Strategic Analysis of Embedded Digital Donation Mujamma Infrastructure in Indonesia's Digital Banking and Super App Ecosystem: A Case Study Bank Nano and Mytelkomsel

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Abstract.

The rapid development of the digital banking industry, particularly the implementation of mobile banking as the primary banking channel, has transformed customers' daily financial transaction behavior. Almost all daily transactions, from bill payments and hotel or flight reservations to the purchase of goods, can be conducted through customers' mobile banking applications. On the other hand, social or philanthropic institutions face difficulties in raising funds for social programs, even through digital fundraising or crowdfunding systems. Currently, integration between digital fundraising through institutional websites and the Islamic social financial system, represented by mobile banking applications, remains limited, creating a significant gap between the rapid growth of mobile banking platforms and the slow pace of transactions through social institution fundraising applications. The study will examine how Mujamma, which is implemented as a digital donation infrastructure or platform provider, can be integrated with mobile banking ecosystems to implement a sharia-compliant donation scheme. By integrating such a scheme, the system will aim at reaching out millions of clients at ex post prohibitive costs, increasing the confidence of the user base and improving on the favorability of social program donations. At the same time, the model assumes the creation of the additional fee-based sources of revenues of the banking institution. Using a qualitative case study approach to examine the implementation at Bank Nano and MyTelkomsel, supported by interviews and analyses of PESTEL, STP, SWOT, and TOWS, the findings show that Mujamma's white-label, modular, and storytelling-based model provides an emotionally memorable donation experience for customers, thereby increasing donation transactions. However, the integration process with mobile banking requires intensive interaction and dependence on the Bank's execution, so this study recommends a selective growth strategy that focuses on automating integration from social institutions independently and selecting Banks that are ready with a digital integration system and have the need to make donations as one of the main features of their mobile banking. The characteristics of banks like this include Islamic banks with a relatively strong digital strategy.

Keywords: *Digital donation; Islamic social finance; digital banking; mobile banking; sharia-compliant fintech and infrastructure platform.*

I. INTRODUCTION

Digitalization has transformed the Indonesian financial services segment into mobile-first type ecosystems that determine the daily behaviors of the financial activities. Mobile banking and digital payment channels are on the increase because users are increasingly gaining appreciation on convenience and swiftness as well as accessibility. Bank Indonesia reports that the number of digital banking activities is over IDR 58,000 trillion, whereas the portion of e-money activities is over IDR 500 trillion, which confirms the strong dependence on mobile-based financial systems (Bank Indonesia, 2023). However, the use of digital donation systems is still low with no sign of establishing itself as part of everyday financial activity. At the same time, the number of clients who require socially responsible financial services is increasing, especially among Millennials and Generation Z. According to a survey conducted by Deloitte (2022), over 65% of respondents belonging to Generation Z respond to brands that take social responsibility, which should encourage the need to incorporate social values into digital finance. The phenomenon relates closely to the growth of the Islamic finance in Indonesia. Islamic financial assets keep on increasing and this has been backed up by regulatory ensurances and increased confidence on the part of the people. According to the report released by Otoritas Jasa Keuangan (2023), Islamic financial assets have increased more than 13% per annum. Although this has risen, digital conventions of Islamic social financing schemes as zakat, infaq and sadaqah are limited with less than 5% of accessible funds being gathered through digital platforms.

The mismatch can be used to show that the spread of Islamic financial resources has not been accompanied by the proper use of digital social finance. The addition of donation features to trustworthy digital platforms would transform charitable donations into a scientific financial process as opposed to a non-regular exercise. In that regard, such digital platforms as Bank Nano and MyTelkomsel come into view as central ones. Bank Nano positions itself as a mobile-first digital bank with focus on the Sharia-compliant financial services. It provides basic banking services, such as savings, transfers, and payments, via a single app, and it is aimed at digitally fluent Muslim clients. The concept of ethical finance and social responsibility also takes a front seat in its value proposition making the platform susceptible to integration of an Islamic-based digital donation functionality. Bank Nano technically uses the partially modular systems allowing the integration of API, but still has to deal with the limitations of legacy infrastructure. On the other hand, MyTelkomsel is a large scale, super-app, with millions of active users that provide telecommunications services, digital payment, reward, and lifestyle functionalities. Its open, API friendly design enables quick adaptation of third party services, such as donation modules. Although digital finance continues to proliferate, the use of digital donation is still low, which can be explained by the insufficient institutional prioritisation, disjointed user experience, and the lack of technological features.

