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EVALUATION OF ISLAMIC ORGANIZATION ABILITY TO IMPLEMENT ACCOUNTING APPLICATION USING THE TOE FRAMEWORK : CASE STUDY OF AL-FURQON GRAND MOSQUE

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AN EVALUATION OF ISLAMIC ORGANIZATIONAL ABILITY TO IMPLEMENT ACCOUNTING APPLICATIONS USING THE TOE FRAMEWORK: CASE STUDY OF THE X GRAND MOSQUE

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ABSTRACT

The purpose of this study is to evaluate the readiness of the X Great Mosque in Bandar Lampung City to implement accounting applications in the future and to provide recommendations to improve the capabilities needed to employ such applications using the Technology-Organization-Environment (TOE) framework. The study employs a descriptive method with a qualitative approach. The data collection methods or techniques used in the research are practice and interviews. The results show that the application of accounting applications is influenced by three factors: management support, organizational size, and support from regulators. Management support is a driving force because the administrators support the application of information technology in the accounting process. However, such application can occur after deliberation is held. The size of the organization is also a factor, as because there are only two administrators in charge of finance and one administrative administrator who helps them, communication and coordination can be optimally established. Regulatory support is also an impetus for the application of information technology, as the government, as the regulator, will support the decisions taken by management and their advisors. In future related research, the use of an accounting application whose system has been audited is recommended.

Keywords: *Ability, Accounting Application, Mosque, TOE Framework.*

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1. INTRODUCTION

Technological developments in the period of globalization are becoming increasingly advanced and are taking place rapidly. This is indicated by the increasing number of people, companies, government institutions, and organizations taking advantage of technological advances as a means of facilitating their tasks and responsibilities. For example, government institutions use social media applications to accommodate the aspirations of the entire community. In addition, organizations also apply technology such as accounting applications in order to simplify the financial management process.

The Indonesian state comprises a variety of organizations in various sectors, especially ones that are related to society, one type of which are non-profit organizations. Such organizations are defined as institutions that are not profit-oriented, but must account for the management of any resources obtained to funders and society, without expecting any compensation. In this regard, there is one form of non-profit organization in the religious field, namely the mosque, which is a symbol of the greatness of the Muslims who play a role in the development of civilization and is an important social institution in religious life. The presentation of mosques' financial statements is regulated in ISAK 35 concerning the presentation of the financial statements of non-profit-oriented entities.

Financial statements are reports that provide information about the financial position, performance, and cash flows of organizations; they are useful for various users of financial statements in making economic decisions. Financial reports are expected to provide relevant, clear, and accountable financial information. The financial statements of non-profit entities include statements of financial position at the end of the reporting period; statements of activities; and statements of cash flows for the current period, as well as notes on the statements. The X Grand Mosque is in the city of Bandar Lampung. There is a problem in that the mosque's financial statements are not yet prepared using ISAK 35, as shown in Figure 1.1, which presents the mosque's financial report format. Its financial statements only present reports of cash receipts and disbursements.

NO	BULAN	URAIAN	DEBET	KREDIT	SALDO
1	Saldo Awal 01 Januari 2020				Rp 234,819,077
2	JAN	Penerimaan	Rp 172,286,300		
		Pengeluaran		Rp 188,841,856	Rp 218,263,521
3	FEB	Penerimaan	Rp 109,063,200		
		Pengeluaran		Rp 145,224,200	Rp 182,102,521
4	MAR	Penerimaan	Rp 80,334,100		
		Pengeluaran		Rp 112,193,100	Rp 150,243,521
5	APR	Penerimaan	Rp 67,697,500		
		Pengeluaran		Rp 147,801,600	Rp 70,139,421
6	MEI	Penerimaan	Rp 200,000,000		
		Pengeluaran		Rp 68,021,900	Rp 202,117,521
7	JUN	Penerimaan	Rp 22,140,200		
		Pengeluaran		Rp 44,294,365	Rp 179,963,356
8	JUL	Penerimaan	Rp 54,903,200		
		Pengeluaran		Rp 46,717,368	Rp 188,149,188
9	AGS	Penerimaan	Rp 44,392,800		
		Pengeluaran		Rp 32,965,200	Rp 199,576,788
10	SEP	Penerimaan	Rp 32,481,300		
		Pengeluaran		Rp 32,189,400	Rp 199,868,688
11	OKT	Penerimaan	Rp 70,441,000		
		Pengeluaran		Rp 34,382,600	Rp 235,927,088
12	NOP	Penerimaan	Rp 41,664,200		
		Pengeluaran		Rp 65,009,750	Rp 212,581,538
13	DES	Penerimaan	Rp 60,798,800		
		Pengeluaran		Rp 32,256,280	Rp 241,124,058
		Jumlah	Rp 956,202,600	Rp 949,897,619	Rp 241,124,058

