



Investigating Factors Influencing Decision Makers to Adopt Accreditation Information System Using Multi Theory of Technology Acceptance Model, Resource Dependence Theory, and Technology-Organization-Environment: Evidence from Indonesian Private Universities

Arif Hartono*, Ratna Roostika, Istyakara Muslichah

Department of Management, Faculty of Business and Economics, Universitas Islam Indonesia. *Email: arif.hartono@uii.ac.id

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ABSTRACT

This study explores the factors influencing decision-makers adoption of the accreditation information system (AIS) in private universities across Yogyakarta, Surakarta, Magelang, Semarang, and Purwokerto, focusing on economics and business faculties accredited by LAMEMBA. Using a quantitative research design, data were collected from 300 decision-makers, including heads of study programs and program secretaries, through structured questionnaires. The analysis combined descriptive statistics with structural equation modeling (SEM) using SMART-PLS software to examine the relationships between latent variables. Findings reveal that financial costs and system complexity negatively influence AIS adoption, while perceived usefulness significantly drives adoption intentions. By integrating the technology acceptance model (TAM), resource dependence theory (RDT), and technology-organization-environment (TOE) framework, the study provides a holistic understanding of technology adoption in higher education. This comprehensive approach highlights the interplay of individual perceptions, external pressures, and organizational readiness in influencing adoption decisions. The study offers actionable insights for policymakers and academic leaders, contributing to the broader discourse on technology adoption in accreditation systems, particularly within developing countries like Indonesia. It underscores the importance of addressing financial and resource constraints to enhance the adoption of innovative systems in higher education.

Keywords: Technology Acceptance Model, Resource Dependence Theory, Technology-Organization-Environment, Information System, Accreditation, Academic, Indonesia

JEL Classification: I23, O33, M15

1. INTRODUCTION

Technology integration into higher education management has become essential for institutions seeking to enhance operational efficiency, improve decision-making, and ensure compliance with regulatory standards. One such critical innovation is the accreditation information system (AIS), designed to streamline the accreditation process and enhance the accountability of higher education institutions. In many developing countries, such as Indonesia, accreditation systems play

a pivotal role in maintaining educational standards and ensuring that programs meet national and international quality benchmarks (Venkatesh et al., 2012), (Aboelmaged, 2014), (Moertini et al., 2012). Recent studies highlight the growing significance of technology adoption in higher education for operational effectiveness and competitive advantage (Aldhaban et al., 2015).

A complex interplay of individual, organizational, and environmental factors influences the adoption of AIS by decision-

makers in higher education institutions. The technology acceptance model (TAM) has been widely used to explore technology adoption behavior, with additional models such as UTAUT2 proving useful in explaining mobile banking and higher education technology adoption (Alalwan et al., 2017). TAM, developed by (Davis, 1989), is one of the most widely applied models for understanding technology adoption. TAM posits that two core beliefs - perceived usefulness (PU) and perceived ease of use (PEOU) - are critical determinants of users' intention to adopt a new system. In the context of AIS, the decision-maker's perception of the system's ability to improve accreditation efficiency and reduce administrative burdens will likely influence their adoption decisions (Dwivedi et al., 2019). However, while TAM focuses on the individual's perception of technology, it does not account for external influences and organizational factors that also play a crucial role in adoption decisions, especially in higher education contexts (Venkatesh and Bala, 2008), (Alalwan et al., 2016).

To address these limitations, this study integrates Resource Dependence Theory (RDT), which emphasizes how external dependencies influence organizational behavior (Pfeffer and Salancik, 2006). RDT suggests that organizations adopt technologies based on internal evaluations and in response to external pressures and dependencies on critical resources, such as government regulations, funding bodies, and accreditation requirements (Hillman et al., 2009). In the Indonesian context, the pressure to comply with national accreditation standards, maintain institutional reputation and secure resources may drive decision-makers to perceive AIS as essential for achieving organizational goals. By incorporating RDT, this study explores how external dependencies on regulatory bodies and resource providers influence decision-makers' adoption of AIS (Wry et al., 2013), (Verbruggen et al., 2010).

Additionally, this research employs the technology-organization-environment (TOE) framework, which provides a holistic view of technology adoption by considering technological, organizational, and environmental factors (Baker, 2012). The TOE framework highlights the role of organizational readiness, technological infrastructure, and ecological pressures in shaping technology adoption decisions (Bouwman et al., 2019). In the context of AIS, the organizational capacity to implement and sustain the system and the technological readiness of faculties are critical considerations (Gangwar et al., 2014). Furthermore, external environmental factors, such as regulatory mandates and competitive pressures, can also influence AIS's perceived importance and utility (Qasem et al., 2020). By combining TAM, RDT, and TOE, this study seeks to provide a comprehensive understanding of the multidimensional factors influencing the adoption of AIS. This study employs a multi-theoretical approach, integrating TAM, resource dependence theory (RDT), and the technology-organization-environment (TOE) framework to examine the factors influencing the adoption of AIS among private universities' Indonesian economics and business faculties.

LAMEMBA, the Independent Accreditation Agency for Economics, Management, Business, and Accounting, is an accreditation body in Indonesia focused on assessing and

certifying the quality of educational programs in economics, management, business, and accounting. It was established to ensure educational institutions meet national and international standards. LAMEMBA plays a critical role in the accreditation process for higher education institutions in these disciplines. In Indonesia, very limited commercial information systems facilitate the accreditation process and manage accreditation documents and data. Consequently, no information system is currently available for the Economics, Management, Business, and Accounting programs to assist the programs with storing and processing LAMEMBA accreditation data. Study programs in Indonesian universities typically use their facilities to manage accreditation documents. Therefore, AIS in this study is a new information system design that can be used to support LAMEMBA accreditation.

2. LITERATURE REVIEW

2.1. Integration of TAM, RDT, and TOE in Technology Adoption

Integrating TAM, RDT, and TOE provides a comprehensive framework for analyzing technology adoption, particularly in complex institutional settings like higher education. While TAM focuses on individual-level perceptions of technology, RDT and TOE offer insights into the broader organizational and environmental factors that drive technology adoption decisions (Gangwar et al., 2014), (Oliveira et al., 2016).

Recent studies highlight the benefits of integrating these models to provide a more holistic view of technology adoption. For instance, (Hussein Alghushami et al., 2020) integrated TAM and TOE to analyze the adoption of cloud computing systems in higher education, finding that while individual perceptions were critical, organizational readiness and environmental pressures also played significant roles in adoption decisions. Similarly, (Anaam et al., 2009) demonstrated the importance of combining TAM and RDT to understand how external dependencies, such as regulatory requirements and funding constraints, shape the adoption of accreditation systems in public universities in Yemen.

Integrating technological systems into higher education management, particularly for accreditation purposes, has emerged as a critical factor in enhancing institutional accountability and performance. While previous studies have examined technology adoption in higher education using individual theoretical lenses, the novelty of this research lies in its multi-theoretical approach. By combining TAM, RDT, and the TOE framework, this study comprehensively analyzes the factors influencing decision-makers' adoption of the accreditation information system (AIS) within Indonesian economics and business faculties. This integrative approach addresses significant gaps in the literature and provides a holistic understanding of the socio-technical dynamics of technology adoption.