Donation options are often put in an unimportant side category, which leads to poor user experience and low interactions. Mujamma tries to overcome these problems by integrating the possibilities of donation directly into the everyday digital platforms, which reduces the number of friction spots and encourages more people to take part. Challenges remain in system integration internal alignment user trust and regulatory and Sharia compliance. The core business issue lies in the gap between the rapid growth of digital financial platforms and the slow adoption of integrated user centered and Sharia compliant digital donation services. Based on these conditions this study examines how embedded digital donation infrastructure can support the strategic development of Mujamma in Indonesia.

1. How effective is the implementation of Mujamma's digital donation feature on the Bank Nano and MyTelkomsel platforms?
2. What strategic approach should Mujamma adopt to expand its donation infrastructure into larger banks and broader digital ecosystems?

II. LITERATURE REVIEW

PESTEL Analysis

PESTEL Analysis is used as a strategic framework to understand macro environmental factors that influence organizational performance, covering political economic social technological environmental and legal dimensions (Ward & Peppard, 2002), through this framework organizations are able to observe how public policy economic trends societal change technological development environmental sustainability and regulatory requirements shape the context in which decisions are made, these factors may open strategic opportunities but also introduce constraints that affect organizational choices, in many cases a systematic PESTEL assessment helps organizations adjust their strategies and maintain competitiveness within environments that continue to evolve and remain highly dynamic (Istichanah, 2022).

Segmentation, Targeting, and Positioning Analysis

Segmentation, targeting and positioning (STP) analysis is one of the fundamental marketing models used to align organizational products and services with the market requirements and the competition amidst market variables. Segmentation divides different markets into comparatively homogeneous groups based on geographic, demographic, psychographic, and behavioral variables, thus allowing companies to better suit the diversity of customers (Kotler and Keller, 2018; Rosyida et al., 2020). Targeting also evaluates these segments based on their measurability, size, accessibility, differentiability, and actionability, thus creating strategic focal points and investing the resources in the most efficient way possible (Kotler and Keller, 2018). Positioning then focuses on establishing a differentiated and valuable image of the product or service in the minds of the consumers based on differentiation on attributes, benefits, quality, price, or usage, thus strengthening brand image and competitive edge (Rosyida et al., 2020; Ries et al and Trout).

Internal Strategy

Internal strategy refers to how organizations develop, synchronise and execute strategic decisions using the synergistic deployment of its internal resources and processes as opposed to focusing on resource ownership. Internal strategy puts emphasis on the organisation, deployment and governance of these resources; it achieves effectiveness when it is implemented in coordinated action across the entire organisation and has enough flexibility so that it will accommodate change in the environment. Internal strategy therefore makes the gap between strategic intent and operational reality, hence its effect on long term performance (Sirmon et al., 2010; Strandskov, 2006).

1. Internal strategic capabilities are the ability of the organisation to perform strategy through processes of coordination, decision making, and routines or, the organisation practices. The capabilities are based on the interface between technology, operations management, and the governance structures and they are not independent artefacts. Those organisations with strong internal strategic resources are in a higher position to react to environmental forces, the achievement of the gaps in execution, and the addition of internal consistency particularly in digital and platform-based situations where cross-functional alignment is a priority. (Sirmon et al., 2010; Ford, 2020)
2. Strategic advantages are realized when strategies are executed in a consistent and repeatable manner, advantages such as efficiency reliability scalability and trust arise from coordinated execution across organizational processes but also depend on the organization's ability to adjust execution as conditions evolve, these advantages are not static and may weaken if internal processes are not reviewed and refined, organizations therefore need to continuously align execution mechanisms with strategic direction in order to sustain advantage over time. (Sirmon et al., 2010; Strandskov, 2006)