Figure 1 Financial Statements of the X Grand Mosque

Apart from not using ISAK 35 in the presentation of financial statements, the recording method remains manual, with financial transactions recorded in a notebook. However, now such recording and the preparation of financial reports can be done using technology; for example, Microsoft Excel (Triandi & Agustin, 2016),a spreadsheet application program can be employed to assist users in making calculations and creating financial reports. The application has calculation and graphing features, so is an alternative solution to make the accounting cycle faster and more effective by using formula features that can speed up the formulation of numbers to achieve the desired results. It can also make financial reports work more efficiently start from general journals, ledgers, and trial balances ,and make the production of financial statements quicker (Enterprise, 2014).

One example of a mosque accounting application based on Microsoft Excel is that developed by Hamzah in 2020. It helps mosque officials to undertake the accounting process more easily by using the features available in the application. These features include setting mosque identities; entering mosque opening balances and budgets; recording transactions; posting in the ledger; and printing reports as well as a help menu that explains how to operate the application. The application was developed based on ISAK 35 (Hamzah, 2020).

Aboelmaged (2014) explains that the evaluation of technology capabilities for organizations aims to increase the skills and abilities needed to apply technology. The ability to adopt technology can be measured using the Technology-Organization-Environment (TOE) framework, which describes the process by which a company adopts and implements technological innovations (Baker, 2012). Baker also mentions that the TOE framework, which was first introduced by Tornatzky and Fleischer in 1990, is a technology adoption framework at the organizational level. In line with this, Chong and Olesen

(2017) explain that there are three contextual elements that influence organizations in making decisions to adopt information technology: the technology context, organizational context, and environmental context.

To enable administrators to use Microsoft Excel, this research covers the socialization of the implementation of ISAK No. 35 regarding the presentation of financial statements of non-profit oriented entities. Microsoft Excel features include recording general journals; preparing financial statements which include reports required in ISAK No. 35, namely the statement of financial position (balance sheet); comprehensive income reports; cash flow statements; and cash flow change reports. Interviews were also conducted regarding the ability of the mosque to implement Microsoft Excel based on the TOE framework, as seen from the technological, organizational, and environmental contexts.

Based on the discussion of the background above, the following research questions were formulated:

1. What are the factors that influence the mosque's ability to implement accounting applications based on the TOE framework?
2. What is the ability of the X Great Mosque to implement accounting applications?

The purpose of the study is to evaluate the ability of the X Grand Mosque to implement accounting applications/technology according to the TOE aspect, as well as to provide recommendations to the mosque related to the TOE element in order to increase its capability to employ such applications.

2. LITERATUREREVIEW

2.1 THE MOSQUE

The mosque is a symbol of the greatness of the Muslims who play a role in the development of civilization and is an important social institution in religious life. Most mosques are seen as gathering places for people to perform activities that show their devotion and submission to Allah SWT. They also act as institutions or *madrasas* (schools) to produce quality human resources based on Islamic monotheism; the way of life proposed by the Qoran and hadith; Islamic morality; and actions and activities that project goodness. The responsibility for promoting positive values and change in society rests with the mosque institution (Omar, 2019).