First, while TAM has been extensively employed to assess the influence of individual user perceptions—such as perceived usefulness (PU) and perceived ease of use (PEOU)—on technology adoption (Venkatesh et al., 2003), (Davis, 1989). This study extends TAM's application to organizational decision-

makers. This research addresses a gap in the literature where TAM has been underutilized in high-level decision-making contexts by examining how institutional leaders perceive AIS regarding its ability to improve accreditation efficiency. This extension is critical, as it provides insights into how user-centric factors like PU and PEOU influence strategic organizational choices in adopting national systems.

Second, integrating RDT introduces a novel dimension by examining the external pressures and resource dependencies that shape decision-making (Pfeffer and Salancik, 2006). While RDT is well-established in understanding organizational behavior, its application to technology adoption in higher education accreditation is underexplored. This study uniquely explores how dependencies on external stakeholders—such as government bodies, funding agencies, and international accreditation standards—influence decision-makers' perceptions of the importance and necessity of adopting AIS. The RDT perspective adds a new layer to understanding technology adoption by highlighting how external pressures and institutional resource needs shape the perceived value of adopting accreditation systems.

Third, this research bridges the gap between the internal organizational environment and the broader technological and environmental context by incorporating the TOE framework. TOE highlights the importance of organizational readiness, technological infrastructure, and external environmental factors (Baker, 2012). These are crucial for understanding how higher education institutions navigate the complexities of adopting a national system like AIS. The novelty here lies in applying TOE to the Indonesian higher education context, which presents unique challenges in terms of technological readiness and regulatory pressures. By doing so, the study provides empirical evidence of how these broader factors interact with individual decision-makers' perceptions to drive adoption.

The Indonesian context further enhances the novelty of this research. While much of the literature on technology adoption in higher education is centered on developed economies, this study provides valuable insights into the challenges faced by emerging economies, particularly in managing accreditation processes. With its evolving regulatory landscape and growing emphasis on global competitiveness in higher education, Indonesia presents a unique setting for examining the dynamics of AIS adoption. This empirical focus on Indonesia contributes to the worldwide discourse on educational accreditation and technology adoption in developing countries (Hussein Alghushami et al., 2020).

2.2. Perceived Usefulness and Intention to Adopt AIS

Perceived usefulness (PU) is central to the TAM, developed by (Davis, 1989), to explain the factors influencing individuals' acceptance and use of technology. Perceived usefulness refers to the extent to which an individual believes using a particular system will enhance their job performance. In the case of the accreditation information system (AIS), perceived usefulness plays a pivotal role in shaping the adoption intentions of decision-makers in faculties of economics and business. Accreditation is a crucial driver of institutional legitimacy and reputation, particularly in emerging

economies like Indonesia, where demonstrating compliance with national and international standards is essential for maintaining competitiveness (Absor and Hairunas, 2022). AIS is designed to streamline and standardize the accreditation process, making it easier for institutions to manage data, ensure compliance with evolving regulations, and meet accreditation deadlines. Suppose decision-makers perceive AIS as a tool that will significantly reduce administrative burdens, improve accuracy, and enhance the overall efficiency of accreditation management. In that case, they are more likely to view the system as valuable and adopt it.

Empirical studies across different contexts have shown that perceived usefulness is one of the strongest predictors of technology adoption. For instance, (Al-Gahtani, 2016) demonstrated that systems perceived as helpful in improving academic and administrative processes in higher education settings were more readily adopted. Similarly, (Venkatesh and Bala, 2008) confirmed that perceived usefulness consistently influences adoption decisions across industries, particularly in systems that support critical institutional functions. Given accreditation's central role in institutional success and its direct link to resource allocation, funding, and reputation, the perceived usefulness of AIS is expected to influence decision-makers' intention to adopt the system positively. Based on the theoretical foundations of TAM and the supporting empirical evidence, we hypothesize that:

H₁: Perceived usefulness positively influences the intention to adopt the accreditation information system.

2.3. Perceived Importance and Intention to Adopt AIS

Perceived importance refers to how decision-makers view a system or process as crucial for achieving specific goals or fulfilling organizational requirements. Unlike perceived usefulness, which focuses on how a system enhances task performance, perceived importance reflects the broader significance of a system for organizational success and compliance (Venkatesh et al., 2003). In adopting the AIS, perceived importance is critical in shaping decision-makers' intentions to adopt the system, especially in highly regulated environments like higher education, where accreditation is directly tied to institutional credibility and resource allocation (Absor and Hairunas, 2022).

In higher education, particularly within economics and business faculties, accreditation systems like AIS are central to maintaining institutional standards and ensuring alignment with national and international accreditation bodies. The perceived importance of AIS stems from its role in ensuring that faculties can efficiently manage accreditation requirements, adhere to evolving regulatory standards, and demonstrate accountability to stakeholders, including government bodies, students, and industry partners. Decision-makers are likely to adopt AIS if they view it as essential for maintaining accreditation and avoiding the risk of non-compliance, which could jeopardize institutional reputation and funding opportunities (Alsoud et al., 2021).

Several studies have demonstrated that the perceived importance of a system positively influences its adoption. For instance, (Oliveira et al., 2016) found that when decision-makers perceive

a system as vital to achieving strategic goals, they are more likely to adopt it, even if it presents certain challenges, such as cost or complexity. Similarly, research in the public sector by (Aritonang, 2017) showed that perceived importance, driven by regulatory requirements, significantly influenced adopting e-government systems. Given the critical role of accreditation in ensuring institutional legitimacy and competitiveness, decision-makers in Indonesian economics and business faculties are expected to adopt AIS when they perceive it as vital for fulfilling these accreditation responsibilities. Based on this rationale, we hypothesize that:

H₂: Perceived importance positively influences the intention to adopt the accreditation information system.

2.4. Relative Advantage and Perceived Usefulness of AIS

Relative advantage is a core concept in (Rogers, 2003) diffusion of innovations (DOI) theory refers to the degree to which a new technology or system is perceived as superior to the existing methods it seeks to replace. When a new system offers clear advantages—such as greater efficiency, accuracy, or ease of use—over current practices, users are more likely to perceive it as useful and adopt it. In the context of the AIS, relative advantage reflects how decision-makers in economics and business faculties perceive the system as superior to traditional accreditation management practices. This includes the system's ability to automate manual processes, improve data accuracy, reduce administrative burdens, and ensure compliance with regulatory requirements (Hussein Alghushami et al., 2020).

The perceived usefulness (PU) of a system is central to the TAM, which posits that the more users believe a system will enhance their performance, the more likely they are to adopt it (Davis, 1989). In higher education, accreditation is a resource-intensive process that requires precise data management and timely submission of reports. AIS promises to streamline these processes, offering significant improvements over manual methods, such as automating accreditation workflows, improving data consistency, and enhancing institutional transparency. Decision-makers are more likely to perceive AIS as useful if it demonstrates a relative advantage over existing accreditation management methods, fulfilling their need for increased operational efficiency and compliance.

