

## Exploring Waqf Management Transformation: Opportunities and Challenges (case study in Ismuhu Yahya Foundation Pontianak)

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### Abstract

*This study aims to explore the impact of technology implementation on the efficiency of waqf management in the non-profit organization Ismuhu Yahya Foundation Pontianak. Currently, waqf is undergoing a transformation as a result of advances in digital technology. As one of the important social and humanitarian services, an in-depth understanding of the adaptation process is needed to make this digital transformation work. This research uses a qualitative approach with a case study method to explore the impact of waqf management transformation, as well as to understand the ongoing digitalization process. Through interviews, direct observation, and review of relevant documents, this research explores the changes that occurred in waqf management at Ismuhu Yahya Foundation Pontianak. The results show a significant improvement in the efficiency of waqf management, including administrative cost savings and increased transparency. In addition, this research provides some novelty and unique contributions. First, by raising the topic of digital transformation in waqf management, which has not been widely studied, this research brings novelty by introducing a theme that is relevant to current technological developments. Secondly, as an in-depth local case study, the selection of Ismuhu Yahya Foundation provides new value as not many researchers have explored local areas with a qualitative approach. Third, the specific opportunities and challenges faced during the transformation process. Fourth, this study also found changes in the interaction between waqif (waqf giver) and nazir (waqf recipient). Finally, this study can contribute to the development of theories on waqf management, particularly in the context of digital transformation, which can serve as a foundation for future research and implementation.*

**Keywords:** *Waqf, Technology Implementation, Digitalization, Transformation, Waqf Management.*

### Introduction

Waqf is a concept in Islamic teachings in which an individual, group, or institution donates assets or property to be used permanently for public or good purposes (Ismail *et al.*, 2023; Kahf, 2003; Rahmawati *et al.*, 2021). Assets or assets that are waqfed may not be sold, inherited, or transferred, and the benefits must be used in accordance with the original intention of the waqf giver (wakif) (Rinawati, 2021). Assets that have been waqfed provide many important urgencies in the welfare of the people. The urgency of waqf can be seen from several contexts, namely social, economic and religious (Kahf, 2003). However, waqf, especially those managed manually or traditionally, faces a number of challenges. Traditionally managed waqf has limited documentation, lack of transparency, and no clear management standards. This leads to low accountability and distrust of waqf management by the public (Sadeq, 2002). Other problems include the lack of integrated data and the underutilization of information technology in waqf management. The widespread and diverse waqf assets require more systematic and efficient management, which is difficult to achieve with traditional methods. Limitations in management capacity, both in terms of human resources and technology, are also a major obstacle in optimizing the benefits of waqf (Kuran, 2001). Therefore, waqf management needs to transform from a traditional system to a more modern system with the utilization of technology.

The development of technology has become a basic necessity for people's lives, the use of gadgets and the installation of internet networks are important in socializing life. Community services are already technology-based, Isabela & Umam (2020) found in their research that the transformation of technology in people's lives provides a lot of convenience and maximum utilization of time. Based on data from *Global Digital Report* Data as of January 2024, global internet utilization has reached 5.35 billion and nearly seventy percent of the total population. The Indonesian region is one of the countries that utilize technology

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massively. Rachman & Salam (2018) also conducted research on technological transformation, the findings state that utilizing technology for most people is seen as efficient and more reliable. The many advantages of technological transformation make almost all sectors of life eager to carry out technological transformation, including the philanthropic sector.

Waqf is a philanthropic sector that is growing very rapidly, if it wants to expand its benefits, the use of technology is a must. In addition, waqf is one of the Islamic economic instruments that has great potential in supporting the social and economic development of the ummah (Syaifulah & Idrus, 2019). As an asset dedicated to the public interest, waqf can strengthen the education, health, and other social services sectors. However, in recent decades, waqf management is often faced with various challenges, such as inefficient management, transparency, and lack of technology utilization.