SWOT Analysis

SWOT allotment is there to assess the strategic location of the firm by applying a simultaneous evaluation of both internal and outside environments. The strengths and weaknesses are internal aspects that determine the performance of the organization and the opportunities and threats are external factors that arise among external conditions that cannot be directly controlled. Combining these dimensions, SWOT analysis will help to understand the strategy better and make organizations address the external realities with internal possibilities they have, i.e. remain not scattered in their approach of these aspects. (Namugenyi et al., 2019)

Conceptual Framework

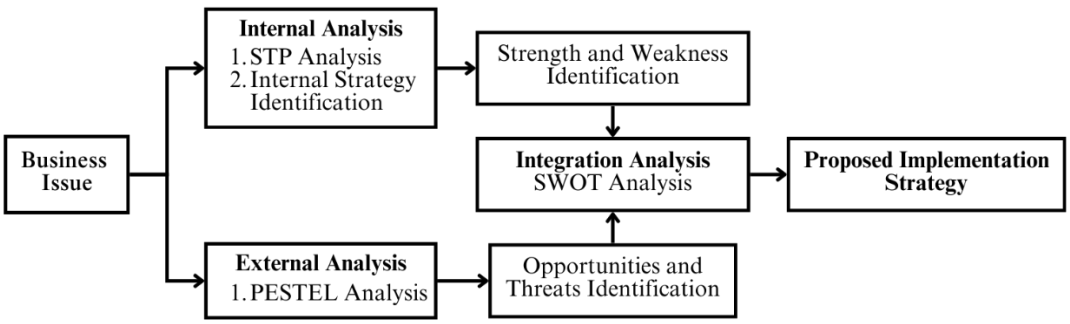

Fig 1. Conceptual Framework

The conceptual framework of this study is developed to explain Mujamma's business issue related to limited scalability and integration of embedded digital donation features despite favorable market conditions, the framework places the business issue at the center of analysis and examines it through internal and external perspectives, internal analysis applies STP Analysis and internal strategy to assess market orientation positioning and execution capability, external analysis uses PESTEL Analysis to examine regulatory economic social technological environmental and legal factors influencing scalability, insights from both analyses are integrated through SWOT Analysis which allows internal capabilities to be connected with external dynamics, and on this basis implementation oriented strategies are formulated to emphasize scalability partner enablement operational autonomy and governance alignment in line with Mujamma's role as an embedded digital infrastructure provider.

III. METHODS

This study adopts a qualitative descriptive exploratory research design using a case study approach to examine the implementation and strategic potential of Mujamma's embedded digital donation infrastructure across two partner platforms in Indonesia namely Bank Nano and MyTelkomsel, the research process begins with the identification of the core problem which relates to the gap between the rapid growth of digital banking usage and the relatively limited adoption of embedded digital donation features within everyday digital platforms, this stage is followed by a literature review that establishes the conceptual foundation of the study by drawing on discussions related to embedded finance Islamic social finance digital banking user engagement and platform based service integration. Primary data are collected through in depth semi structured interviews with key representatives from Bank Nano and MyTelkomsel who are directly involved in strategic decision making technical integration operational management and the evaluation of Mujamma's donation features, the semi structured interview format allows flexibility in exploring strategic technical and operational issues while still maintaining consistency across informants, respondents are selected using purposive sampling based on their relevance expertise and strategic responsibility in relation to the implementation of embedded donation services.

