

Bounded Creativity under Dual Constraints: How Islamic Nonprofit Organisations Innovate Digitally within State Regulation and Sharia Governance

Arnaz Agung Andrarasmara ^{1*}, Suharnomo ¹, Andriyani ¹

¹ Universitas Diponegoro, Semarang, Indonesia

Abstract

This research studies how nonprofit organizations (NPOs) operating in the Islamic finance industry manage the use of information technology (IT) in light of restrictions posed by the state and Sharia boards. The study employed a qualitative case study methodology focused on BAZNAS from January 2023 to February 2025. During this time, the researcher conducted 28 interviews with BAZNAS management and staff, Sharia council members, MUI academics, and members of BAZNAS's IT and digital media unit. The researcher used a reflexive thematic analysis approach to analyze the case. The study identifies three forms of bounded creativity: (a) compliant adaptation, (b) Sharia-sanctioned innovation, and (c) transformative recombination. The study also identifies and discusses supporting mechanisms, including relational capital and work integration. The single case study and exploratory research design limit the study's generalizability. The study recognizes that the Indonesian context may not reflect situations elsewhere where similar infrastructure is lacking. The study is situated in Indonesia, where the state is expanding IT infrastructure to support the development of the digital economy. The study advocates integrating Sharia advisors into the innovation team and using structured/deliberate methods in the work integration process to facilitate greater stakeholder participation. Furthermore, the study advocates using narrative work in the innovation process. Lastly, the study offers a religiously integrated framework to analyze creativity in nonprofit organizations.

Keywords: Bounded creativity; Digital innovation; Faith-based nonprofit organisations; Sharia governance; Zakat management

Citation (APA):

Andrarasmara, A. A., Suharnomo, S., & Andriyani, A. (2026). Bounded Creativity under Dual Constraints: How Islamic Nonprofit Organisations Innovate Digitally within State Regulation and Sharia Governance. *Economica: Jurnal Ekonomi Islam*, 17(1), 103–126. <https://doi.org/10.21580/economica.2026.17.1.32231>

Submitted: 23 Feb 2026

Revised: 20 Mar 2026

Accepted: 27 May 2026

Published: 30 May 2026

Copyright: © 2026 by Economica: Jurnal Ekonomi Islam

This is an open access article under the terms and conditions of the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International License.



*Corresponding Author. Email: arnazagung.ac@gmail.com

Introduction

The global *zakat* economy has been estimated to be worth between \$200 billion and \$1 trillion. Indonesia has the largest national *zakat* potential in the world, estimated at IDR 327 trillion (approximately \$21 billion) in 2024 (BAZNAS, 2024b; Beik & Arsyianti, 2016; UNDP, 2022). Indonesia's state-owned national *zakat* agency, Badan Amil Zakat Nasional (BAZNAS), is responsible for collecting and distributing *zakat* in the country. Like other comparable agencies in the Muslim world, BAZNAS is under pressure to provide *zakat* collection and distribution services in a digital format (Kasri & Yuniar, 2021; Thaker et al., 2022). BAZNAS has begun efforts to meet this need; however, Muslims in the region still rely primarily on cash and non-digital forms of philanthropy (Fauzia et al., 2022; Kahf, 1999). Indonesian Islamic nonprofit organizations (NPOs) face multiple sets of requirements. First, the secular state imposes requirements. These include regulations on permits and supervision of fundraising and financial activities, processing donation payments, data protection, and prevention of money laundering. These requirements are set out in Law No. 23 of 2011 on *zakat*, as well as regulations issued by the Otoritas Jasa Keuangan (OJK) and Bank Indonesia (BI). The second set of requirements stems from the Sharia normative framework. These requirements are generally interpreted through fatwas issued by the Dewan Syariah Nasional-Majelis 'ulamā' Indonesia (DSN-MUI) and integrated Sharia supervisory boards. These requirements dictate the nature and form of various Shariah-compliant activities (Bank Indonesia, 2020; Indonesia, 2011; OJK, 2022).

Several open legal and moral questions remain about the interpretation and application of the Sharia Framework regarding various types of donations and endowments. These include, among others, *infāq* and *ṣadaqah*. Beyond raising Sharia questions, many digital solutions for *zakat* and other Shariah-compliant activities also pose legal and moral questions. Thus, any framework developed to address these Sharia questions should be compatible with digital systems and support integration across regulatory and Sharia requirements. Islamic NPOs operate in a complex legal environment. On the one hand, state secular laws regulate financial transactions and integrated services, including requirements for *zakat* management, solicitation and fundraising, financial reporting, beneficiary data protection, and anti-money laundering. These regulations are primarily set out in Indonesian Law No. 23/2011 on *Zakat* Management, as well as Otoritas Jasa Keuangan (OJK) and Bank Indonesia (BI) regulations and guidelines. Meanwhile, the

validity of *zakat*, *infāq*, *ṣadaqah*, and *waqf* is governed by the Sharia normative order and interpreted through fatwas from the Dewan Syariah Nasional-Majelis 'ulamā' Indonesia (DSN-MUI) and other Sharia supervisory boards. The answers to these questions hinge on the objectives of Sharia (*maqāṣid al-Sharī'ah*). While engineering can enhance digital channels for collecting and distributing *zakat* and other charity services, the greater challenge lies in resolving Sharia questions about the legality of digital contracts and other channels (BAZNAS, 2024a).