Empirical studies support the relationship between relative advantage and perceived usefulness. For example, (Al-Gahtani, 2016) found that the perceived relative advantage of new information technologies is a key determinant of their perceived usefulness and subsequent adoption. Similarly, (Venkatesh et al., 2003) identified relative advantage as one of the most consistent predictors of technology adoption across various contexts. In the case of AIS, decision-makers in Indonesian economics and business faculties will likely view the system as useful if it significantly enhances their ability to meet accreditation standards more effectively and efficiently than traditional methods. Thus, we propose the following hypothesis:

H₃: Relative advantage positively influences the perceived usefulness of the accreditation information system.

2.5. Complexity and Perceived Usefulness of AIS

The concept of complexity in technology adoption is derived from the Diffusion of Innovations (DOI) theory, which defines complexity as the degree to which a technology is perceived as challenging to understand and use (Rogers, 2003). Complexity has been shown to negatively affect the adoption of new technologies, particularly when users face challenges in learning and integrating the system into their existing workflows. In the context of TAM, complexity is inversely related to perceived ease of use, which influences perceived usefulness (PU) (Venkatesh and Bala, 2008). When users perceive a system as complex and challenging to operate, they are less likely to find it helpful, as the time and effort required to master the system may outweigh the benefits. In the case of AIS, if decision-makers perceive the system as overly complex, they may doubt its value in improving accreditation processes, reducing their intention to adopt it.

The TOE framework further emphasizes that complexity can hinder technology adoption by increasing perceived risk and reducing organizational readiness (Baker, 2012). In organizations where systems like AIS are implemented, the system's complexity may lead to resistance from staff and decision-makers, particularly if they lack the technical skills to manage the system effectively. Studies have shown that when complexity is high, users are more likely to perceive a system as difficult to integrate with existing workflows, reducing its perceived usefulness (Alshamaila et al., 2013). For Indonesian faculties of economics and business, which may have limited resources and technical expertise, the complexity of AIS could be a significant factor in diminishing its perceived utility.

Empirical evidence from recent studies reinforces the negative relationship between complexity and perceived usefulness. For instance, (Ifinedo, 2016) found that the perceived complexity of enterprise resource planning (ERP) systems in higher education institutions led to lower levels of perceived usefulness as users struggled with the system's technical features and integration with existing processes. Similarly, (Hussein Alghushami et al., 2020) demonstrated that high system complexity negatively impacted the perceived usefulness of cloud computing adoption, particularly in organizations with limited technical resources and support. Other scholars, such as (Mohammadi, 2015), also identified that complexity in the user interface and system functionalities of e-learning platforms led to reduced perceptions of usefulness among educators. In the context of AIS, these findings suggest that if decision-makers perceive the system as difficult to use or integrate with their accreditation processes, they will likely view it as less valuable, reducing their motivation to adopt it. Based on these theoretical foundations and empirical evidence, we hypothesize that:

H₄: Complexity Negatively Affects The Perceived Usefulness of The Accreditation Information System.

2.6. Compatibility and Perceived Usefulness of AIS

Compatibility refers to the degree to which a new system or technology is perceived as consistent with users' existing values, experiences, needs, and the organization's processes

and infrastructure (Rogers, 2003). When a system aligns with users' current practices and fits well into existing organizational workflows, it is often seen as easier to integrate and more beneficial. In information systems, compatibility is closely tied to perceived usefulness because systems that align with users' needs and organizational requirements are more likely to be viewed as tools that enhance performance and efficiency (Venkatesh et al., 2003). When a system is compatible, users are more likely to perceive it as reducing disruptions, making it easier to achieve desired outcomes.

The positive relationship between compatibility and perceived usefulness is well-documented in the literature. For example, (Alalwan et al., 2016) found that compatibility with users' daily activities and preferences significantly enhanced their perception of the system's usefulness in mobile commerce. Similarly, (Oliveira et al., 2016) demonstrated that compatibility with organizational processes was a key determinant of perceived usefulness in enterprise systems. In both cases, when a system aligns with how users work and supports existing workflows, it is perceived as more useful because it integrates smoothly into their tasks, reduces friction, and adds value without requiring substantial changes to established practices.

In the case of the accreditation information system (AIS), decision-makers in Indonesian economics and business faculties are likely to perceive the system as useful if it is compatible with their existing accreditation processes, institutional policies, and technological infrastructure. Compatibility in this context could include ease of integration with current data management systems, alignment with regulatory requirements, and the ability to facilitate the institution's specific needs for accreditation. If AIS fits well with these existing systems and processes, decision-makers are more likely to view it as a helpful tool that enhances their ability to manage accreditation efficiently. Based on this reasoning, the following hypothesis is proposed:

H₃: Compatibility positively influences the perceived usefulness of the accreditation information system.

2.7. Compatibility and Intention to Adopt AIS

The TOE framework provides further insights by recognizing the importance of organizational factors, such as compatibility, in shaping technology adoption. TOE suggests that the success of technology adoption is contingent on how well a system fits within the organization's existing infrastructure, culture, and workflows. In adopting the AIS in higher education institutions, compatibility with current accreditation processes, data management practices, and regulatory compliance structures is crucial (Baker, 2012). The TOE framework posits that the more aligned the new system is with the organization's established operations, the smoother the adoption process will be, reinforcing the role of compatibility in influencing adoption decisions.

A substantial body of research underscores the positive relationship between compatibility and the intention to adopt new technologies. For example, (Oliveira and Martins, 2011) found that compatibility with existing organizational practices

and technologies was a significant predictor of adoption intention in e-business technologies. Similarly, (Al-Gahtani, 2016) demonstrated that compatibility was a critical factor in influencing adoption in various technological contexts, especially when the new technology required minimal changes to existing operational systems.

In higher education, studies have highlighted that systems designed to manage accreditation or academic processes must be perceived as compatible with institutional practices to achieve widespread adoption. For instance, (Ifinedo, 2016) found that the likelihood of adoption significantly increased when educational technology, such as e-learning platforms, was compatible with universities' existing teaching methods and administrative processes. The same applies to AIS, where compatibility with current accreditation workflows and regulatory compliance processes would make it easier for decision-makers in the Faculty of Economics and Business of Indonesian private universities to integrate the system into their operations without substantial disruption.

Moreover, (Oliveira et al., 2016) examined the factors influencing e-business adoption across several countries and industries, finding that compatibility with existing organizational processes and the external environment strongly predicted adoption. This is particularly relevant for a developing country like Indonesia, where alignment with both internal institutional needs and external regulatory requirements is critical for successful technology adoption. (Mohammadi, 2015) emphasizes that aligning new accreditation technologies with existing national accreditation standards is crucial for ensuring institutional compliance and operational efficiency in Indonesian higher education. In the case of AIS, the system's compatibility with existing accreditation processes, organizational practices, and regulatory requirements will likely influence the decision-maker's intention to adopt it. Therefore, based on the theoretical foundation and empirical findings, we hypothesize that:

H₆: Compatibility positively influences the intention to adopt the accreditation information system.