2.2 MICROSOFT EXCEL

Microsoft Excel is a spreadsheet application program that is widely used to assist users in making calculations, preparing financial reports, and analysis. The application has calculation and graphing features, making it an alternative solution for accelerating the accounting cycle and making it more effective by using formula features that can aid users in formulating numbers to achieve results. By understanding the formulas that exist in Microsoft Excel, users can compile financial reports more efficiently from general journals, ledgers, and trial balances and make the process faster. The formulas used to compile financial reports using the application include SUM, VLOOKUP, SUMIF, and IF, which can be used to add up and combine the numbers and columns processed to speed up the preparation of financial reports from general journals (Enterprise, 2014; Taufiq, 2021).

A mosque accounting program using Microsoft Excel which was created by Andy Prasetiawan Hamzah, SST, M.Sc., Ak (PKN STAN Lecturer & Mosque Accounting Trainer) in 2020. The software makes it easier for mosque officials to conduct the accounting process through the features available and after explaination of how to use them, including setting mosque identities, entering mosque opening balances and budgets, recording transactions, posting in the ledger and printing reports (Hamzah, 2020). The menus available in the application are the navigation menu, mosque budgeting menu, transaction recording and journaling menu, general ledger menu, comprehensive income report menu, financial position report menu (balance sheet), cash flow menu, and program or activity achievement menu.

2.3 TECHNOLOGY, ORGANIZATION, AND ENVIRONMENT FRAMEWORK

This framework was first developed by Tornatzky and Fleischer in 1990 with the aim of explaining that the adoption of technological innovation in an organization depends on the external environment, the organization's internal environment, and technological developments. Table 1 lists previous studies that explain the TOE framework.

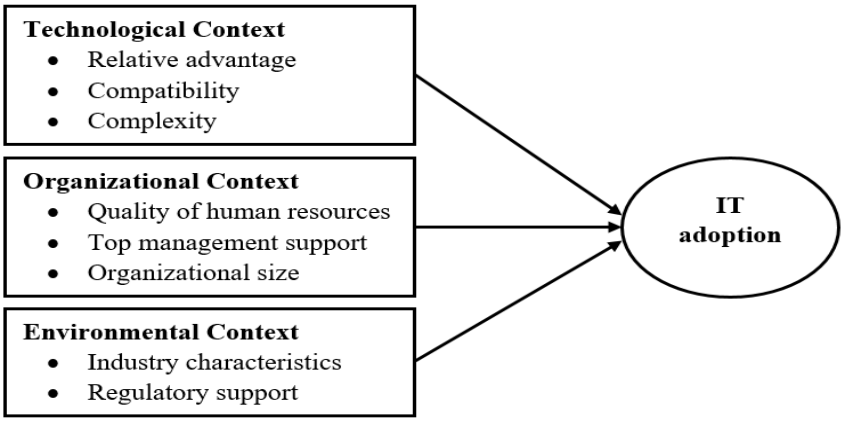
Table 1 Previous research of the TOE Framework

Research	Results
The Processes of Technological Innovation (Tornatzky LG & M, 1990)	This study describes the overall process of technological innovation, from the development of innovations by engineers and entrepreneurs, to their adoption and implementation by users in an enterprise context. The Technology-Organization-Environment framework was first proposed in this study. According to Tornatzky