This study explores the extent of creativity constrained by state controls and Sharia norms in Islamic NPOs, and how these constraints foster digital innovation. Based on a 24-month case study of BAZNAS, this study elaborates a framework of dual-constraint bounded creativity. It identifies and illustrates, through various examples, the innovations undertaken by BAZNAS within the dual-constraint framework. It further identifies and describes several organizational enabling mechanisms for such innovations. The study offers three kinds of contributions. First, with respect to the Theory of Bounded Creativity, this study offers a religious, or more precisely, an epistemological contribution, by detailing the nature of religious, and in particular, of Sharia-based constraints, and the types of tensions and trade-offs that they create. Second, this study offers an empirical contribution by describing governance innovations and digital transformations of the national *Zakat* authority of the largest Muslim-majority country. Third, this study provides policy and administrative guidance for Sharia regulators and government officials seeking to foster digital innovation within the regulatory and legal framework. The rest of the paper is organized as follows. Section 2 provides the theoretical foundations of the research. Section 3 describes the research design. Section 4 presents the results. Section 5 provides reflections on the contributions to the theory of Islamic Finance. Section 6 provides views on the implications of the research for practice. Section 7 concludes and offers thoughts on the research limitations and directions for further research.

This study has both academic and practical justifications. In Islamic Finance, academic research has examined the concepts of *Iqra* and Sharia compliance (Hassan & Mollah, 2018; Iqbal & Mirakhor, 2017) but has largely ignored how these frameworks shape and limit the initiatives taken by innovation management teams within organizations. In the field of nonprofit organizations (NPOs) and digital transformation, research has mostly been conducted in the secular world (Salido-Andres et al., 2021; Saxton & Wang, 2014) and has also disregarded how religious norms and frameworks shape and structure management thinking and practices.

These two strands of research also rarely engage with each other. From a practical perspective, the digital transformation of the donor landscape has created a framework in which, if Sharia-compliant financial structures do not keep pace with the digital transformation of the work, donors will ultimately choose non-*zakat*, secular frameworks for their philanthropic activities. Rapid innovation will help meet donor expectations while upholding Sharia principles.

Literature Review

Bounded creativity: from constraints as obstacles to constraints as enablers

Prior studies of creativity tended to suggest that more constraints limited creativity ([Amabile et al., 2018](#)). It was assumed that, for creativity to occur, one had to exert a certain level of control over one's working conditions. The absence of such control (e.g., insufficient work resources, time, independence, and security) was considered to block creative thinking. Evidence has accumulated that creativity and constraints can be positively related. Researchers have estimated an inverted-U relationship between constraint level and creativity ([Acar et al., 2019](#)). Studies in various fields have supported these findings ([Goldenberg et al., 1999](#); [Hennessey & Amabile, 2010](#); [Sonenshein, 2014](#); [Stokes & P., 2006](#)). From a cognitive perspective, working under constraints can facilitate new and different ways of understanding and relating to the problem ([Crompton, 2015](#); [Stokes & P., 2006](#)). Especially in science and engineering, R&D, and other similarly creative fields, valuable new knowledge and innovations can emerge through recombining existing, diverse, and seemingly unrelated information ([Goldenberg et al., 1999](#)). Such a 'constrained' thinking can, among other things, allow working within a well-defined research or practical framework ([Caniëls & Rietzschel, 2015](#)).

There are three features of constraints. First, constraints can vary by source. Constraints can be personal, or self-imposed (like haiku constraints). Constraints can also be external, such as those imposed by a regulator. Second, constraint validity also varies. Constraints can be completely arbitrary, like an arbitrary cap on supply (people attempt to game the system, instead of using the constraints productively). However, the public can also accept constraints (like speed limits). Constraint acceptance can also be relative (like a target). Third, the character of constraints can also vary. Constraints can be rigid (like a Rubik's cube) or fluid. Fluid constraints can promote new, greater degrees of freedom (like a jigsaw puzzle or the beginning of a new game). However, too much ambiguity can make people apathetic

or paralyzed (like a blank jigsaw puzzle). Additionally, constraints can be Personal or System constraints. Personal constraints restrict raw inputs to a creative process. System constraints limit the process framework (like a budget constraint). [Acar et al. \(2019\)](#) suggest that System constraints are as pervasive and limiting as Personal constraints, particularly in highly regulated environments.