2.8. Financial Cost and Intention to Adopt of AIS

The influence of financial costs on technology adoption has been extensively discussed in the literature, particularly within the TOE and RDT frameworks. According to TOE, financial resources represent a critical aspect of organizational readiness, significantly affecting the decision to adopt new technologies (Baker, 2012). Financial costs encompass the initial investment required for system acquisition and the ongoing maintenance, upgrades, and training costs. Higher perceived financial costs may deter organizations from adopting new systems, especially when the benefits are uncertain or not immediately visible (Oliveira and Martins, 2011). In the context of Indonesian economics and business faculties, budget constraints and resource allocation priorities can significantly influence decision-makers reluctance to adopt the AIS.

In line with RDT, organizations often depend on external resources, including financial support from governments, accreditation

bodies, or other funding institutions (Pfeffer and Salancik, 2006). When financial costs are perceived as high, institutions may feel constrained by their external resource dependencies and be less likely to adopt a new system like AIS, fearing that the cost will outweigh the benefits. This financial strain is especially relevant in higher education institutions in developing countries, where public funding is often limited, and additional expenditures must be carefully justified. Studies have shown that organizations facing financial constraints tend to delay or avoid adopting new technologies unless there is clear external pressure or substantial support to mitigate the costs (Ifinedo, 2016).

Empirical studies over the past 5 years reinforce the negative impact of financial costs on technology adoption. For example, (Hussein Alghushami et al., 2020) demonstrated that financial costs significantly hindered the adoption of cloud-based learning systems in higher education institutions, particularly in contexts where resources were limited and the perceived return on investment was unclear. Similarly, (Henry and Alexander, 2023) found that financial costs were a critical barrier to adopting enterprise resource planning (ERP) systems in public sector organizations, as decision-makers weighed the long-term expenses against the immediate financial burden. In line with these findings, (Qasem et al., 2020) showed that high implementation costs negatively affected the intention to adopt information systems in developing economies, where financial prudence is a priority for institutions. For Indonesian economics and business faculties, where AIS adoption might entail significant financial outlay, the perception of high costs could dampen decision-makers' intentions to adopt the system. Based on these theoretical insights and empirical evidence, we hypothesize that:

H₇: Financial costs negatively influence the intention to adopt the accreditation information system.

2.9. Lack of Human Resources and Intention to Adopt of AIS

The availability of human resources, particularly in terms of skilled personnel, is a critical factor influencing technology adoption in organizations. According to the TOE framework, organizational readiness—including the availability of human resources—plays a crucial role in successfully determining an institution's ability to adopt new technologies (Baker, 2012). Successful adoption of systems like the AIS in higher education requires financial investment and skilled staff who can manage, implement, and sustain the system. When an institution lacks sufficient human resources with the technical expertise or time to oversee the system's implementation and operation, decision-makers may hesitate to adopt the system, fearing operational difficulties and increased workloads (Oliveira et al., 2016).

The RDT further emphasizes the importance of human resources by highlighting how organizations depend on critical resources to reduce uncertainties and external pressures (Pfeffer and Salancik, 2006). In the case of AIS, the dependence on skilled personnel to manage the accreditation process and comply with regulatory standards is paramount. A lack of human resources may exacerbate the perceived risks associated with system

adoption, especially in resource-constrained environments such as Indonesian higher education institutions. Without adequate human capital, organizations may find it challenging to manage the system's complexity, train existing staff, or address technical issues during implementation, reducing the likelihood of adoption (Ifinedo, 2016).

Over the past 5 years, empirical studies have reinforced that human resource limitations negatively affect technology adoption. For example, (Hussein Alghushami et al., 2020) found that lacking trained personnel and technical support was a significant barrier to adopting cloud computing technologies in small and medium-sized enterprises (SMEs). Similarly, (Henry and Alexander, 2023) demonstrated that higher education institutions were reluctant to adopt new learning management systems when they lacked the necessary human resources to support implementation and usage. Moreover, (Qasem et al., 2020) found that insufficient human capital was a significant barrier to cloud computing adoption in higher education institutions, as staff struggled to manage the technical complexities of these systems. In line with these findings, the Indonesian Faculty of Economics and Business may face similar challenges with AIS, as limited access to skilled personnel can create hesitation among decision-makers, who may doubt the institution's capacity to manage and sustain the system effectively. Based on the theoretical foundations of TOE and RDT and supported by recent empirical evidence, we hypothesize that:

H₈: Lack of human resources negatively influences the intention to adopt the accreditation information system.

2.10. Competitive Pressure and Perceived Importance of AIS

Competitive pressure refers to the external pressure that organizations face from competitors, which can drive them to adopt new technologies or innovations to maintain or enhance their competitive position. This concept is integral to the TOE framework, which posits that competitive pressures can influence an organization's perception of the importance of new technologies (Baker, 2012). When faced with intense competition, organizations are often motivated to adopt systems that they perceive as critical for maintaining or improving their market position, including tools that support compliance and enhance operational effectiveness.

Recent literature supports the positive relationship between competitive pressure and perceived importance. For instance, in digital transformation, (Mohamed Hashim et al., 2022) found that competitive pressures significantly influenced the perceived importance of adopting advanced information systems. Organizations facing intense competition were more likely to view such systems as crucial for gaining a competitive edge and improving efficiency. Similarly, (Alshirah et al., 2021) demonstrated that competitive pressures driven by environmental factors significantly influenced SMEs' intention to adopt cloud-based accounting information systems, highlighting the critical role of external factors in technology adoption. These findings suggest that competitive environments drive organizations to prioritize technologies that enhance their operational capabilities and comply with industry standards.

In the context of the AIS, economics, and business faculties in Indonesia may experience increased competitive pressure from national and international institutions. To maintain or enhance their reputation and meet accreditation standards, these faculties may perceive AIS as a critical tool for managing accreditation processes effectively. The pressure to stay competitive and comply with stringent accreditation requirements can elevate the perceived importance of AIS, enabling institutions to meet these standards efficiently and remain competitive in the higher education landscape. Therefore, based on the literature, the following hypothesis is proposed:

H₉: Competitive pressure positively influences the perceived importance of the accreditation information system

2.11. Government Support and Perceived Importance of AIS

Government support can significantly influence an organization's perception of the importance of adopting new technologies, such as the AIS. Government support includes various forms of assistance, such as funding, regulatory frameworks, and incentives, which can enhance the perceived value and necessity of adopting a technology. According to the TOE framework, government support represents a critical external factor that can positively impact an organization's adoption decisions by making the technology more accessible and aligned with regulatory requirements (Baker, 2012).

Recent studies underscore the positive relationship between government support and the perceived importance of technology adoption. For instance, in e-government initiatives, (Almaiah and Nasereddin, 2020) found that government policies, financial incentives, and technical assistance significantly increased the perceived importance of adopting e-government services among Jordanian citizens. This support facilitates the implementation of the technology and elevates its perceived value by aligning it with governmental priorities and compliance requirements. Similarly, in the education sector, (Ali et al., 2023) demonstrated that government support, in the form of grants and policy endorsements, increased the perceived importance of adopting IoT technologies in higher education. Their research highlighted that such support helps institutions view these technologies as crucial for meeting educational standards and improving overall performance.