	and Fleischer (1990), this framework for decision-making in technological innovation consists of three different elements: 1. Elements of Technology, consisting of Availability and Characteristics. 2. Organizational Elements: Formal and Informal Linking Structures, Communication Process, Size, and Slack 3. Elements of the External Environment:Industry Characteristics and Market Structure, Technology Support Infrastructure and Government Regulation
An Exploratory Study of Factors Influencing Internet/E-Business Technologies Adoption By SMEs in Canada (Ifinedo, 2012).	This study aims to determine the factors that influence the adoption of IEBT in SMEs based in Canada. The research model is based on the TOE framework and the data collection process involved a questionnaire sent to SMEs. Data analysis used the partial least squares (PLS) approach. The results show that the variables that support the adoption of internet/e-business in SMEs in Canada are Relative Advantage, Top Management Support, Competitive Pressure, and Government Support, while the variables of Compatibility, Complexity, Customer Pressure, and Partner Pressure do not support it as a predictor of IEBT (Internet/E-Business Technology) in SMEs
The Technology–Organization–Environment Framework (Baker J, 2012).	This research is a literature review of studies that discuss the TOE framework. It starts by describing the description of the TOE proposed by Tornatzky and Fleischer (1990) and its elements. Next, a brief review of studies that have used the TOE framework is made, with the emphasis placed on noting the type of innovation adopted in each study. Finally, discussion is made for future research with the TOE framework.
Assessing the Determinants of Cloud Computing Adoption: An Analysis of the Manufacturing and Services Sectors (Oliveira T, Thomas M, & M, 2014).	The purpose of this study is to assess the determinants of cloud computing by using the perspective of technology, organization, and environment in companies in manufacturing and services. The study uses a quantitative method by distributing online questionnaires to 2000 manufacturing and service companies in Portugal. The results show that the four factors that influence the adoption of cloud computing are Relative Advantage, Complexity, Top Management Support, and Firm Size.
Technological, Organisational, and Environmental Factors Influencing Managers' Decision to Adopt Cloud Computing in the UK (Gutierrez, Boukrami, & Lumsden, 2015).	The purpose of the study was to determine the factors that influence managers' decisions to adopt cloud computing in the UK using the TOE framework. Data were collected through a questionnaire-based survey and tested using regression. The results show that the variables of Technology Readiness, Competitive Pressure, Complexity, Top Management Support, and Trading and Pressure affect companies in adopting cloud computing.
A Technology-Organization-Environment Perspective on Eco-	This study uses TOE to explain the adoption of information technology. The TOE framework is a general framework that

effectiveness: A Meta-Analysis (Chong & Olesen, 2017).	identifies various factors that influence organizations in adopting technology. The study presents a meta-analytic review of previous quantitative studies that have investigated the relationship between information technology adoption and its elements. The research shows that specific factors in the context of technology, organization, and environment can support technology implementation. From the results of the study, it was found that there was a strong relationship between IT Infrastructure, Perceived Direct Benefits, Top Management Support, and Industry Characteristics, with a moderate relationship between Compatibility, Technological Readiness, Perceived Indirect Benefits, Quality of Human Resources, Organization Size, Attitudes Towards Innovations, Learning Culture, and Regulatory Support. Finally, weak relationships were found for Relative Advantage, Complexity, Perceived Risks, and Information Sharing Culture.
Implementation of Microsoft Access-Based Accounting Software In a Catholic Church In Yogyakarta (Simatupang, Gunarso, & Kuntara, 2019).	This study aims to determine the effect of implementing technology-organization-environment-based accounting software based on Microsoft Access in a Catholic church in Yogyakarta. The variables in the study are technology, organization, environment, and the application of Microsoft Access. It is explanatory research. The data analysis technique used was multiple regression. From the results of the study, it was found that the variables of technology and organization partially and significantly affected the application of Microsoft Access-based accounting software. On the other hand, the environment partially has no effect on the application of Microsoft Access.

Based on the three elements that influence the adoption of information technology, Chong and Olesen (2017) description of the TOE framework is shown in Figure 2.



Source: Chong and Olesen (2017)

2.3.1 TECHNOLOGICAL CONTEXT

According to Baker (2012), the context of technology includes all the technologies that are relevant to the company, both technology that it already uses, and others that are available in the market but not presently used. In line with this, Chong and Olesen (2017) suggest that technological factors such as relative advantage, compatibility, and complexity can affect the adoption of innovative technology. According to Oliveira and Thomas (2014), relative advantage is the extent to which an innovation is considered better than the idea it replaces. Organizations are more likely to implement technological innovations if the technology can bring perceived organizational benefits, such as better organizational performance and higher economic returns (Chong & Olesen, 2017).

In adopting new technology, it is necessary to consider compatibility with that existing in the organization. Compatibility is the extent to which an innovation is perceived as consistent with existing socio-cultural values and beliefs, past experiences, and the needs of potential adopters (Baker, 2012). The implementation of technological initiatives can be driven by technology that is more compatible with the organization's technology, processes, and work application systems (Chong & Olesen, 2017).

Complexity is the extent to which an innovation is considered relatively difficult to understand and use (Baker, 2012). For more complex technological initiatives, employees may take longer to understand and adapt to the new technologies (Chong & Olesen, 2017). This is because more effort is required to learn and share knowledge about such adaptation.