The waqf system that is still mostly used is a traditional system with several limitations. First, there is a lack of transparency, one of the biggest problems that can be found in the manual recording, reporting, and management process, which is prone to abuse and information imbalance. Second, many waqf assets, such as land or buildings, are not managed productively. As a result, the potential economic benefits of these assets are not maximized and the expected social benefits of waqf are not fully achieved. Third, the complicated bureaucratic process that still uses traditional approaches is often slow, making it difficult for managers to respond quickly to community needs that must be supported by waqf funds. Fourth, traditional waqf systems are often less flexible and do not keep up with the times, making it difficult to attract new waqfs, especially the younger generation who are more accustomed to digital technology.

Therefore there are several studies such as Fahlevi (2019) in his research states that waqf management has a desire to continue to grow, therefore starting the use of technology with products in the form of *software-based* financial services in providing services with computer programs or other technologies (Lee *et al.*, 2015; Rachman & Salam, 2018). In this context, the transformation of waqf management becomes an urgent need to improve the efficiency and effectiveness of waqf asset management. This transformation involves a paradigm shift, the application of technology, and modern managerial methods to maximize the potential of waqf.

Ismuhu Yahya Foundation is one of the social, religious institutions that focuses on waqf management and community empowerment through social, religious activities in Pontianak. Since its establishment, Ismuhu Yahya has been committed to utilizing waqf as one of the main instruments in supporting various social and religious programs, including education, health, and community-based infrastructure development. Nevertheless, in its daily practice, Ismuhu Yahya faces various challenges, especially in efficiency, transparency, and optimal management of waqf assets. Because there is a transformation process of waqf management carried out by Ismuhu Yahya Foundation, it is one of the main reasons to make the object of research in the form of a case study. Ismuhu Yahya is also considered relevant to understand how this transformation can be carried out, as well as the opportunities and obstacles that may be faced. Ismuhu Yahya is one of the big drivers of da'wah in Pontianak city, so the transformation process continues. Technological transformation is one of the modern service solutions that can expand the reach, as well as provide satisfaction and convenience for donors (Sari *et al.*, 2022).

Ismuhu Yahya's main focus in utilizing technology is to gain the trust of donors. The use of technology can make it easier to provide information on the performance of waqf management institutions in a transparent manner, thus increasing satisfaction and trust in waqf management institutions, and the sustainability of the institution will also be better maintained. In addition, the benefits provided to the community will be wider, Rachman and Salam (2018) support the statement that the utilization of technology as a trend in business and non-business can encourage the development of an institution. This research aims to explore the opportunities resulting from digital transformation in waqf management. By utilizing technology, it is hoped that waqf management can become more inclusive and efficient and have a greater impact on social and economic development. One of the institutions that has tried this process, Ismuhu Yahya Foundation, is used as the object of research. Their transformation of waqf management is expected to not only increase effectiveness and efficiency but also open up opportunities for innovation in

the development of more creative and productive waqf assets. Not only that, this research also wants to see the impact of digital transformation, including the opportunities, obstacles, and benefits provided.

## Methods

This research design uses a qualitative method with a case study approach to deeply understand the implications of implementing digital transformation through fintech applications at the Ismuhu Yahya Foundation institution in Pontianak, West Kalimantan, Indonesia. The informants in this research are Ismuhu Yahya Baitul mall administrators, who are actively involved in the operational process of raising funds through *fintech*. The list of informants is as follows:

**Table 1.** List of Research Informants

Name	Position
Mr. IC	Ismuhu Yahya Foundation Coordinator
Mr. AP	Chairman of the Ismuhu Yahya Foundation
Mr. AS	Customer Service Ismuhu Yahya
Mrs. NZ	Customer Service Ismuhu Yahya

The institution was chosen because it has been utilizing technology for almost four years. In the process that has been passed they already have a lot of experience and provide some special notes on the advantages when utilizing technology. The stages of data analysis in this study were carried out in several stages of data collection and organization, such as conducting interviews with managers, field observations, reviewing the foundation's internal documents and financial reports, and determining what kind of information technology is used. Furthermore, relevant data was categorized based on predetermined themes. After data collection is complete, enter the data coding process to make it easier to break it down into smaller units and give codes according to themes, which will eventually be connected as needed.

Pattern matching is also an important sequence in this data analysis process, after which an explanation of how waqf management transformation occurred at Ismuhu Yahya Pontianak is created. This process is iterative, i.e. the initial explanation is developed and refined as the data analysis progresses. Not forgetting to identify the factors that encourage and hinder the utilization of technology. Finally, data triangulation was conducted by comparing data from several sources (interviews, observations, documents, and digital data) to improve validation of findings. This triangulation ensures that the conclusions do not depend on a single data source (Yin, 2018).