Process constraints define Sharia governance primarily through how a product or service is authorized and controlled, rather than solely through its final outcome. Shaping design deliberation before a product or service is authorized can occur in several ways, including defining the consultative process, placing procedural constraints on submissions (e.g., Sharia audits, certification, or approval), and specifying end-state compliance requirements (e.g., Sharia compliance declarations used in the GCC). One such end-state design solution proposed a statutory framework by which 'Sharia Compliant Contracts' (i.e. *wakālah*) are assessed (among other contracts) to ascertain their permissibility. In this framework, any agreement that intends to transfer ownership (e.g. an outright sale) would necessarily be void. While the framework may help regulate contracts in a Sharia-compliant manner, an assessment should be made of the procedural and substantive ways audits and compliance assessments are designed, structured, and controlled.

From the viewpoint of paradox theory ([Smith & Lewis, 2011](#)), simultaneous adherence to multiple constraints fosters conditions from which 'productive' or 'creative' tensions arise and may, in fact, drive organizational success. From this perspective, is it productive to consider the 'tensions' within creative Sharia design as 'irreconcilable' or 'absolutist' and seek to remove them? The data presented in Chapter 4 points to the negation of absolutist and irreconcilable conceptualizations of the 'tension' within the creative Sharia design framework.

Islamic nonprofit organisations and dual normative orders

Zakat agencies, *waqf* and other charitable organizations operate based on principles of Islamic law ([Çizakça, 2011](#); [Hassan & Mollah, 2018](#)). Therefore, these organizations are governed by the normative framework of the State and Sharia. The state, through its laws and regulations, governs transactions, financial and managerial reporting, data privacy, anti-money-laundering controls, taxation, and donation solicitation. On the other hand, the rules of Sharia, especially the transactions of *fiqh al-mu'āmalāt*, prohibit *gharar*, *ribā* and *maysir*, and the objectives of Sharia (*maqāṣid*) create normative limits on economic activities

(Dusuki et al, 2007; Obaidullah, 2016). A similar attitude is observed regarding businesses' Sharia compliance in finance and related fields. Scholars tend to treat Sharia as a constraint met through an independent screening mechanism, i.e., a Sharia Board (Hassan & Mollah, 2018). This approach, often described as 'screen-and-pass' (Auda, 2008; El-Gamal, 2006), undervalues the richness of dialogue between business proponents and the '*ulamā*'. In fact, most scholars argue that business activities must be assessed in light of the objectives of Sharia and relevant principles of Divine Law (El-Gamal, 2006; Kuran, 2010).

As Greenwood et al. (2011) describe, where state regulations do not fully protect them, Islamic NPOs exist in an environment called "institutional plurality." In "plurality," there is more than one way to define the rationale and justification of an organization's activities, and these need not be logical or consistent with each other. In such an environment, an NPO will fail to gain legitimacy by relying on a single definition of "logic." Therefore, to gain and retain legitimacy, an NPO must reconcile both definitions of "logic." Numerous studies have discussed such "logic" reconciliation in organizations. For instance, Battilana & Dorado (2010) discuss such "logic" reconciliation in social enterprises, and Kent & Dacin (2013) discuss it in the case of microfinance. Islamic NPOs, however, are distinctive. In such cases, one of the two "logics" is religion (DiMaggio & Powell, 1983). The review suggests that, for Sharia-governed entities, decisions cannot be generated by committee or by consulting lawyers; they require individual judgement (Choudhury, 2018; Hasan, 2010).

Limited case law exists on assessing the permissibility of trusts, and Islamic nonprofit organizations must rely on public perceptions of their institutions' excellence and trustworthiness. These perceptions affect the organization's ability to develop and implement innovative practices. For example, an organization might determine that it is permissible to solicit donations and provide aid through a particular online platform. However, the organization could find that its stakeholders would not approve of the practice, for instance, if the online platform, in the organization's view, dehumanizes persons in need by, for example, treating them solely as impersonal data (Andriof & Waddock, 2017; Suchman, 1995; Tracey & Phillips, 2016).

Digital innovation under institutional plurality

The COVID-19 pandemic changed the way nonprofit organizations (NPOs) interact with donors. Digital transformation in NPOs is ongoing and is likely to

continue in the foreseeable future (Salido-Andres et al., 2021). One recent innovative digital fundraising solution is customer relationship management (CRM) systems. The use of predictive analytics, including artificial intelligence and machine learning, to help target beneficiaries and measure impact is also on the rise. Other innovations, including payment infrastructure and digital identity verification, are increasingly being adopted in fundraising and impact measurement. Blockchain technology is being employed to increase transparency in the movement of donated funds (Bekkers & Wiepking, 2011; Saxton & Wang, 2014). However, the Islamic sector uses digital innovations less than the conventional sector (Salamon & Anheier, 1997). Several factors may explain the pace at which Islamic NPOs have embraced digital innovations. Above all, this is an interpretation problem. The use of various digital tools inevitably raises Sharia questions. Are specific digital tools that facilitate and promote electronic funds transfer (i.e., super apps, smart contracts, and embedded finance) Sharia-compliant? Do they facilitate and promote *gharar*? Among others, these are some of the Sharia questions that remain unanswered (Kasri & Yuniar, 2021).