2.3.2 ORGANIZATIONAL CONTEXT

Organizational context refers to the characteristics, structures, processes, and resources that limit or facilitate the adoption of technological innovations (Chong & Olesen, 2017). According to Oliveira and Thomas (2014), a company’s IT adoption is influenced by the size of the organization and the support available. Such support can be in the form of encouragement from management to use new technology, the existence of communication facilities, or coordination from top management. According to Chong and Olesen (2017), the quality of human resources, top management leadership, and organizational size are the most frequently discussed factors in the organizational context that affect innovation adoption.

The quality of human resources refers to the extent to which technical knowledge is available in an organization. The greater the capacity of such resources, the greater the chance of success in implementing new technologies (Chong and Olesen, 2017). Top management leadership concerns the role of executive leadership in encouraging and facilitating innovation in the overall strategy of the organization (Chong and Olesen, 2017). This is in line with the findings of Gutierrez, Boukrami, and Lumsden (2015), that top management commitment is an important factor in motivating organizations to adopt information technology. Therefore, the commitment of top management plays an important role in driving technology initiatives.

Organizational size has a moderate relationship with technology adoption (Chong and Olesen, 2017). Research by Tornatzky and Fleischer (1990) found that larger organizations are more likely to adopt innovations because they have adequate resources and strong infrastructures to facilitate the technology implementation process. However, smaller organizations are more likely to encourage the use of innovation because they have less bureaucratic inertia and more flexible structures, enabling them to benefit from better communication, coordination and influence to gain support for implementing technological change (Chong and Olesen, 2017).

2.3.3 ENVIROMENTAL CONTEXT

According to Chong and Olesen (2017), in the environmental context, industry characteristics and regulations are the dominant factors influencing the adoption of technology. Companies in fast-growing industries tend to innovate faster. However, in industries that are mature or underperforming, the practice of innovation becomes less influential (Tornatzky and Fleischer, 1990). Some companies respond to declining industry performance by innovating through efficiency initiatives or by expanding into new business lines. Other companies may avoid investing in innovation to minimize costs.

Government regulations can motivate or prevent organizations from adopting technological innovations (Chong and Olesen, 2017). In line with this, Ifinedo (2012) suggests that the level of support and requirements of regulators and/or professional bodies influences technology adoption. Regulatory support is identified as the main environmental factor influencing technology adoption within the TOE framework (Simatupang, Gunarso, and Kuntara, 2019).

3. RESEARCH METHODS

The study uses a descriptive method with a qualitative approach, an approach that focuses the discussion on the phenomena at the time of research. In addition, this research takes a case study approach, with the researcher conducting an in-depth exploration of the programs, events, processes, and activities of one or more people. A case is bound by time and activity,therefore the researcher collected detailed data using various processes and procedures within a certain time (Sugiyono, 2018).

The data collection methods or techniques used in this study are practice and interviews. Practice is an attitude that is not automatic in the realization of action. For the realization of an attitude or action to make a real difference, a supporting factor or a possible condition is needed, including facilities and support from other parties (Notoatmodjo, 2010).

The things that researchers do in the practice of using Microsoft Excel are as follows:

a) Deliver basic material for the preparation of financial statements of non-profit entities by ISAK No. 35, especially those related to mosque reporting. The material described was based on information found on the bit.ly website /AKUNTANSIMASJID owned by Hamzah (2020).

b) Record financial transactions or prepare mosque financial reports. Next, practice the results of the training with simple transactions. Creating/filling new data must be done by the administrator in the step after installation of the application. Next, the administrator can start journaling on the available journal menu. After the journal has been completed correctly, the next process is posting to the general ledger, create trial balance and finally producing financial statements.

c) Prepare financial statements based on ISAK 35.

After the series of practice processes and introductions have been completed, the next stage is the interview. This is a planned direct conversation between a resource person and an interviewer, aimed at obtaining certain information (Tersiana, 2018). In this study, interviews were conducted with five respondents, the general chairperson, general secretary, deputy general secretary, general treasurer, and deputy general treasurer of the mosque. They were all daily administrators during the 2019-2024 period.