## Result

### *The Urgency of Waqf*

Waqf has great potential to be a sustainable social instrument that has a long-term impact, firstly on the economic empowerment of the ummah. There are two points that we can see, namely the source of sustainable social financing and economic empowerment and job creation. For sustainable social financing sources, waqf can be a source of funds for financing various social programs such as education, health, and humanitarian assistance without depending on temporary donations. As for economic empowerment and job creation, productive waqf management such as agricultural land, property, or business, waqf can create jobs and support local economic growth (Hasan, 2007). In addition, the social welfare improvement of waqf lies in poverty reduction and access to public services, both of which are the role of waqf in helping the poor in the form of support, such as scholarships, health care, and the provision of basic infrastructure. Waqf assets can also be used to build public facilities such as schools, hospitals, and mosques, which directly improve the quality of life.

Increased community sustainability and self-reliance is also the urgency of waqf, which can be felt by the community through long-term funding sources. It can be said that waqf is different from ordinary

donations because it is eternal, waqf assets cannot be sold, inherited, or donated, so that they can provide in the long term (Nour, 2015). The difference between waqf and regular donations can also encourage financial independence through proper management. Waqf can help Islamic institutions and communities become financially independent, reducing dependence on external aid. At this point, if we look at some of the urgencies regarding waqf, we will realize that waqf is a social activity that has a special position in the eyes of the ummah, and also in the eyes of Allah SWT.

Another thing that makes waqf even more special is the sustainability of the Jariyah charity. In Muslim understanding, waqf is a charity whose rewards continue to flow even after the waqf giver (wakif) has passed away. This motivates Muslims to make long-term contributions through waqf. Waqf also provides lasting benefits through the fixed assets given, provided that the management of the waqf is carried out as well as possible so that the benefits can be felt continuously by future generations (Salarzehi *et al.*, 2010). Last but not least, through waqf we can conduct a stronger Islamic propagation. Various da'wah and Islamic propagation activities can be supported through waqf and its derivative programs, the impact of which can strengthen the Muslim community in carrying out religious teachings and Islamic values.

#### *Ismuhu Yahya Foundation and Technology Transformation*

Ismuhu Yahya Foundation is one of the waqf fund management institutions that has carried out technological transformation. Technological transformation itself is a process of significant change in the use of technology, from what is used, implemented, and integrated into aspects of life (Westerman *et al.*, 2014). One of the uses is in the utilization of financial software which is expected to be an integral part of technological transformation in waqf management (Buckley, 1996). Financial software is an example of how new technologies are adopted to create more efficient and innovative financial services. In addition, it also helps in the development and improvement of payment technology, cybersecurity, and data management (Kusuma & Nugroho, 2019). Adopting financial software in Indonesia is influenced by several factors such as the level of financial literacy, access to technology, and risk perception. (Setiawan *et al.*, 2021).

The process of adopting financial software in Indonesia developed around the year 2000 (Fahlevi, 2019). The adoption process of financial software in Indonesia only began to develop around the 2000s and its development has been very rapid because a large population supports it. In other words, Indonesia is one of the fastest-growing financial software markets in Southeast Asia (Urumsah *et al.*, 2023). In Indonesia, according to *Services Authority Financial*(OJK) financial software is divided into several sectors, namely: 1) *financial planning*, 2) *crowdfunding*, 3) *lending*, 4) *aggregator*, 5) *payment*, and 6) other *fintech*. (Rusydia *et al.*, 2018). Isabela and Umam (2020) explained that what dominates financial software is the *payment* sector (*payment*) of 42.22%, the *lending* sector of 17.78%, the aggregator sector of 12.59%, the financial planning sector (financial planning) of 8.15%, and other sectors 11.11%.

This research will further discuss financial software that is utilized specifically on crowdfunding. Crowdfunding is understood as the collection of funds from a number of individuals or organizations to support a specific project or cause and is usually done through a dedicated online platform (Butticè & Colombo, 2020; Mollick, 2014). The development of technological transformation drives the success of the crowdfunding concept, Sitanggang (2018) stated that the crowdfunding phenomenon in its current state originated in the United States in 2008. The debut of Kickstarter and Indiegogo catalyzed the development of crowdfunding in the world, especially in the United States.