Synthesis: a dual-constraint bounded creativity framework

Using a dual-constraint bounded creativity framework, we argue that the case of Islamic NPOs demonstrates that digital innovation is the result of a constrained search in a solution space determined by the intersections of three constraint sets: (i) the constraints posed by the state's regulatory environment, (ii) the scope of Sharia's prescriptiveness, and (iii) the organization's stakeholder legitimacy. Where the three constraint sets intersect determines the space for legal innovation, within which digital products and services can be developed and offered. Three theoretical statements are advanced. The first statement proposes that when all three constraints are legitimate and stable, Islamic NPOs engage in within-rule innovations that are incremental and do not require new interpretations. The second statement proposes that when a constraint is legitimate but unstable, Islamic NPOs engage in regulatory or Sharia innovation to clarify the scope for new digital products and services and seek the necessary regulatory and Sharia approval. The third statement proposes that when formal constraints remain stable but their interpretation changes, Islamic NPOs may pursue breakthrough innovations in digital offerings and services (Thierer, 2016).

Methods

Research design

This study uses an instrumental qualitative case study approach (Stake, 1995; Yin, 2018). Given the nature of the phenomenon under study, this method is appropriate for researching contemporary phenomena in real time. In this study, BAZNAS serves as an instrumental case, and the findings are intended to inform understanding of comparable cases (Eisenhardt & Graebner, 2007).

Case selection

BAZNAS was chosen based on three factors. First, BAZNAS, as the largest single national *zakat* office, provides sufficient scope for analysis and reflects the nature of innovation within the office. Second, BAZNAS is governed by the *Zakat* Law and other Financial Services and digital economy-related laws and regulations, providing sufficient regulatory variation. Third, having Sharia governance within BAZNAS at different levels provides ample scope to understand constraints and governance within Sharia.

Data collection

Data were collected from January 2023 to February 2025 using three methods. First, 28 semi-structured, in-depth interviews were conducted using Bahasa Indonesia and English, and lasted 90-110 minutes. Interviews were recorded and transcribed. Participants provided informed consent for recording and transcription. Next, 142 documents were analyzed. These documents included annual reports published by BAZNAS from 2018 to 2024, research publications by PUSKAS BAZNAS, digital *zakat*-related fatwas issued by the DSN-MUI, OJK frameworks regarding Indonesia's digital finance, and other internal product frameworks. Lastly, we analyzed 14 workplace observational opportunities, including Sharia reviews and Digital Zenita engagements. More details of the analyses are provided in Table 2.

Data analysis

Using the thematic analysis framework described by Braun & Clarke (2006), (2019), the analysis followed six steps. First, the researcher became familiar with the data. Second, initial codes were developed. Third, the codes were grouped into candidate themes. Fourth, the themes were reviewed to identify overlap and

redundancy. Fifth, the final themes were defined and described. Finally, the findings were written up in the results section (Braun & Clarke, 2006, 2019).

Trustworthiness

Following Lincoln & Guba (1985), the four trustworthiness criteria are addressed; Credibility: Prolonged engagement of 24 months was supported by source triangulation of the three data streams and member checks with seven informants; Transferability: To capture contextual detail, we relied on thick description. Dependability and confirmability were supported by an audit log and debriefing with two peers who served as independent reviewers. The Institutional Review Board for the lead author (Ref: BAZ-2023-007) granted ethical clearance, and we obtained informed consent for each interview.

Results and Discussion

The findings consist of four interrelated areas: (a) the nature and interpretation of organizational constraints; (b) how constraints are interpreted and acted upon; (c) ways in which employees express and exercise creative energies within the constraints; and (d) the enablers and supports for the expression and exercise of employees' creative energies. To illustrate the above, statements from informants are included and identified by an abbreviation (e.g. I-EXEC-02 means statement from Executive Informant No. 2).

Table 1. The constraint landscape facing BAZNAS digital innovation

Constraint layer	Interpretive body	Time horizon	Tolerance for ambiguity
State regulation	OJK, Bank Indonesia, Ministry of Religion, BAZNAS oversight	Slow (months to years for new circulars)	Low (rules require explicit text)
Sharia normativity	Internal Sharia board, DSN-MUI, provincial Sharia councils	Medium (weeks to months for new fatwas)	Medium (interpretive but bounded by <i>uṣūl al-fiqh</i>)
Organisational legitimacy	Diffuse: <i>muzakki</i> community, <i>ʿulamāʾ</i> , public, media	Continuous (real-time reputational signals)	Variable (highly sensitive to incidents)

Mapping the constraint landscape

Informants consistently described their innovation environment as defined by three overlapping constraint layers. As Table 1 shows, each has its own interpretive body, time horizon, and tolerance for ambiguity.