In the case of AIS, government support is likely to play a significant role in shaping the perceived importance of the system among Indonesian faculties of economics and business. Suppose the government provides financial assistance, develops supportive policies, or mandates using AIS for accreditation purposes. In that case, institutions are more likely to view the system as essential for meeting accreditation requirements and maintaining their institutional status. Government backing can make AIS a vital tool for compliance and enhance its perceived importance by ensuring it aligns with national standards and priorities. Based on current literature, the following hypothesis is proposed:

H₁₀: Government support positively influences the perceived importance of the accreditation information system.

2.12. Digital Environment Change and Perceived Importance of AIS

Digital environment change refers to shifts and advancements in the technological landscape that impact how organizations operate and manage their processes. This includes the adoption of new digital tools, changes in digital infrastructure, and evolving technology standards. According to the Technology-Organization-Environment (TOE) framework, changes in the digital environment can influence an organization's perception of the importance of new technologies by creating a context in which such technologies become essential for maintaining competitiveness and operational effectiveness (Baker, 2012).

Recent literature supports that digital environment change positively affects the perceived importance of adopting new technologies. For instance, in digital transformation, (Vial, 2019) found that rapid changes in digital technologies led organizations to perceive new digital tools as increasingly crucial for staying competitive and responsive to market demands. This was particularly evident as organizations needed to adapt to emerging technologies to maintain operational efficiency and meet new industry standards. Similarly, in the context of e-health, (Hoque et al., 2017) demonstrated that advancements in digital health technologies and shifts in the digital health landscape significantly increased the perceived importance of adopting integrated health information systems. Organizations viewed these systems as crucial for aligning with new digital health standards and improving service delivery.

In the case of the AIS, changes in the digital environment can heighten the perceived importance of adopting the system among Indonesian economics and business faculties. As digital technologies evolve and digital standards for accreditation become more stringent, institutions are likely to view AIS as an essential tool for managing accreditation processes effectively. The increasing complexity and demands of the digital landscape may drive institutions to adopt AIS to ensure compliance, streamline operations, and enhance competitiveness. Based on current literature, the following hypothesis is proposed:

H₁₁: Digital environmental change positively affects the perceived importance of the accreditation information system.

The literature review has enabled the generation of 11 hypotheses, leading to the conceptual model presented in Figure 1.

3. RESEARCH METHODOLOGY

This study employed a quantitative method to explore why decision-makers at EMBA study programs of Indonesian private universities have already embraced the accreditation information system. The research was conducted in the cities of Yogyakarta, Surakarta, Magelang, Semarang, and Purwokerto, targeting decision-makers such as the Heads of Study Programs and Program Secretaries from academic programs accredited by the Independent Accreditation Agency for Economics, Management, Business, and Accounting (LAMEMBA). The total number of respondents was 300.

The data were analyzed through descriptive statistics using the SPSS application to depict the respondents' demographic characteristics and centralize the studied key variables. After descriptive analysis, structural equation modeling (SEM) with a partial least squares approach using the smart-PLS software was utilized to test the previously proposed hypotheses. Such methodology investigates the relationship among the latent variables in its complex nature and possesses capabilities for testing the theoretical models in the quantitative research environment. The integration of descriptive statistics and SEM-PLS ensures a complete understanding of the data set and tight testing of the relationships between variables, both of which assist in a good understanding of factors that influence the adoption of AIS in the academic institutions targeted.

Measurement and structural model evaluation are the processes needed to assess PLS-SEM results. While the structural model evaluation looks at the predictive power of the model and the relationships between the constructs, the measurement model assessment measures the relationships between the indicators and the construct (measurement models) and between the constructs (structural models). Convergent validity, internal consistency reliability, and discriminator validity were all examined in the evaluation of the reflective measurement paradigm. The convergent validity analysis includes indicator reliability, average variance extracted (AVE), and factor loading, all of which have suggested thresholds exceeding 0.5 and 0.708. Composite reliability and Cronbach's alpha are included in the internal consistency reliability analysis, with a suggested threshold of 0.6 to 0.9. Employ heterotrait-monotrait (HTMT) with a confidence interval, not including one, to ensure discriminant validity. The

developed hypothesis, the coefficient of determination (R²), and the f² effect size were used in the structural model evaluation to determine the significance and relationship of the structural model relationship (using a one-tailed test and a significant level of 5%).

4. RESULTS

4.1. Descriptive Statistics

Table 1 presents the characteristics of the study respondents. Most respondents are in the mid-career phase, predominantly between 41 and 50, indicating that individuals typically hold decision-making roles in these institutions with significant professional experience. The age distribution, with 68% of respondents aged 41-50, suggests mature and experienced leadership in the academic programs of these faculties.

Most of the respondents (74%) have more than 11 years of professional experience, further highlighting the seasoned nature of the decision-makers in these institutions. Regarding job positions, a more significant proportion of the respondents (59%) are Heads of Study Programs, while 41% are Secretaries, reflecting a solid representation of top-level academic leadership. Additionally, 85% of respondents hold the rank of Assistant Professor or higher, with a substantial portion being Associate Professors, reinforcing their academic authority and experience. This level of academic standing indicates that the respondents are well-positioned to influence institutional decisions and educational strategies.

Most respondents (67%) possess doctoral degrees, reflecting a highly educated faculty leadership structure. The distribution