Following Indonesia in 2013, several crowdfunding sites emerged such as Wujudkan.com, Patungan.com, Ayopeduli.com, GandengTangan, Kitabisa.com, and others (Hutami & Irwansyah, 2019; Sitanggang, 2018). The collection process and crowdfunding mechanism are quite interesting because they are similar to campaigns, because there are regulations set by the platform to facilitate the meeting of people/organizations that fund and those to be funded (Adiansah *et al.*, 2016). In addition, the interesting thing to see is the communication patterns of the individuals involved to the reasons why they want to donate their funds. Fundraising using crowdfunding media at the Ismuhu Yahya Foundation has been running since 2020. Their secretariat is located in the Kubu Raya area, West Kalimantan in the Ismuhu

Yahya mosque area, this mosque can be said to be a multi-benefit mosque managed by young people in the suburban village of Pontianak, not just a place of worship, but a place of learning for the ummah and trying to prosper the community's economy.

Crowdfunding can technically raise funds from a large number of people through an online platform, so the funds obtained are also large (Mollick, 2014). The utilization of crowdfunding in Ismuhu Yahya's environment is carried out with structured stages, from planning to managing the funds collected (Adjakou, 2021). Before starting, the Ismuhu Yahya team determines the specific purpose of fundraising; they divide it into several specifications; some are included in general donations, special donations, and waqf. General donations are for the general activities of the Foundation, special donations are for specific cases, and physical construction is included in waqf. They utilize GoFoundMe-type crowdfunding specifically for social and charitable purposes (Sahm *et al.*, 2014).

After classifying the designation of donations, they proceeded to carefully compile technical steps, up to the target funds to be collected. The maturity of the planning is also supported by a responsible work team, Ismuhu Yahya divides it into several teams. There is a team that compiles the program, there is a poster design team, there is a team that uploads on the website, and, of course, there is a team that focuses on marketing the program that has been made. The solid team at Ismuhu Yahya makes them productive, increases creativity, innovation, job satisfaction, and resilience to challenges, which is proven until now they continue to grow and the donations managed are also increasing. Nonetheless, there are a few challenges they face such as developing a strong narrative, to attract donors. Agrawal *et al.* (2015) explained that success in narrating the purpose of the community project will be touched so as to attract donors to donate their funds.

The creation of quality videos or images can also strengthen the message to be conveyed (Burtch *et al.*, 2013). Furthermore, they conduct promotions by utilizing social media, email marketing, and the Foundation's website. To strengthen these efforts, they also utilize personal networks, friends, family, and foundation administrators. Bi *et al.*, (2017) and Brown & Mason (2017) in their research explain that utilizing networks and actively communicating will be very helpful in raising funds. Because the latest information provided will increase the trust of the donor. Moreover, the two-way interaction, such as answering their questions, is also very influential. And the last part of the management of funds that have been collected also needs to be careful in its management. Make sure it is in accordance with the budget plan that has been prepared, it is also important to provide transparency in the use of funds to donors (Lehner, 2013). But for them, while having a solid team will help the organization achieve long-term goals more effectively and efficiently, and will create a positive and supportive work environment for all.

#### *Santri Pengelola Amanah (SPA) and Customer Relationship Management (CRM) Application*

During the observation period, the researcher also stayed in the Ismuhu Yahya mosque area. At the beginning of the search for research results, many interesting things appeared from the area. The position of the mosque is in the middle of a residential area, in one area there are several housing clusters occupied by trustee students or abbreviated as SPA. The term SPA is common for Ismuhu Yahya Foundation managers, regardless of the division. The recruitment process is also unique, initially they open vacancies for the required division positions, the human resources development (HRD) conducts a fairly strict selection. In addition to considering the final education, experience, and motivation to join, these SPA candidates are given a charge in viewing the meaning of "salary".