Secondary data are used to support and contextualize the primary findings including regulatory guidelines industry reports institutional publications from Baznas and DSN MUI as well as national regulations related to digital governance and data protection, these sources provide a broader understanding of the external environment surrounding embedded digital donation services in Indonesia.Data analysis is conducted through a combination of internal and external analysis, internal analysis applies Segmentation Targeting and Positioning analysis alongside internal strategy identification to assess market orientation execution capability and operational readiness, external analysis employs PESTEL Analysis to capture political economic social technological environmental and legal factors that influence scalability and adoption, the findings from both analyses are then integrated through SWOT Analysis which synthesizes internal strengths and weaknesses with external opportunities and threats, this synthesis forms the basis for the formulation of a proposed implementation strategy that emphasizes scalability enhancement partner enablement operational efficiency and improvement of user engagement, overall this research design supports analytical depth contextual validity and strategic relevance through interpretive analysis cross case comparison and triangulation of data from multiple sources.

Data Analysis Methods

This study applies a qualitative descriptive data analysis approach to examine the implementation process and strategic implications of Mujamma's embedded digital donation features within partner platforms by integrating both primary and secondary data, primary data obtained from in depth interviews are analyzed using thematic analysis through stages of data reduction coding and theme development, this process allows the identification of recurring patterns related to strategic considerations technical integration user engagement operational constraints and scalability issues, cross informant comparison is also conducted to capture both shared perspectives and platform specific insights, secondary data are utilized to support the analysis of the external environment through PESTEL Analysis, providing macro level context related to political economic social technological environmental and legal factors that influence the adoption and sustainability of embedded digital donation services, to enhance analytical credibility triangulation is applied by aligning interview findings with insights derived from secondary sources, the integrated results are then interpreted strategically and used as the basis for developing actionable recommendations.

IV. RESULT AND DISCUSSION

External Analysis

PESTEL Analysis

To examine the macro-environmental determiners that have an impact on the operating environment of Mujamma as an operational digital donation infrastructure provider in Indonesia, the PESTEL framework is used. In these evaluations, the six external dimensions, including political, economic, social, technological, environmental, and legal, are questioned, which together define the opportunities and limitations of the

venture of Mujamma of scaling Sharia-compliant digital philanthropy, including banking-based, fintech-based, and super-app-based solutions. Such an extensive grasp of these external conditions is essential to the assessment of the strategic fit of Mujamma in the fast-changing Egyptian digital finance and Islamic social finance platform in Indonesia.

Table 1. Mujamma PESTEL Analysis

Category	Key External Factors	Strategic Implications for Mujamma
Political	Strengthening digital governance, platform accountability, and consumer protection regulations	Requires higher regulatory compliance and coordination with partners, while increasing public trust in embedded donation systems
Economic	Continued growth of Indonesia's digital economy and digital payment transactions	Expands donation touchpoints within partner platforms, supporting scalability of the embedded model
Social	High internet penetration and strong alignment between digital behavior and religious/social values	Enhances user acceptance of frictionless, value-driven donation features
Technological	Mature mobile infrastructure, widespread QRIS adoption, and API-based fintech ecosystems	Enables seamless integration, real-time processing, and scalable deployment across platforms
Environmental	High exposure to natural disasters and recurring humanitarian needs	Increases relevance of always-on donation features for emergency and relief campaigns
Legal	Enforcement of personal data protection and digital platform regulations	Necessitates robust data governance, while strengthening credibility and user confidence

As shown by the PESTEL analysis, Mujamma has a fairly favorable, but highly controlled macro-environment, where the economic growth, emergence of social digital use, and technological preparedness contribute greatly towards the proliferation of embedded digital donation. Simultaneously, the politics and the legal context require Mujamma to maintain a high level of adherence, transparency, and government. Environmental factors also demand the strategic necessity to establish a responsive and scalable digital donation infrastructure in Indonesia.

