time as ICT use advanced.
- **Restricted Variable Scope:** Although the model identified important predictors, it did not look at other pertinent factors including institutional leadership, digital literacy, and cultural attitudes toward technology.

Longitudinal studies could monitor shifts in perceived worth and resistance across several academic years for future research. Comparative research between nations or areas may be useful in determining how cultural and policy variations affect the uptake of ICT. Furthermore, using qualitative techniques like focus groups or interviews may yield deeper understanding of the contextual and emotional elements influencing resistance.

5.3 Conclusion

This study shows that a complex interaction of organizational, procedural, and psychological factors shapes teacher opposition to ICT adoption in Bangladeshi high schools. The results show that while high switching and transition costs erode adoption intentions, perceived value is crucial in lowering resistance. Promoting good attitudes toward technology integration requires teachers to actively participate in ICT planning processes and acknowledge the concrete advantages. In the end, the study emphasizes the necessity of an all-encompassing strategy for ICT adoption, one that strikes a balance between the development of technological infrastructure and human-centered tactics like ongoing training, participatory decision-making,

and transparent benefit communication. Policymakers and school administrators may improve teaching methods and learning outcomes by tackling these issues, which will also lessen opposition and increase the long-term viability of ICT integration in the classroom.

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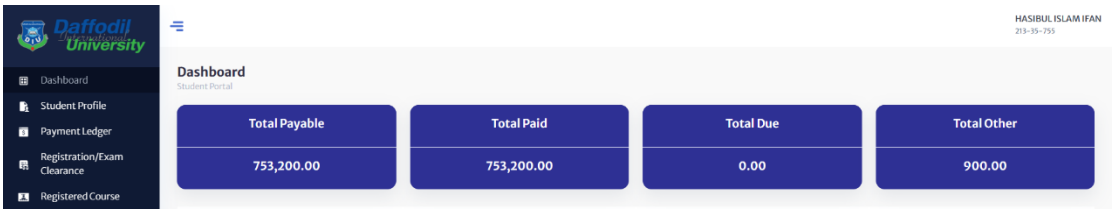

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