In general understanding, we have been patterned in seeing salaries as income that we get every month in return for services in the form of money, in Ismuhu Yahya Foundation does not believe in a similar definition. They have an understanding that "salary" is a fortune that is obtained if you make maximum efforts, whether whatever you get is a provision, and should be grateful. Therefore, the foundation has never discussed the issue of "salary" in any nominal amount. Although, in this case, they do not question the nominal, in human terms, their payroll process has standards that can improve the welfare of the SPAs.

The advisor and Chairman of the Ismuhu Yahya Foundation gave an understanding that the SPA is the most important individual who must be asked for his commitment to carry out every mandate given. The success of the team in managing waqf funds cannot be separated from the form of commitment at the beginning. Continuing his delivery that our positions in the Foundation are all the same; the difference is at the level of the idea initiator, the execution part, and the operational part. We are all in the same circle of guardians of the trust that has been given.

Ismuhu Yahya Foundation has managed the mandate from donors with full digital utilization. The SPAs believe that all-digital management provides many benefits. Customer Relationship Management, or CRM for short, is a crowdfunding application that they use in collecting and managing donations. The application is a form of business strategy that combines processes, people, and technology. Its main function is to help attract donation prospects, determine them to become donors, retain existing donors, and provide services to make them feel satisfied and loyal. In general, this application is used in for-profit companies, but can be modified for donation purposes.

Santri trust management (SPA) is an important factor in the utilization of CRM applications; one informant shared his experience in utilizing the application. many conveniences are obtained by utilizing CRM, first, features that make it easy for them to operate, just enter the user and password. On the initial display will appear the name of the account owner, there will be no account exchange under any circumstances. On the next display, there will be six features that can be selected as needed, record donations, record followups, leaderboards, statistics, transactions, and donor lists. As the name suggests, the record donations this feature serves to record every incoming donation, with any nominal will be recorded neatly. Next is record follow-up; this feature is used when you want to follow up on all donors handled; each SPA has a different list of donors, and they will do maintenance from start to finish.

In the CRM application, there is a leaderboard display, which is a favorite feature for SPAs. The feature has the function of displaying the achievements of the students in collecting donation funds. In this display, we will see which students collect the most donations, and of course, they get rewards from the process. Interestingly, from the experience of the informants, there is no tendency whatsoever from the leaders to seek as many donations as possible. Nevertheless, the leaders provide an understanding that the influx of large donations will also have a big impact on the welfare of the people. So that the students have the right motivation in carrying out the obligation to collect donations.

This application is also equipped with a statistical feature. The display will explain the summary of the collection of donation funds in daily, monthly and annual forms. The feature also displays program categories that can be selected by donors, such as zakat, infaq, waqf and grants. Therefore, donors have the flexibility to choose in donating, the funds will be used in which program category. In addition, the donor list also complements the CRM application features. On its display, we will see the names of donors complete with cellphone contacts who have been sincerely giving their funds for the benefit of the people. Santri can communicate, in the form of greeting news, asking about daily activities, sometimes even santri become good listeners for donors' problems. At the end there is a thank you feature as a form of appreciation, equipped with good prayers offered to the donors.

#### *Utilization of Technology in Waqf Management of Ismuhu Yahya Foundation*

From the results of interviews from informants, the results given from the use of technology are quite diverse. First, access to donation results is increased compared to traditional methods, this is due to the breadth of reach not only in one city, can reach all of Indonesia and can even reach foreign countries. Second, it allows transactions from donors to be faster and easier by only making transfers or utilizing payment barcodes. Third, a very significant reduction in operational costs. Fourth, the sustainability of fundraising is more fixed every month, thanks to intense communication with donors. Donors can also be classified by the amount of donations, the intensity of donations, and which programs are more attractive. Fifth, the transparency of the use of funds is quite clearly displayed on the digital platform used, thus maintaining the trust of donors. Finally, the efficiency and effectiveness of working time is greatly influenced, as SPAs can do their work anywhere.

Funds that come from donors to the Ismuhu Yahya Foundation will be classified. The program category has been determined by the donors, such as zakat, infaq, waqf, and grants. The utilization of technology, especially the use of crowdfunding, requires special attention because it involves the management of funds sourced from the public and donors provide a high value of trust. Transparency, accountability, and compliance with the law and sharia principles are key in managing these funds.