Internal Analysis

Segmenting

Market segmentation is used to identify end-user characteristics that are most compatible with Mujamma's embedded digital donation infrastructure within partner platforms Rather than segmenting donors directly, Mujamma derives its segmentation indirectly from the user bases of digital banks and super apps where donation features are embedded

Table 2. Mujamma Segmentation

Dimension	Key Segments	Description
Geographic	Urban & suburban Indonesia	Greater Jakarta, West Java, and major Islamic urban areas
Demographic	Age 18–40	Students, young professionals, early-career workers
	Income level	Middle to upper-middle class
Psychographic	Digital-first & value-driven	Religiously inclined, socially conscious, trust-oriented
Behavioral	Transaction-active users	Frequent mobile banking, e-wallet, bill payment, and top-up users

Mujamma's segmentation focuses on digitally literate Muslim users whose donation behavior is strongly influenced by routine financial transactions This indicates that effective donation engagement is driven primarily by contextual integration within everyday digital activities rather than by standalone donation intent

Targeting

Following segmentation targeting defines which segments should be prioritized to achieve scalable adoption Mujamma applies a B2B2C targeting approach by prioritizing institutional partners rather than individual donors enabling indirect access to relevant user segments through trusted digital ecosystems

Table 3. Mujamma Targeting

Target Dimension	Priority Criteria	Strategic Rationale
Platform Type	Digital banks & super apps	Immediate access to large, trusted user bases
Technical Readiness	API-ready & modular systems	Faster integration and scalability
Value Alignment	Islamic finance / ESG orientation	Strengthens trust and narrative consistency
User Profile	Urban, digitally active Muslims	Higher conversion to contextual donations
Engagement Level	High-frequency transactions	Maximizes exposure to donation prompts

This targeting strategy allows Mujamma to scale efficiently by embedding donation features within platforms that already demonstrate strong user engagement, high transaction frequency, and institutional trust, without incurring direct user acquisition costs

Positioning

Positioning defines how Mujamma differentiates itself within the digital philanthropy ecosystem Consistent with its infrastructure-based business model Mujamma does not position itself as a consumer-facing donation brand but as a backend enabler embedded within partner platforms

Table 4. Mujamma Positioning

Dimension	Positioning Choice	Strategic Meaning
Core Role	Embedded donation infrastructure	Backend enabler, not donor-facing brand
Market Approach	B2B2C, platform-first	Partners retain customer ownership
Value Proposition	Seamless & Sharia-compliant integration	Enhances trust and user experience
Brand Strategy	White-label	Preserves partner brand identity
Functional Focus	Modular API & scalability	Supports rapid deployment
User Experience	Contextual, frictionless donations	Giving embedded in daily transactions

Mujamma is positioned as an "invisible but essential" infrastructure layer that enables partner platforms to deliver seamless, Sharia-compliant digital donations without disrupting brand identity or user experience

Internal Strategy

Internal strategy analysis focuses on how Mujamma operationalizes its positioning through technology, partnerships and execution capabilities The strategy emphasizes embeddedness, partner autonomy, and emotional user engagement, supported by a modular and adaptive technological architecture

Table 5. Mujamma's Internal Strategy Summary

Aspect	Key Strategy	Strategic Meaning
Strategic Focus	Embedded donation infrastructure	Reduces user friction by integrating donations into trusted daily transactions
Value Proposition	Sharia-compliant, white-label solution	Builds trust while preserving partner brand ownership
Partner Model	B2B2C with banks & super apps	Enables scale through institutional ecosystems
Technology Approach	Modular API, SDK, sandbox, templates	Supports flexibility and faster deployment
Integration Strategy	Adaptive to partner digital maturity	Balances standardization with customization
Campaign Strategy	Contextual & thematic (Ramadan, disaster)	Increases emotional relevance and conversion
Operational Control	Dashboard for non-technical teams	Enhances partner autonomy and efficiency
User Engagement	Emotional UX & behavioral nudges	Encourages spontaneous and repeat donations
Key Challenge	High-touch integration	Limits scalability as partner numbers grow

Mujamma's internal analysis highlights a coherent strategic alignment between market orientation, positioning, and execution While its embedded and partner-centric strategy strengthens trust, relevance, and adoption, it also introduces scalability challenges that must be addressed through standardization and automation in subsequent strategic initiatives

SWOT Analysis

SWOT analysis gives a methodical assessment of the internal factors and the external environment of Mujamma hence creating a strong base on which strategic planning can be developed. Based on this analysis, there are internal strengths and weaknesses that are related to the business model, technology and operational capabilities of Mujamma and external opportunities and threats that arise due to market forces, regulatory forces and advancements in technology. The results of the SWOT experiment will be the best input, to the next TOWS table, which would convert these realities into a strategic option that could be put into practice.