Figure 1: The proposed research model

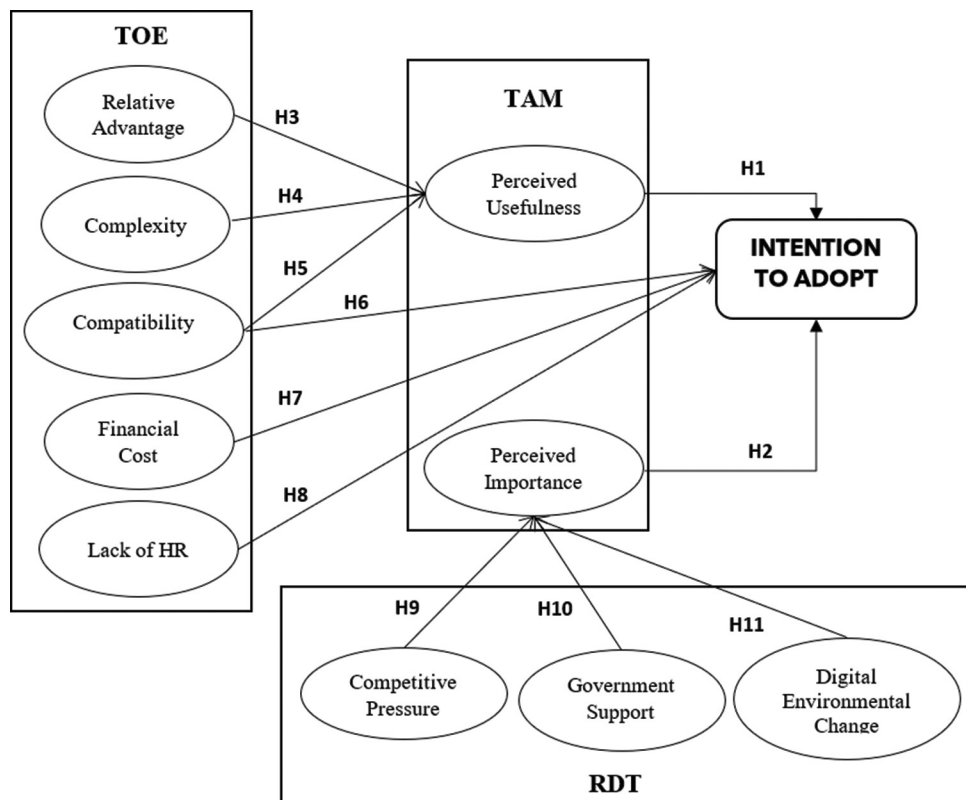


Table 1: Characteristics of the respondents

No	Demographics		%	Number
1	Gender	Men	53	159
		Women	47	141
2	Age	25-30	0	0
		31-35	7	21
		36-40	18	54
		41-45	31	93
		46-50	37	111
		50-55	7	21
3	Years of experiences	Older than 55	0	0
		<5	0	0
		5-10	19	57
		11-15	35	105
		16-20	39	117
4	Job position	>20	7	21
		Head of study program	59	177
		Secretary of study program	41	123
5	Functional roles	Assistant lecturer	11	33
		Assistant professor/senior lecturer	47	141
		Associate professor	38	114
		Professor	4	12
6	Education level	Master	37	111
		Doctoral	67	201
7	Study program	Economics	13	39
		Management	51	153
		Accounting	36	108

of academic disciplines shows a focus on management (51%) and accounting (36%), with a more miniature representation of economics (13%). This distribution suggests that management and accounting are the dominant programs in the surveyed institutions, aligning with the broader trend in business education. Overall, the data portrays a group of highly educated, experienced professionals in senior academic roles playing a crucial role in shaping the direction and quality of education in their respective universities.

Table 2 presents a detailed analysis of measurement items related to various variables within the study, along with their descriptive statistics, including mean scores and standard deviations. The variables measured include Perceived Usefulness, Intention to Adopt, Perceived Importance, Relative Advantage, Complexity, Compatibility, Financial Cost, Lack of Human Resources, Competitive Pressure, Government Support, and Digital Environmental Change. Each variable comprises several items, each scored on a mean scale, which indicates respondents' perceptions and attitudes. For instance, the mean scores for the items measuring Perceived Usefulness range from 4.22 to 4.35, indicating a generally positive perception among respondents, while Complexity scores are notably lower, with mean values around 3.55-3.91, suggesting that complexity may be perceived as a significant barrier to adoption.

The standard deviations accompanying the mean scores provide insight into the variability of responses for each item. A higher standard deviation, such as that seen in the Complexity items (1.169-1.243), indicates a broader range of opinions among respondents regarding the complexity of adopting the National Accreditation Information System. In contrast, the lower standard

Table 2: Measurement items and descriptive

No	Variables	Items	Mean	Standard deviation
1	Perceived usefulness	PUSE1	4.35	0.699
		PUSE2	4.34	0.751
		PUSE3	4.22	0.729
2	Intention to adopt	ADOPT1	4.43	0.725
		ADOPT2	4.22	0.756
3	Perceived importance	IMPORT1	4.07	0.791
		IMPORT2	3.98	0.826
		IMPORT3	3.92	0.798
4	Relative advantage	ADVAN1	4.41	0.685
		ADVAN2	4.28	0.771
		ADVAN3	4.24	0.763
5	Complexity	COMPLEX1	3.55	1.169
		COMPLEX2	3.78	1.243
		COMPLEX3	3.91	1.243
6	Compatibility	COMPAT1	4.18	0.772
		COMPAT2	3.80	0.941
		COMPAT3	4.10	0.753
7	Financial cost	COST1	3.03	1.357
		COST2	3.67	1.359
		COST3	3.72	1.327
8	Lack of human resources	LACKHR1	3.40	1.402
		LACKHR2	3.56	1.397
9	Competitive pressure	PRESS1	4.05	0.756
		PRESS2	3.99	0.792
		PRESS3	4.26	0.771
10	Government support	GOV1	4.24	0.754
		GOV2	4.21	0.819
		GOV3	3.98	1.173
11	Digital environmental change	DIGITAL1	4.02	1.187
		DIGITAL2	3.99	1.27
		DIGITAL3	3.81	1.173

deviations for items related to Perceived Usefulness (0.699-0.751) reflect a consensus among respondents regarding the system's usefulness. Overall, the table highlights the factors influencing decision-makers intentions to adopt the accreditation system, emphasizing areas of strength, such as perceived usefulness, and areas needing attention, like complexity and financial costs, which may hinder adoption efforts.

4.2. Inference Analysis

According to (Hair et al., 2011) (Hair et al., 2019), testing the measurement model requires an examination of outer loadings, item/indicator reliability, construct reliability, and convergent and discriminant validity. Table 3 displays the outcomes concerning the validity and reliability of the measurement model.

Table 3 presents the results of the validity and reliability tests for the measurement model used in the study. The table includes key statistics such as item loadings, average variance extracted (AVE), composite reliability (CR), and Cronbach's alpha (CA) for each variable. Generally, the item loadings exceed the acceptable threshold of 0.70, indicating that the items have a strong relationship with their respective constructs. For example, the item loadings for perceived usefulness (PUSE) range from 0.865 to 0.880, suggesting a high level of agreement among respondents regarding the usefulness of the National Accreditation Information System. Additionally, AVE values are above the minimum requirement of 0.50 for most variables, confirming

that the constructs explain a substantial portion of the variance in their indicators.

Furthermore, the composite reliability (CR) and cronbach’s alpha (CA) values indicate good internal consistency for all constructs. Most variables show CR values above 0.70, considered acceptable, while the CA values exceed 0.70, demonstrating that the items reliably measure their respective constructs. For instance, the Complexity variable exhibits a CR of 0.948 and a CA of 0.866, indicating excellent reliability. These results collectively validate the measurement model, suggesting that the constructs are valid and reliable, strengthening the study’s findings. The validity and reliability of the measurement model are crucial for ensuring that

subsequent analyses, such as structural equation modeling, yield meaningful insights.

Table 4 presents the Fornell-Larcker criterion, a method used to assess the discriminant validity of the measurement model in the study. This criterion compares the square root of the AVE for each construct with the correlations among the constructs. In essence, for a construct to demonstrate adequate discriminant validity, the square root of its AVE should be greater than its correlations with other constructs. In this table, the diagonal elements represent the square roots of the AVEs for each variable, while the off-diagonal elements show the correlation coefficients between different constructs. For instance, the Compatibility construct has a diagonal value of 0.778, indicating a strong level of variance explained by the items measuring this construct.

Upon analyzing the correlation values, it is evident that the constructs maintain satisfactory discriminant validity. For example, the correlation between compatibility and competitive pressure (0.731) is less than the square root of the AVE for compatibility (0.778), satisfying the Fornell-Larcker criterion. This pattern holds across all constructs, indicating that each construct is distinct and not overly influenced by the other constructs in the model. Overall, the results from the Fornell-Larcker criterion reinforce the validity of the measurement model, affirming that each construct can be effectively interpreted in isolation, thereby enhancing the credibility of the study’s findings.