In Ismuhu Yahya, sharia compliance is a basic requirement for the management of zakat, infaq, waqf and grant funds. The funds must be distributed to recipients who meet sharia criteria and not be used for activities prohibited by Islam. For example, zakat must be distributed to mustahik (zakat recipients) who fulfill the eight asnaf (groups of zakat recipients) (Guidelines for Zakat Management, 2020). Infaq and grants have more flexibility than zakat, but must still be used in accordance with the purpose of the donation that has been agreed with the donor. For waqf Djalaluddin (2018) provides an understanding in fiqh, basically the utilization of property depends on the conditions set by the waqif (waqf giver), most of the SPAs have made a contract at the beginning to the donors or waqif, especially for waqf because it is for the wider and long-term benefit of the people. One of the waqf donations was used for the construction of the Ismuhu Yahya Mosque, and currently the waqf funds are being used for the construction of male and female dormitories.

In the context of technology utilization, research conducted by Gabor & Brooks (2017) by examining the importance of digital-based management inclusion as a form of development intervention through a network of state institutions, organizations, and philanthropic investments. Furthermore, the research also maps, expands, and mobilizes digital footprints, this is done to combine economic behavior with algorithm predictions. The result of this view is expected to accelerate access and monitor community involvement in the economy. Ozili (2018) presents issues related to digital financial management and management, from the point of view of management, benefits for financial service users, digital financial providers, governments, and even social organizations. Geng & He (2021) The use of technology does not only provide advantages, but is accompanied by shortcomings that need to be improved, such as the level of literacy for users and providers

Furthermore, another weakness is that stress tests have not been applied to technology users, because there are impacts, such as how they are able to survive in the most difficult conditions, such as high interest rates, financial crises, and so on (Geng & He, 2021; Ozili, 2018). Other concerns with the use of technology provide more opportunities for violations, manipulation so that it is quite high risk when managed by organizations that are less trustworthy. To eliminate this stigma, the Ismuhu Yahya Foundation management during the technological transformation also conducts an evaluation at the end of each program, the aim is to maintain public trust.

#### *Digital Transformation in Waqf Management: Opportunities and Challenges*

Digital transformation in waqf management is an effort to utilize digital technology to improve the efficiency, transparency, and effectiveness of waqf management. It involves the use of technologies such as mobile applications, information management systems, and digital platforms to better manage waqf assets, raise funds, and distribute them. If we look at it from several angles, digital transformation has two sides that we cannot let go of opportunities and challenges. Let's talk about the challenges first.

The first challenge of digital transformation in waqf management is limited technological infrastructure. In some parts of Indonesia, especially in rural areas, access to the internet and digital technology is still limited, which can hinder the adoption of digital transformation. On the island of Kalimantan alone, there are still many areas that are still not covered by internet signals. In addition to limited signal access, the cost of developing and maintaining digital systems requires significant initial investment, including software and hardware costs. Both of these issues are still being complained about by the community and the Ismuhu Yahya Foundation, because the full utilization of technology is inseparable from adequate internet access. Furthermore, another challenge faced by the foundation is data security, they had experienced hacking of donors' data and had become the target of online fraud, which finally affected the trust of donors and the community.

The good news is that they can handle it well, making several efforts, including communicating intensely with donors. In addition, the users of new technology, especially for sharia-related transactions, must comply with sharia principles. The utilization of technology is not an easy thing, because there are many adjustments that should not conflict with religious provisions. The lack of digital knowledge and skills is also a challenge; the skills gap in each individual makes waqf management encounter obstacles, making it less effective. The most difficult process and also a challenge according to the informants is to provide understanding to waqf managers who have been accustomed to the traditional system. Persuasive approaches and communications are needed, as this relates to changes in organizational culture and ways of working, so it takes significant time and effort.

The opportunities related to digital transformation that are most felt by foundations are regarding increased transparency and accountability. The utilization of technology can be used to record transactions and waqf asset management in a transparent and immutable manner, thereby increasing accountability and trust from donors and stakeholders. The utilization of digital platforms also allows waqf managers to report on the utilization of funds in real-time, they also provide access to donors to monitor how their funds are being utilized.