Sixteen questions were posed to each respondent. These were based on questions from previous studies, as indicated in Table 2.1. The question components focused on the contexts contained in the TOE framework, namely the technological, organizational, and environmental, intended to evaluate the ability of the mosque to employ Microsoft Excel in its accounting process. The data analysis was based on a descriptive method, in which the data were collected, then compiled into paragraphs (Sugiyono, 2018). Three stages were involved in analyzing the qualitative data.

a) Data Reduction

Data reduction is used by researchers to perform the election process, simplification, and the focusing, abstracting, and transforming of the raw data from the field data. This research focused on the application of Microsoft Excel by the X Great Mosque. The researchers conducted the interview process and separated the data into three contexts, the technological, organizational, and environmental, in line with the TOE framework.

b) Data Presentation

The researchers compiled the data presentation starting with the interviews, and followed by transcription of the results, and present. The data were presented in the form of narrative text.

c) Conclusion

The research was concluded with the aim of obtaining the final study results.

4. ORGANIZATION PROFILE

The X Mosque is located at JL. Diponegoro, Gulak Galik, Kec. Tlk. North Betung, Bandar Lampung City and was built in 1958. The construction of the mosque consisted of four stages. In Stage I, from 1958 to 1969, the first mosque building had an area of 20x25 meters with a cast flat roof without a dome. Phase II construction involved the building of the 2nd floor, the procurement of domes, and building of a mihrab measuring 5x5 meters. In 1996, the third phase of construction was conducted, namely the construction of the 2nd floor, terrace and two front steps, a place for ablution, toilets, and a 50-meter-high tower. Phase IV construction from 2011-2014 consisted of the arrangement of the mosque's courtyard. The land area on which the mosque was built is 60,850 m2and 7,000 m2. The mosque can accommodate 6,000 worshippers at one time. The building consists of two floors; on the 1st floor there is a multipurpose room which is used as a place to hold wedding reception sand mass circumcisions, and perform vaccination and immunization. This room can accommodate 2,000 guests. On the second floor is the main room. The mosque has three pyramidal domes located in the middle of the front, and on the right and left sides of the mosque, and has two towers located in front and behind the mosque.

5. RESULTS AND DISCUSSION

5.1 TECHNOLOGICAL CONTEXT

According to Baker (2012), the technological context includes all the technology relevant to the company, both that which is already used and that which is available on the market but not currently used. Chong and Olesen (2017) suggest that technological factors such as relative advantage, compatibility, and complexity can affect the adoption of innovative technologies.

5.1.1 Relative Advantages

Organizations are more likely to implement information technology if it will bring perceived organizational benefits, such as improved performance and higher economic benefits (Chong and Olesen, 2017). Ifinedo (2012) demonstrates that SMEs in Canada are generally positively encouraged to adopt IEBT after realizing the perceived benefits of the technology compared to existing manual practices. This is in line with the answers in the interviews put

forward by the General Chair and the Treasurer concerning the benefits of the use of Microsoft Excel, such as faster accounting processes, neater preparation of financial reports, and proof of stored transaction records that will not be easily lost.

According to Gutierrez, Boukrami, and Lumsden (2015), organizations will gain greater benefits from adopting large-scale cloud computing because this will help them achieve competitive advantage over their competitors. Research by Simatupang, Gunarso, and Kuntara (2019) showed that the advantages of using Microsoft Access in the accounting process of the Catholic Church were that it could display data more quickly; the preparation of financial reports could be faster, measurable, and documented; and that parish priests could easily control church finances. The deputy secretary concurred with this, that Microsoft Excel allowed the accounting process on the existing system to automatically provide updates, and that the process of preparing financial statements can be done in a timely manner.

5.1.2 Compatibility

Compatibility is the degree to which an innovation is perceived as consistent with existing socio-cultural values and beliefs, past experiences, and needs of potential adopters (Baker, 2012). The general chairman believed that the eventual implementation of Microsoft Excel was necessary to simplify the accounting process. The implementation of technology initiatives can be driven by technology that is more compatible with the organization's technology, processes, and work application systems (Chong and Olesen, 2017). The same idea was also argued by Simatupang, Gunarso, and Kuntara (2019) in relation to the compatibility of the application of available technology. In implementing Microsoft Access, the parish must consider it slevel of compliance with the rules that have been applied to parish accounting and its compatibility with Microsoft Excel in the accounting information system previously applied. According to the general treasurer, the procurement of computers needs much consideration as the financial capacity of the mosque is not the same as that of a company, so discussion with advisors and other administrators is necessary about their usefulness, and whether to buy a computer or use personal items.