Table 3: The validity convergent and reliability test results

Variables	Item	Item loading	AVE	CR	CA
Compatibility (COMPAT)	COMPAT1	0.850	0.706	0.821	0.785
	COMPAT2	0.738			
	COMPAT3	0.742			
Competitive pressure (PRESS)	PRESS1	0.837	0.796	0.815	0.766
	PRESS2	0.767			
	PRESS3	0.707			
Complexity (COMPLEX)	COMPLEX1	0.701	0.756	0.948	0.866
	COMPLEX2	0.899			
	COMPLEX3	0.761			
Digital environmental change (DIGITAL)	DIGITAL1	0.855	0.777	0.913	0.876
	DIGITAL2	0.850			
	DIGITAL3	0.937			
Financial cost (COST)	COST1	0.720	0.708	0.876	0.813
	COST2	0.906			
	COST3	0.959			
Government support (GOV)	GOV1	0.918	0.772	0.746	0.718
	GOV2	0.931			
	GOV3	0.920			
Intention to adopt (ADOPT)	ADOPT1	0.848	0.742	0.852	0.753
	ADOPT2	0.874			
Lack of human resources (LACKHR)	LACKHR1	0.700	0.777	0.798	0.704
	LACKHR2	0.998			
Perceived importance (IMPORT)	IMPORT1	0.820	0.717	0.884	0.803
	IMPORT2	0.861			
	IMPORT3	0.859			
Perceived usefulness (PUSE)	PUSE1	0.865	0.759	0.904	0.842
	PUSE2	0.869			
	PUSE3	0.880			
Relative advantage (ADVAN)	ADVAN1	0.839	0.707	0.879	0.792
	ADVAN2	0.870			
	ADVAN3	0.813			

4.3. Assessment of Structural Model and Hypothesis Testing

After evaluating the structural model with Smart PLS software, a comprehensive list of the path coefficients, along with their corresponding t-values, P-values, β , R^2 , and Q^2 , is provided in Tables 5 and 6. Table 5 provides a comprehensive overview of the R^2 values and predictive relevance (Q^2) for the constructs examined in the study. The R^2 value represents the proportion of variance in the dependent variable that the independent variables can explain, while Q^2 assesses the model’s predictive relevance. For the Intention to Adopt, the R^2 is 0.670, suggesting that approximately 67% of the variance in intention to adopt can be explained by the predictors in the model, which is a strong level of explanatory power. The Q^2 value of 0.479 indicates that the model has considerable predictive relevance for this construct, reinforcing the importance of the factors influencing the intention to adopt the AIS.

Table 4: Fornell-Larcker criterion

Variables	1	2	3	4	5	6	7	8	9	10	11
1. Compatibility	0.78										
2. Competitive pressure	0.73	0.77									
3. Complexity	0.13	0.10	0.80								
4. Digital environmental change	0.11	0.07	0.20	0.88							
5. Financial cost	0.18	0.04	0.17	0.54	0.84						
6. Government support	0.59	0.72	0.16	0.09	0.02	0.76					
7. Intention to adopt	0.65	0.64	0.05	0.06	0.05	0.61	0.86				
8. Lack of human resources	0.02	0.62	0.23	0.46	0.50	0.03	0.06	0.82			
9. Perceived importance	0.71	0.62	0.15	0.15	0.07	0.55	0.68	0.21	0.85		
10. Perceived usefulness	0.62	0.66	0.07	0.02	0.02	0.62	0.76	0.13	0.59	0.87	
11. Relative advantage	0.67	0.70	0.16	0.03	0.06	0.63	0.67	0.13	0.63	0.72	0.84

In contrast, the Perceived Importance and Usefulness constructs exhibit lower R² values of 0.418 and 0.554, respectively, explaining 41.8% and 55.4% of their variances. The corresponding Q² values of 0.290 and 0.413 suggest moderate predictive relevance, indicating that while the model effectively captures the influences on these constructs, there is still room for improvement. These findings underscore the efficacy of the proposed model in explaining the relationships among the constructs, as well as its potential to predict future outcomes related to the adoption of the accreditation system. Overall, the R² and Q² results provide valuable insights into the model's effectiveness and help to validate its theoretical foundations as supported by existing literature on technology adoption.

Table 5 presents the path estimates for the proposed model, detailing the relationships among the constructs in the study. The path estimates indicate the strength and direction of the relationships between independent and dependent variables. At the same time, the corresponding t-statistics and P-values provide insights into the statistical significance of these relationships. Each path estimate reflects how changes in one construct influence another, allowing for a clear understanding of the factors driving the intention to adopt the National Accreditation Information System.

The results reveal that Perceived Usefulness significantly impacts Intention to Adopt, with a path coefficient of 0.501 and a t-statistic of 9.835 (P < 0.001). This finding aligns with existing literature, which emphasizes that the perceived usefulness of a system is a crucial determinant of user acceptance [9; 33]. The strong significance of this path suggests that enhancing the perceived usefulness of the National Accreditation Information System can effectively encourage adoption among decision-makers in educational institutions.

Perceived Importance also positively influences Intention to Adopt, with a coefficient of 0.292 and a t-statistic of 6.073 (P < 0.001). This outcome supports the argument that recognizing

the importance of a system can significantly affect an individual's decision to adopt it. As educational institutions aim to improve their accreditation processes, fostering a perception of the system's importance can enhance its adoption rates. This relationship highlights the necessity of effectively communicating the value and significance of the National Accreditation Information System to prospective users.

Conversely, the path from Complexity to Perceived Usefulness shows a negative coefficient of -0.058, with a t-statistic of 3.317 (P < 0.01). This suggests that as complexity increases, the perceived usefulness of the system may decrease, which could hinder its adoption. This finding resonates with existing research indicating that perceived complexity can negatively impact user acceptance and satisfaction with technology (Moore and Benbasat, 1991). To counter this effect, institutions must streamline the system's usability and provide adequate training and support to potential users, ensuring they perceive the system as beneficial despite its complexity.

The model also shows that Compatibility has a positive influence on both Perceived Usefulness (0.266) and Intention to Adopt (0.137), with respective t-statistics of 5.073 and 2.616 (P < 0.001 and P < 0.01). These results underline the importance of aligning new systems with existing practices and technologies to facilitate their acceptance (Venkatesh and Brown, 2001). When decision-makers view the Accreditation Information System as compatible with their current processes, they are more likely to recognize its usefulness and adopt it. Therefore, emphasizing the system's compatibility during implementation can enhance user acceptance and promote a smoother transition.

Lastly, the paths concerning Financial Cost and Lack of Human Resources to Intention to Adopt show negative coefficients of -0.093 and -0.007, respectively, with significant t-statistics (P < 0.001 and P < 0.01). These findings suggest that concerns over financial costs and inadequate human resources can deter adoption efforts. This aligns with the literature, identifying financial considerations as a significant barrier to technology adoption (Ghobakhloo et al., 2012) addressing these concerns through potential funding solutions or resource allocation strategies is essential to encouraging the adoption of the Accreditation Information System among educational institution decision-makers.