The first layer of friction, state regulations, was slow-moving and procedural. Law No. 23/2011, enacted during the pre-smartphone era and therefore unrelated to digital financial services (DFS) and other digital intermediation, was the main policy framework. One digital financial services (DFS) executive, remarks:

"The law tells us what we may collect and how we must report. It does not tell us whether a TikTok live donation counts as zakat or sadaqah. We must read between the lines, then ask the regulator, then sometimes wait six months for a circular." (I-EXEC-02)

The second layer, the presence of Sharia norms and standards, was substantive and amorphous. While the MUI has issued several Fatwas regulating the Sharia compliance of digital financial transactions, other Fatwas address Sharia compliance of other digital financial activities and services. For instance, the MUI has issued several fatwas on the Sharia compliance of digital financial services and activities offered by non-banking financial institutions. Members of Sharia boards of financial institutions noted that evaluating the Sharia compliance of financial products and services is more an "art of integrating Sharia principles into the design of contractual arrangements" than a matter of simple "rejection or acceptance" of the product or service (DSN-MUI, 2017, 2018).

"The product team comes to us with a proposal. We do not say yes or no on day one. We sit down, we ask: what is the underlying contract? Who owns the funds at each step? When does tamlik occur? Then we redesign together until we are comfortable." (I-SHARIA-01)

The presence of Sharia boards and the issuance of MUI fatwas do not guarantee that an innovation will be embraced. As one BAZNAS official said, trust and public support are the most important considerations in evaluating innovations, especially if public officers or employees perceive an innovation as against the tenets of Islam.

Constraint sense-making practices

The Innovation Team interprets the constraints, rather than receiving them fully formed. The team used three different practices to interpret constraints, described below. The first is called constraint translation. Members of the Innovation Team translated regulatory text and fatwas into product requirements and product

specifications. A product manager created and maintained a “compliance map” to represent the requirements. According to the manager, the compliance map helped the product team understand how regulatory or policy requirements limited each user flow. The compliance map translated legal and Sharia requirements into explicit boundaries for product design (Carlile, 2002).

The second practice, referred to as constraint deliberation, consisted of structured discussions among members of the product team, legal team, Sharia team and operations, known as the Sharia-Tech Forum. During the forums, which were scheduled monthly, or more frequently if the product team wished to accelerate consideration of a particular proposal, the product team evaluated and altered the scope and content of the proposal to reach a consensus. The third practice, called constraint stress-testing, was used to consider the extremes or edge cases where a product might fail a Sharia test. Informants described the practice as useful for identifying potential issues with a product before it was released to the market. Stress testing was the team's primary mechanism for evaluating potential issues with a product before release. Stress testing of a proposed product feature helped the team identify issues related to a user's intent to perform *zakat* (a charitable donation) with an automated bank debit feature.

Three modes of bounded creativity

We have identified three modes of innovation by BAZNAS within a dual-constraint context. These modes of operation are not successive phases of development. During the period of interest, the organization operated in all of these modes simultaneously (March, 1991; O'Reilly & Tushman, 2013).

Compliant adaptation

This mode involves adopting minor changes within existing rules without requiring new Sharia rulings or regulations. BAZNAS adopted several improvements in the *zakat* collection process, including using a mobile application instead of physical collection. As the main element of the contract (*muzakki* transferring *zakat* to BAZNAS, which is then collected and distributed to the *mustahiq*) remained the same, no change in fatwa was required. In this regard, BAZNAS improved its collection process and reinvented its marketing and other back-office activities. BAZNAS enhanced its collection activities, shifting its total collection from 14% to 41% in just five years. Digitizing BAZNAS's internal *āmil* processes also falls within this mode of innovation.

Sanctioned innovation

The other mode of engagement was to innovate within the limits of Sharia and the regulatory framework, even if that meant engaging with the framework to define its limits. A good example is the introduction of electronic channels for *zakat* collection through one of the major super apps in Indonesia. The key question was whether *zakat* funds could be collected through a non-Islamic payment facility with an intermediary agency. This required the competent authorities to issue a new fatwa. The product and the related Sharia boards engaged in a dialogue to deliberate on the merits of the request. The fatwa permitted collecting *zakat* funds through the frameworks and conditions stipulated by the authorities. It deemed it necessary that the intermediary, among other things, establish a T+1 fund transfer instruction to a BAZNAS account, isolate the *zakat* funds from the intermediary's operational funds, and notify the *muzakki* of the fund's routing. By 2024, this channel had become one of BAZNAS's three leading digital fundraising platforms. As one DSN-MUI scholar stated, sanctioned innovation was a reciprocal process in which regulators and the innovating entity engaged in dialogue to reach a common understanding. As one DSN-MUI scholar put it:

"They came to us not with a fait accompli but with a question. That changed how we engaged. We could shape the product before it was poured in concrete." (I-SHARIA-04)

BAZNAS embraced more innovative forms of *zakat* collection starting in 2022, using QR codes to accept *zakat* payments across different channels. In 2023, BAZNAS launched an initiative to automate *zakat* payments through Islamic banks. BAZNAS partnered with an e-commerce company in 2024 to introduce an option for customers to pay *zakat* on the company's website and apps. Each of these innovations required OJK and Sharia boards to design and implement control mechanisms for terms of use and the isolation of users' funds.