For the utilization of crowdfunding and digital donations, waqf in particular can facilitate fundraising by reaching a wider audience. This allows people to make small but significant contributions collectively. Global access is also an excellent opportunity, with digital utilization allowing waqf management to reach donors around the world, increasing the potential for cross-border fundraising. Of course, with digital utilization, another opportunity is operational efficiency, such as process automation. The use of technology can automate many administrative processes, such as record-keeping, zakat calculation, and asset management, which can reduce operational costs and human error.

Another opportunity can also be seen in better asset management, where digital technology can help by providing accurate data and analytical tools for better decision-making. Increased public participation such as mobile and web applications can be used as media for education and socialization of waqf. The expected result is an increased interest in waqf from the younger generation who are more familiar with technology. Digital transformation can also enable direct interaction with donors through digital platforms, such as chatbots, social media, and email, which can increase donor engagement and satisfaction. And finally, the utilization of technology also enables real-time monitoring and reporting of waqf activities, making management and supervision easier.

## Conclusion

The application of technology in waqf management at Ismuhu Yahya Foundation Pontianak shows that the application of digital technology in waqf management presents significant opportunities as well as challenges that need to be overcome. Ismuhu Yahya Foundation as both the object and subject of the research shows how technology adoption can improve efficiency, transparency, and accountability in the management of waqf funds. However, this transformation will also require adequate technological knowledge as well as compliance with sharia principles.

From the results of this study, it can also be seen that the right strategy, namely by utilizing digital transformation in waqf management at Ismuhu Yahya Foundation Pontianak can have a significant positive impact, both for the management of waqf funds and beneficiaries. However, the existing challenges must be taken seriously in order for this transformation to run well and sustainably. In addition, the contribution of this research can be described in several aspects. At the theoretical level, this research will add insight to the academic literature on waqf management, especially in the context of digital transformation. This research can also provide the development of a theoretical model that describes the process, driving factors, and challenges in the transformation of waqf management from traditional to digital.

On a practical level, this research can provide insights into best practices and strategies that can be applied to improve operational efficiency, transparency, and accountability in waqf management, which can be applied to similar organizations. With this research, waqf managers get relevant recommendations on how



to face the challenges of digitalization and maximize the potential of technology for better management. On a social level, community involvement will increase due to the ease of the donation process, especially among the younger generation who are very familiar with the use of technology. Technology-enabled waqf management will maximize the benefits of waqf assets.

In addition to theoretical and practical contributions, this research also contributes to the social and policy levels. For the social level, this research shows how the utilization of technology in waqf management will increase community involvement. With an efficient and transparent waqf management, this research will help in maximizing the benefits to social welfare, and people will have more trust in waqf managers.

At the policy level, this research can provide important inputs for policymakers, such as the Indonesian Waqf Board (BWI) and other related institutions, on how to improve the regulation and supervision of more modern and technology-based waqf management. A more proactive policy towards the adoption of technology in waqf can be taken as a step towards supporting this sector. The results of this study can also serve as a basis for policy makers to encourage innovation in waqf management, both in terms of technological development and the implementation of new operational standards in various religious institutions.

There are several recommendations that can be given from the results of this study. To maximize opportunities and overcome challenges, Ismuhu Yahya Foundation takes steps that other organizations can also take. First, increase digital capacity by investing in training and digital capacity development of the foundation's staff, so that it will maximize the effectiveness of technology implementation. Second, inviting collaboration with technology companies or Islamic financial institutions to help the foundation develop a digital system that is safe and efficient, and sharia-compliant. Third, adopt strict cybersecurity protocols and conduct regular security audits to protect data and system integrity. And finally, continue to increase efforts to educate the public about the benefits of waqf and ways to donate through digital platforms to expand the donor base.

### **Conflict of Interest**

The authors of the manuscript have no financial or non-financial conflict of interest in the subject matter or materials discussed in this manuscript.

### **Data Availability Statement**

The data associated with this study will be provided by the corresponding author upon request.

### **CRedit authorship contribution statement**

Husnul Khatimah: Writing – original draft, Conceptualization, Visualization, Methodology, Formal analysis, and Investigation. Eko Ganis Sukoharsono: Writing – Supervision Methodology, Formal analysis, Conceptualization. Ali Djamhuri: Writing – review and editing, Noval Adib: Writing –original draft, Visualization, Investigation.

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