Table 6. SWOT Analysis

Strengths	Weaknesses
Sharia-compliant embedded donation infrastructure that enhances trust among Islamic financial institutions and Muslim users	Limited operational scalability due to high-touch integrations and customized partner support
White-label, partner-centric model allowing full partner control over branding and user experience	Heavy dependence on partners for feature placement, promotion, and user communication
Seamless integration into existing transactional journeys, reducing donation friction	Custom integration requirements increase implementation complexity and internal workload

Modular API-based architecture enabling flexibility across platforms with varying digital maturity	Absence of direct end-user brand visibility limits independent brand equity growth
Strong alignment with partner CSR, ESG, and faith-based value propositions	Manual onboarding and campaign configuration processes constrain rapid expansion
Proven adaptability across different partner infrastructures (digital banks vs super apps)	Reliance on continuous coordination for Sharia compliance across multiple institutions
Opportunities	**Threats**
Expansion of Indonesia's digital economy approaching USD 100 billion in 2025	Increasing regulatory and compliance requirements for digital financial services
Rising adoption of digital zakat, infaq, and Islamic social finance among Gen Z and millennials	Potential development of in-house donation infrastructure by large banks or super apps
High internet and mobile penetration supporting embedded digital services	Operational risk from rapid partner expansion without sufficient automation
Technological readiness through API ecosystems, QRIS adoption, and real-time payments	Reputational spillover risk from broader digital donation or fintech scandals
Frequent natural disasters increasing demand for rapid-response digital donations	Heightened expectations for data security and transparency under UU PDP enforcement
Growing institutional interest in ESG and social impact integration	Increased coordination costs across legal, technical, and compliance stakeholders

Business Solution

TOWS Matrix

The TOWS Matrix is applied to convert the SWOT Analysis into structured strategic alternatives by explicitly linking internal strengths and weaknesses with external opportunities and threats While SWOT highlights strategic conditions, the TOWS Matrix emphasizes strategic direction by defining how Mujamma should leverage strengths, address weaknesses, exploit opportunities, and mitigate threats This matrix therefore functions as a strategic bridge between analysis and implementation

Table 6. TOWS Matrix Mujamma

	Opportunities (O)	**Threats (T)**
	SO Strategies	**ST Strategies**
Strengths (S)	**SO1** Leverage Sharia-compliant, white-label donation infrastructure to scale embedded zakat, infaq, and humanitarian campaigns across digitally mature banks and super apps amid rising Islamic social finance adoption	**ST1** Utilize strong Sharia governance, transparency, and traceability features to differentiate Mujamma from in-house donation solutions and mitigate reputational risks under stricter digital regulations
	SO2 Capitalize on high mobile penetration and expanding API-based fintech ecosystems by increasing integrations with digital banks, telco super apps, and ESG-oriented platforms	**ST2** Strengthen Mujamma's position as a compliant and trusted infrastructure layer to withstand tightening data protection and financial service regulations
	SO3 Support partners' CSR and ESG agendas by enabling always-on, contextual donation modules for disaster response, religious seasons, and social impact initiatives	**ST3** Reinforce long-term partner dependency by embedding Mujamma deeply into partners' UX flows, compliance processes, and reporting systems, reducing substitution risk
Weaknesses (W)	**WO Strategies**	**WT Strategies**
	WO1 Develop self-service integration toolkits, standardized onboarding, and low-code configuration modules to accelerate partner onboarding while reducing manual support intensity	**WT1** Gradually reduce reliance on highly customized integrations to prevent operational bottlenecks as regulatory and partner demands increase
	WO2 Leverage growing demand for embedded digital philanthropy to co-create standardized campaign playbooks, UX guidelines, and best practices with partners to improve feature visibility and adoption	**WT2** Establish minimum UX placement and promotion standards to mitigate inconsistent donation feature exposure across partner platforms
	WO3 Transform repetitive integration tasks into reusable SDKs, automated testing tools, and configurable dashboards aligned with expanding API-ready environments	**WT3** Implement internal prioritization and partner-selection mechanisms to avoid overextension and maintain service quality during rapid ecosystem expansion