5.1.3 Complexity

Complexity is the extent to which an innovation is considered relatively difficult to understand and use (Baker, 2012).According to the general chairman, the operation of Microsoft Excel appears very complex and integrated. The general treasurer also expressed the same opinion, that it was confusing and difficult at the start of learning, but after studying and putting it into practice it turned out to be quite simple.

For more complex technology initiatives, employees may take longer to understand and adapt to new technologies (Chong and Olesen, 2017). This is because they need more effort to learn and share knowledge about technology adaptation. According to the deputy secretary, with the existing facilities, together with the available learning materials, management can understand how to use the application quickly.

Gutierrez, Boukrami, and Lumsden (2015) also explain that complexity is a barrier to cloud computing because many organizations still have a degree of fear and concern about the adoption of new IT innovations. Even though it was the first time that Microsoft Excel was used in the accounting process, the management gradually learnt how to employ it, as indicated by the general treasurer.

5.2 ORGANIZATIONAL CONTEXT

The organizational context represents the internal organizational factors that influence the adoption and implementation of information technology. The quality of human resources, management leadership, and organizational size are the most frequently discussed factors in this context that affect innovation adoption (Chong and Olesen, 2017).

5.2.1 Human Resources

Human resource quality refers to the extent to which technical knowledge is available within an organization. The greater the capacity of available human resources, the greater the chance of success in implementing new technologies (Chong and Olesen, 2017). According to the general chairperson, the mosque management is competent and suitable for later adoption of information technology. Agreeing with this, the general treasurer stated that he was willing to accept and supported all forms of changes that were for the benefit of the mosque, because it was the duty of the management to ensure the mosque prospered. God willing, adoption can be achieved through study and much practice.

Simatupang, Gunarso, and Kuntara (2019) explain that in implementing Microsoft Access, parishes must consider the readiness of their technical and financial resources to be able to commit to any adoption. Based on the interview findings, all the management was willing and ready for the accounting process using Microsoft Excel as an accounting application to be adopted.

5.2.2 Management Support

Top management leadership includes the role of executive leadership in encouraging and facilitating innovation in the overall strategy of the organization (Chong and Olesen, 2017). Ifinedo (2012) concludes that

management support is critical for successful adoption of innovations in SMEs in Canada and shows that IEBT adoption rates are higher when management support and commitment is available. In line with this, Oliveira and Thomas (2014) state that top management support has a significant effect on explaining cloud computing. The general secretary also stated the same, saying that he would strongly support the implementation of Microsoft Excel, provide help and play an active role in the process.

Chong and Olesen (2017) argue that top management leadership involves the role of executive leadership in encouraging and facilitating innovation in the overall strategy of the organization. In particular, the commitment of top management plays an important role in driving various initiatives for information technology during the implementation phase. According to the general treasurer, the mosque management strongly supports the use of technology in the form of Microsoft Excel because the preparation of financial reports can be processed effectively and efficiently. However, before deciding to support the application of Microsoft Excel in the preparation of financial reports, the daily management will need to hold discussions. If they decide it is good of the mosque, they will definitely play an active role.

5.2.3 Organizational Size

Tornatzky and Fleischer (1990) argues that larger organizations are more likely to adopt innovations because they have adequate resources and a strong infrastructure to facilitate the technology implementation process. However, smaller organizations are more likely to facilitate the use of innovations because they have less bureaucratic inertia and more flexible structures, enabling them to benefit from better communication, coordination and influence to gain support for implementing any technological change (Chong and Olesen, 2017). The X Great Mosque is a small organization; management in charge of finance only consists of two people, the general secretary and the deputy treasurer. As there are only two people involved, communication and coordination can be optimal.