Transformative recombination

The rarest form of innovation, recombinant innovation, involves integrating diverse and disparate elements, for example, technology, contracts, and procedures, to achieve a novel combination. The *Zakat Trail* project integrated various innovative elements, including a blockchain-based system to track and document the distribution of *zakat* and a distributed ledger to provide a transparent, immutable record of *zakat* fund movements. Additionally, integrating Sharia oversight with technology and external audit support provided further assurance.

The project also introduced a novel governance process and a public dashboard to provide donors with real-time information on how their funds were being used. This innovation had the potential to transform BAZNAS rather than merely improve its existing processes. Before the blockchain implementation, BAZNAS relied on annual audits to build and maintain the public's trust. After the implementation, BAZNAS relied on real-time transparency. Three changes affected BAZNAS's ability to provide real-time transparency. First, BAZNAS obtained a new fatwa that balanced the *mustahiq's* right to privacy against the need to provide transparency to the public. Second, BAZNAS developed a regulatory partnership with the OJK to evaluate the potential of blockchain and other distributed ledger technologies. Third, BAZNAS developed a new way to communicate blockchain technology to its target audience. Real-time transparency raised philosophical questions. For example, the executive stated,

"Blockchain was the easy part. The hard part was deciding what we should make visible to the public and what we must conceal to protect mustahiq dignity. That is not a technical decision. That is a religious and civic decision." (I-EXEC-03)

A similar case of transformative recombination is found in the development of *Mustahiq AI*. BAZNAS integrated various data sources and models to improve the identification and assessment of beneficiaries for *zakat* distribution. *Mustahiq AI* is an administrative innovation in data integration and modeling. This innovation relies on four new internal governance committees; a Sharia opinion on the role of humans, in partnership with academic data scientists, in assessing *mustahiq* status; and a partnership protocol with academic data scientists. The same concern arose, as in the case of *Zakat Trail*, regarding historical biases in the geographic distribution of beneficiaries. In this regard, a Sharia opinion was issued to explain the Equity (Al-Adl) and Prevention of Injustice (Al-qishās) among other *Maqāṣid* principles of Islam. Across both *Mustahiq AI* and *Zakat Trail*, a common pattern emerged: although product development relied primarily on a particular domain (e.g., Islamic jurisprudence or engineering), additional domains had to be engaged to complement the principal expertise, support concurrent integration, and reduce avoidable trade-offs. This conditional integration is more cumbersome than compliant integration and helps explain the rarity of transformative recombination in the observed period.

Mechanisms enabling bounded creativity

Four main organizational enablers were identified across the three bounded-creativity modes: compliant adaptation, sanctioned innovation, and transformative recombination. These are described in Table 2.

Table 2. Mechanisms enabling bounded creativity at BAZNAS

Mechanism	Definition	Illustrative practice at BAZNAS
Embedded Sharia capacity	Sharia expertise positioned within the innovation function rather than only in an external review role.	Sharia liaison embedded in the digital team, attending product sprints and translating between <i>fiqh</i> and engineering
Structured deliberative routines	Recurring co-design forums that turn Sharia review from a gate into a workshop	Monthly Sharia-Tech Forum with board, product, legal and operations; documented Sharia opinions per release
Relational capital	Long-term relationships with regulators and Sharia bodies that lower the transaction cost of clarification	Joint training programmes with DSN-MUI; recurring informal consultations with OJK; quarterly briefings
Narrative work	Cultivation of public stories explaining why a digital innovation is Sharia-aligned, accessible to non-specialist donors	Plain-language explainers, live Q&A sessions during Ramadan, video micro-content with respected <i>‘ulamā’</i>

First, Sharia capacity was embedded. Placing a Sharia Liaison within the digital team enabled Sharia consideration during the design process. During development, the liaison reviewed user-journey diagrams and served as the team's first Sharia interpreter. Second, purposeful two-way engagement processes. The Sharia-Tech forum, which focused on product design, fostered a workshop environment. Standing membership in the forum by Sharia team members and product development team members, respectively, enabled design and integration of Sharia considerations during the product development process. The team encouraged a concerns-based, rather than a solution-based, approach. Third, relational work. Longstanding partnerships between DSN-MUI and OJK representatives reduced the cost of obtaining legal opinions. Access to MUI scholars and OJK officials gave the team a competitive edge in securing opinions that validated their work. A representative from the digital team mentioned: "When the OJK official already knows our model from a panel 6 months ago, a legal opinion request is issued

instead of a long, restrictive, business process (I-DIG-04)." Fourth, narrative work. The team developed Sharia-compliant frameworks to build the donor community's confidence and support their work.