Table 5. Results of R² and predictive relevance (Q²)

Variables	R ²	R ² Adjusted	Q ²
Intention to Adopt	0.670	0.664	0.479
Perceived Importance	0.418	0.412	0.290
Perceived Usefulness	0.554	0.550	0.413

Table 6: Path estimates for proposed model

Variable Relation	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T-Statistics (O/STDEV)	P-values	Decision
Perceived usefulness→intention to adopt	0.501	0.498	0.051	9.835	0.000	H1 supported
Perceived importance→intention to adopt	0.292	0.292	0.048	6.073	0.000	H2 supported
Relative advantage→perceived usefulness	0.548	0.536	0.061	8.950	0.000	H3 supported
Complexity→perceived usefulness	-0.058	-0.027	0.044	3.317	0.002	H4 supported
Compatibility→perceived usefulness	0.266	0.264	0.052	5.073	0.000	H5 supported
Compatibility→intention to adopt	0.137	0.136	0.052	2.616	0.009	H6 supported
Financial cost→intention to adopt	-0.093	-0.075	0.053	3.739	0.008	H7 supported
Lack of HR→intention to adopt	-0.007	-0.020	0.045	2.156	0.009	H8 supported
Competitive pressure→perceived importance	0.463	0.460	0.074	6.217	0.000	H9 supported
Government support→perceived importance	0.211	0.212	0.071	2.969	0.003	H10 supported
Digital environmental change→perceived importance	0.094	0.098	0.040	2.337	0.020	H11 supported

5. DISCUSSION AND CONCLUSION

The findings of this study highlight the significant factors influencing decision-makers intention to adopt the accreditation information system (AIS) in Indonesian faculties of economics and business, particularly those accredited by LAMEMBA. Consistent with the technology acceptance model (TAM), perceived usefulness emerged as a strong predictor of adoption intention. This finding aligns with previous studies, such as (Venkatesh and Bala, 2008), which demonstrated that when decision-makers perceive a system as valuable in improving institutional processes, their intention to adopt it increases. In the case of AIS, the system's perceived ability to enhance accreditation management, streamline processes, and ensure compliance with regulatory standards positively influences adoption decisions. These findings underscore the importance of communicating the benefits and utility of AIS to potential adopters to drive broader adoption across faculties.

In contrast, complexity was found to negatively impact the perceived usefulness of AIS, which is consistent with the Technology-Organization-Environment (TOE) framework. Studies by (Oliveira et al., 2016) have shown that higher levels of system complexity tend to lower perceived usefulness, particularly when decision-makers and end users lack the technical skills to navigate the system efficiently. This finding suggests that decision-makers may hesitate to adopt AIS if it is perceived as difficult to implement and use. As a result, efforts should be made to simplify the system's interface and provide sufficient training to users to reduce complexity and enhance the perception of usefulness.

Financial costs were also shown to influence the intention to adopt AIS negatively, reflecting findings from recent studies on technology adoption in re-source-constrained environments. According to (Aboelmaged, 2014), high financial costs are a significant barrier to adopting new systems, particularly in developing countries where educational institutions may lack the necessary financial resources. In Indonesian faculties, budget constraints may deter institutions from adopting AIS, even if the system is perceived as useful. This indicates that policymakers and system developers should consider providing financial incentives or flexible payment options to encourage adoption, particularly for institutions with limited budgets.

Lastly, lacking human resources was another critical barrier to AIS adoption. This finding supports previous research by (Baker, 2012) and (Oliveira et al., 2016), who found that the lack of skilled personnel significantly hinders the implementation of digital systems in organizational contexts. For AIS, the absence of adequately trained staff capable of managing and maintaining the system reduces the likelihood of adoption. This emphasizes the need for institutions to invest in developing the technical skills of their staff or partner with external vendors for system support and training. Addressing human resource gaps will ensure AIS's successful adoption and long-term sustainability in Indonesian higher education institutions.

5.1. Implications

The findings of this study offer important theoretical implications for understanding the factors that drive technology adoption within

higher education institutions, particularly in developing countries like Indonesia. By integrating the technology acceptance model (TAM), resource dependence theory (RDT), and Technology-Organization-Environment (TOE) framework, this research provides a comprehensive view of how individual perceptions, external pressures, and organizational readiness interact to influence the adoption of the accreditation information system (AIS). The study reinforces the role of perceived usefulness as a key determinant of technology adoption, a factor highlighted in previous research (Venkatesh and Bala, 2008), while also demonstrating the importance of external dependencies and organizational challenges, such as financial costs and human resource constraints, which have been underexplored in the context of accreditation systems.

From a practical standpoint, this research offers valuable insights for higher education institutions and policy-makers aiming to foster greater adoption of AIS. The negative impact of financial costs on adoption highlights the need for government bodies and accrediting agencies, such as LAMEMBA, to provide financial incentives or subsidies to reduce the financial burden on institutions. Previous studies, such as (Aboelmaged, 2014), have suggested that cost-related barriers are particularly significant in developing economies. Financial support or flexible payment plans could encourage more widespread adoption of AIS, particularly among resource-constrained faculties. Moreover, the study emphasizes the importance of simplifying the system's interface and providing comprehensive training to reduce perceived complexity, as noted by (Oliveira et al., 2016).

The findings underscore the importance of investing in human capital for institutional decision-makers. The lack of skilled personnel was identified as a major barrier to AIS adoption, echoing concerns raised in previous research (Baker, 2012), (Oliveira et al., 2016). Higher education institutions must prioritize staff development, ensuring that technical training programs are available to equip faculty members and administrators with the necessary skills to manage and maintain new systems. Alternatively, partnering with external vendors to provide ongoing technical support can help alleviate this challenge. By addressing these practical concerns, institutions can improve the likelihood of successfully adopting accreditation management systems like AIS, thereby enhancing operational efficiency and compliance with accreditation standards.

5.2. Limitations and Suggestions for Future Research

Despite the valuable insights provided by this study, several limitations must be acknowledged. First, the research relied on a cross-sectional design, which captures data simultaneously. While this design allows for an understanding of current perceptions and factors influencing the adoption of the accreditation information system (AIS), it does not account for changes in attitudes or behaviors over time. Longitudinal studies could provide deeper insights into how perceptions of usefulness, complexity, and other factors evolve as institutions progress through different stages of AIS implementation (Venkatesh et al., 2003). Future research could employ longitudinal designs to track changes in decision-makers intentions and the actual use of AIS over extended periods.

Another limitation relates to the use of convenience sampling, which may limit the generalizability of the findings. Although the study gathered responses from 300 decision-makers across multiple cities in Indonesia, using convenience sampling means that the sample may not fully represent all economics and business faculties or other academic departments that might benefit from AIS. Future research should consider using probability sampling techniques to ensure a more representative sample and increase the generalizability of findings to a broader population of higher education institutions. Expanding the study to include public universities or institutions from other regions could provide a more comprehensive understanding of the factors influencing AIS adoption.

Lastly, this study focused primarily on the institutional perspective of decision-makers, such as Heads of Study Programs and Program Secretaries, without considering the perspectives of other key stakeholders, such as faculty members, IT staff, or students, who may influence AIS adoption success. Future studies could adopt a multi-stakeholder approach, incorporating the views of these other groups to gain a more holistic understanding of the factors that facilitate or hinder the successful implementation of accreditation systems. Moreover, research could explore the impact of organizational culture and change management practices on AIS adoption, which could provide deeper insights into the organizational dynamics that affect technology adoption.

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