Implementation Plan

This implementation plan outlines a structured and phased roadmap for executing Mujamma's strategic initiatives derived from the TOWS Matrix analysis The plan translates strategic priorities into concrete actions by clearly defining the responsible units (PIC), key actions, and implementation timelines from 2026 to 2028 The phased approach is designed to ensure strategic focus, operational feasibility, and controlled scalability, allowing Mujamma to strengthen its role as a Sharia-compliant embedded donation infrastructure provider while managing resource constraints and partner readiness effectively

Table 7. Implementation Plan

Strategy	PIC	Key Action	Timeline
SO1 Scale Sharia-compliant embedded donation	Business Development & Strategy	Expand partnerships with Islamic banks, fintechs, and super apps	2026 Q1
SO2 Expand API-based integrations	Product & Engineering	Integrate API-ready platforms using SDKs and modular APIs	2026 Q2
SO3 Always-on donation modules	Product & Partner Success	Embed persistent donation features in daily transactions	2026 Q3
ST1 Governance & transparency	Compliance & Sharia Advisory	Strengthen audit trails and real-time reporting	2026 Q4
ST2 Trusted infrastructure positioning	Management & Strategy	Align architecture with UU PDP and partner compliance	2027 Q1
ST3 Partner lock-in	Partner Success & Engineering	Integrate into CSR and analytics dashboards	2027 Q2
WO1 Self-service integration toolkit	Product & Engineering	Develop low-code onboarding and automation tools	2027 Q3
WO2 Standardized promotion playbooks	Partner Success & Marketing	Create UX and campaign standards	2027 Q4
WO3 Process automation	Engineering & Platform	Automate integration and campaign management	2028 Q1
WT1 Limit customization	Management & Operations	Apply standardized implementation tiers	2028 Q2
WT2 UX consistency	Partner Success	Enforce minimum UX placement standards	2028 Q3
WT3 Controlled growth	Management	Phased onboarding and capacity planning	2028 Q4

V. CONCLUSION AND RECOMMENDATION

Conclusion

Based on the findings of this study which two main conclusions can be drawn

1. It is shown that the embedded digital donation feature provided by Mujamma on the systems of Bank Nano and MyTelkomsel is an effective mechanism as it is smoothly integrated into existing transaction chains, maintains Sharia compliance and organizational trust, and gives customers positive user experiences through contextual and low-friction prompts to donate.
2. To increase the reach to bigger banks and more comprehensive digital ecosystems, Mujamma should consider a selective, scalability-based approach which offers focus to API-ready and value-aligned institutions, reinforces a shift to standardised and semi-automated integrations and strengthens governance, transparency and compliance in order to stay competitive to in-house donation solutions.

Recommendation

Following the results of the present study, it is suggested to make the following recommendations that ought to be conducted as prospective research findings on the topic of embedded digital donation infrastructure:

1. Future studies must perform a quantitative study of the effects of embedded donation capabilities on the rate of conversion, the frequency and the average value of contribution on various digital platforms. 2. Future research can examine users perception and behavioural changes to contextual prompts of donation through survey-based or experimental research designs.
3. More evidence would be obtained through comparison of embedded donation infrastructure and standalone digital donation platforms to determine the differences in terms of trust, adoption and longer sustainability.
4. It is recommended to conduct future research focused on regulatory preparedness and compliance issues of digital philanthropy infrastructure providers in a changing data protection and fintech regulatory landscape.
5. Other possible technological advances that future research can investigate include AI-enhanced personalization or automatic zakat calculation and their implications on user interaction and Sharia rules.

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