Tensions and unresolved paradoxes

The bounded-creativity mechanisms also generated three recurring organizational tensions. The first tension concerns speed versus deliberation. Non-trivial products involving sanctioned innovation required 4–6 months of Sharia deliberation. Relational capital and onsite Sharia officers accelerated this process; however, BAZNAS still operated in a fintech environment where competing digital services could be developed much more quickly, creating a persistent trade-off. One product manager said, "By the time our fatwa is ready, the user-flow may already feel stale to the user (I-DIG-02)." BAZNAS tried to reduce this trade-off by conducting Sharia consultation and user-flow design in parallel. The second tension concerns the scope versus depth of review. Each BAZNAS product operated within the purview of Sharia. As the product portfolio expanded, the capacity of the Sharia board became a potential bottleneck. BAZNAS sought to reduce this constraint by using design thinking and presenting classes of products for pre-approval where appropriate. The trade-off between covering a class of products and ensuring each product conformed to Sharia principles remained.

The third tension concerns the friction between tradition and innovation. New technologies raised questions about the religious essence of giving. Can technology-enabled solutions for charitable giving preserve the intention and attentiveness associated with sacrificial giving? Is it acceptable to use a blockchain dashboard to facilitate charitable giving? The answers to these questions are contextual and relative. The organization therefore focused on providing configurable defaults and options, frictionless pathways, and clearly specified trade-offs to accommodate donor preferences. For example, donors were given choices of payment methods, the period over which the donation would be spread, and other charitable purposes to which the donation would be dedicated. From the perspective of the trade-offs the organization made, paradox theory best explains this situation ([Smith & Lewis, 2011](#)).

Discussion

Theoretical contributions

The results build upon and extend bounded creativity theory in three ways. First, the theory has been extended beyond design and laboratory contexts as well as profit-making contexts ([Acar et al., 2019](#); [Caniëls & Rietzschel, 2015](#)). The case study of an Islamic nonprofit organization shows that the constraint-creativity relationship varies when at least one constraint derives from a religious norm. Religious constraints differ from legal constraints in at least the three respects mentioned above. Consequently, the scope for flexibility and interpretation differs between religious norms and legal norms. This produces a different form of bounded creativity.

This study focuses on understanding the religious case and the nature of bounded creativity in this case, the case study of an Islamic nonprofit organization is highly valuable.

Second, this work extends the idea of “dual constraints.” Previous studies have primarily focused on constraints of the same epistemic structure (i.e., constraints that are measurable and quantifiable, such as time and money constraints ([Acar et al., 2019](#))). In Baznas's case, constraints operate across different epistemic structures. State rules tend to be more codified and deterministic, whereas Sharia rules are interpretive and may be co-constructed through deliberation. Therefore, to operate in both regimes, organizations must develop the ability to integrate and reconcile the two sets of rules. We call this the bi-modal constraint condition and propose it as a limiting case for understanding bounded creativity in religious-state-governed organizations. Without such integrative capability, organizations risk either over-regulation or under-regulation. Third, the case extends and enriches our understanding of the notion of “legitimacy of constraints.” For instance, in the case of Sharia review, if rules are prescribed to constrain and evaluate organizational activity, then, from the perspective of employees charged with creativity, rules become inflexible and illegitimate, driving them to evade them. However, if rules are prescribed to enable and integrate the workforce in co-constructing them, employees perceive them as legitimate and are more likely to innovate within the prescribed framework.

The dual-constraint creativity model

The paper integrates the findings and constructs to present the Dual Constraint Creativity Model, which comprises the following elements: (i) the elemental and structural compositions of each constraint set, (ii) means of interpretation, (iii) modes of creativity (compliant adaptation, sanctioned innovation, and transformative recombination), and (iv) enablers (embedded Sharia capacity, structured deliberative routines, relational capital, and narrative work). The model is structurally and functionally complex and offers several implications. First, the modes of creativity need not occur sequentially; an organization can exhibit all three modes simultaneously. Second, enablers are inter-related, and one can strengthen and enable the other. For example, structured deliberative routines and relational capital can strengthen narrative work. Narrative work can, in turn, reinforce relational capital and help clarify organizational boundaries. The model provides a plausible basis for empirical validation of the modes of creativity described in Section 2. Compliant adaptation was evidenced in the migration to mobile-based banking and *ʿamil* workflow digitization under stable, rigid constraints. Sanctioned innovation was evidenced in Super Apps and constrained (under uncertainty) by law. Transformative recombination was evident in *Zakat* Trail and *Mustahiq* AI, which interpreted and creatively integrated multiple constraint sets.

Implications for Islamic finance and NPO scholarship

Regarding Islamic finance, the findings provide an opportunity to reframe a dominant criticism. Numerous examples of innovation in structures that facilitate compliance exist, and more broadly point to a productive research area on compliance. This should not be misconstrued with the body of work on Sharia-arbitrage. This work is more closely related to the literature on form-versus-substance criticisms (Bedoui & Mansour, 2015; El-Gamal, 2006). While form-versus-substance criticisms argue that lawyering enables market participants to interpret compliance within a vague Sharia framework that achieves arbitrary business objectives, the case studies in this paper argue for Sharia compliance as a design frame for creating more effective and trustworthy financial products.