5.3 ENVIRONMENTAL CONTEXT

According to Chong and Olesen (2017), in the environmental context,- industry characteristics and regulations are the dominant factors influencing the adoption of technology.

5.3.1 Industry Characteristics

In previous research, for example Chong and Olesen (2017), industry characteristics consist of competitive pressure and pressure from trading partners. However, the mosque has no trading partners and no competitors. In line with this, Simatupang, Gunarso, and Kuntara (2019) explain that the parish does not have a trading partner, nor does it compete with other parishes for

profit. From the interview findings the needs and expectations of the mosque management if there will be an application of automation of the mosque accounting process. According to the finance team, namely the treasurer and deputy treasurer, it is hoped that the application of automation will ease and not complicate the tasks of financial management.

5.3.2 Regulatory Support

City government regulations can motivate or prevent organizations from adopting technological innovations (Chong and Olesen, 2017). In relation with this, Ifinedo (2012) suggests that the level of support and the requirements of regulators and/or professional bodies influence technology adoption. Regulatory support is identified as the main environmental factor influencing such adoption within the TOE framework (Simatupang, Gunarso, and Kuntara, 2019). From the interview findings, all the respondents answered that there would no intervention from the government if an accounting application based on Microsoft Excel were adopted; even though the status of the X Great Mosque is as a city mosque, all the decisions and policies depend on the agreement and deliberation of the daily management, which should conform to Islamic sharia and not violate city government regulations. There is no interference from the city government, because the accounting process is the business of the daily management. The City Government is indeed a donor, but cannot intervene in such matters. If the implementation of Microsoft Excel is a good move, the government will definitely agree with any mosque management decision.

6. CONCLUSION AND RECOMMENDATIONS

6.1 CONCLUSION

The purpose of this study was to determine the ability of the X Great Mosque to apply Microsoft Excel in an accounting application. The analytical tool used to assess such ability to employ information technology was the technology-organization-environment framework, or TOE framework. This is designed to explain that the adoption of technological innovation in an organization depends on technological, organizational, and environmental factors. The data collection method used involved interviews, which were conducted with five administrators at the mosque, namely the general chairman, general secretary, administration, general treasurer, and deputy treasurer.

Factors in the technological context that influence adoption decisions are relative advantage, compatibility, and complexity. In the organizational context, the decision to implement technology is influenced by the availability of human resources, management support, and the size of the organization, while in the

environmental context, the factors that influence the adoption of new technologies consist of industry characteristics and regulatory support.

The results of the study demonstrate that based on the framework, the management of the X Great Mosque are able to implement accounting applications using Microsoft Excel. The findings from the interviews show that three attributes play an important role in encouraging mosques to implement accounting applications, namely management support, organizational size, and regulator support.

6.2 RECOMMENDATIONS

What needs to be considered is the readiness of the mosque's resources, namely human resources, and the availability of infrastructure. It is important to consider the readiness of human resources; sufficient ability and in-depth understanding are needed by mosque administrators dealing with finance regarding the operation of Microsoft Excel in the accounting process. In addition, for the process to run smoothly, there should be availability of information technology infrastructure and adequate IT infrastructure readiness, especially regarding the availability of computers, computer storage security, computer access, and data storage.

Based on the research findings, the following suggestions or recommendations are made to the management of the X Great Mosque in relation to the implementation of accounting applications:

a) In-depth training and socialization should be conducted on the use of Microsoft Excel in the accounting process. This can be done by inviting experts on Microsoft Excel, for example Mr. Andy Prasetiawan Hamzah, SST, M.Sc., Ak, to run joint training on the use of software accounting applications using Microsoft Excel.
b) Regulations and policies should be developed to prevent problems caused by administrators other than the finance team to access the mosque computers, as these will contain financial statements giving confidential information; for example, salary data. The enactment of such regulations is expected to mitigate the risk of misuse of access by other parties.

The limitation of this study is that the scope is limited to the factors that influence the implementation of accounting applications at the X Great Mosque in Bandar Lampung. These factors focus on the technological, organizational, and environmental contexts in accordance with the TOE framework. Future researcher wishing to continue this research are recommended to use an accounting application whose technology has been audited.

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