The case studies extend pluralism theory (Greenwood et al, 2011) in the NPO context. The case studies are instructive to other industries on the technology adoption and architectural choices made by NPOs. This research supports the assertion that the context and nature of NPOs inform decisions on architecture and

governance. The case studies further support the theory of deliberative design for religious organizations.

Practical and policy implications

For Islamic NPO managers

Three practical implications are drawn from the research. First, integrate Sharia knowledge and review throughout the process, rather than restricting it to the end. Having a Sharia Liaison Officer (SLO) embedded in an Agile team can provide earlier and more continuous Sharia input than relying solely on end-stage board review. Second, the framework should ensure that the opinions provided by the Sharia Advisors (SAs) are reflected and captured in the final design. Although opinions may vary from case to case, the design should include a mechanism to document them to build institutional memory. Lastly, from a strategic perspective, managers should invest in communicating the rationale and justification for Sharia-compliance to the public.

For Sharia governance bodies

The research anticipates the following changes: (1) Issuance of general guidelines from Sharia advisory boards, which would provide greater legal certainty and incentivize development of Sharia-compliant products. (2) Investment in training of Sharia scholars by exposing them to technology and engineering. (3) Greater transparency in the rationales of fatwas.

For state regulators

The research anticipates the following changes: (1) Integration of Sharia advisors within the scope of regulatory sandboxes. (2) Amending *Zakat* and philanthropy laws to address digital intermediation. (3) Development of data and ICT infrastructure to foster transparency in the reporting of beneficiaries.

Conclusion

This research presents an evidence-based and theoretical framework to analyze how Badan *Amil Zakat* Nasional (BAZNAS) Indonesia uses science and technology to facilitate *zakat* and *ṣadaqah* within the boundaries of existing state regulations and Sharia law. Drawing on bounded creativity theory and evidence from 28 interviews, we identified three bounded-creativity modes: compliant adaptation, sanctioned innovation, and transformative recombination. We also identified other

mechanisms, including relational capital and narrative creativity. We integrated these two sets of mechanisms to develop a multidisciplinary, holistic approach to address the dual constraints of state regulations and Sharia governance. These approaches and frameworks apply to Islamic nonprofit management and offer innovative ideas for state regulatory bodies, Sharia governance entities, and managers of Islamic nonprofit organizations.

Limits should be identified. The single-case design limits statistical generalization and may underestimate variation in Islamic NPOs operating in other countries. The case studies in the Indonesian context may not represent other contexts where Sharia governance is still developing, or where the state centralizes control over Sharia governance (for example, in Saudi Arabia and Malaysia). The 2-year case study period was set during the early stage of the rapid expansion of digital and other infrastructure in Indonesia (including the rapid adoption of QR codes and super-apps). Findings reported in this study are likely to change as new digital and other infrastructure develop and further integrate in various countries.

What is needed is additional work, particularly: (i) comparative case studies in other countries (for example, the GCC, the UK and Malaysia) to further test the 'dual-constraint' framework; (ii) studies to evaluate the bi-modal constraint framework and test it in the context of other Islamic financial institutions; (iii) studies to examine how technology and innovative products integrated with Sharia governance raise new challenges in Sharia governance; and (iv) studies to assess the applicability of the framework to other religiously governed institutions (for example, Jewish, Christian, and other faith-based institutions).

Declarations

- Funding: This research received no specific grant from funding agencies in the public, commercial, or not-for-profit sectors.
- Conflict of interest: The author declares no competing interests.
- Data availability: Anonymized excerpts of interview data are available from the author upon reasonable request, subject to ethical review board approval.
- Ethics approval: Institutional review board reference BAZ-2023-007.

Acknowledgements

The author thanks the BAZNAS leadership, *ʿamil* officers, members of the institutional Sharia board, and the DSN-MUI scholars who generously gave their time to this study. All errors and interpretations remain the author's own.

BIBLIOGRAPHY

- Acar, O. A., Tarakci, M., & van Knippenberg, D. (2019). Creativity and Innovation Under Constraints: A Cross-Disciplinary Integrative Review. *Journal of Management*, 45(1), 96–121. <https://doi.org/10.1177/0149206318805832>
- Amabile, T. M., Amabile, T. M., Collins, M. A., Conti, R., Phillips, E., Picariello, M., Ruscio, J., & Whitney, D. (2018). Creativity in Context. In *Westview Press*. Routledge. <https://doi.org/10.4324/9780429501234>
- Andriof, J., & Waddock, S. (2017). Unfolding Stakeholder Engagement. In *Unfolding Stakeholder Thinking* (pp. 19–42). Routledge. <https://doi.org/10.4324/9781351281881-2>
- Auda, J. (2008). Maqāṣid al-Sharī'ahh as Philosophy of Islamic Law. In *International Institute of Islamic Thought*. International Institute of Islamic Thought. <https://doi.org/10.2307/j.ctvkc67tg>
- Bank Indonesia. (2020). PADG No. 21/18/PADG/2019 on the Implementation of Quick Response Code Indonesian Standard (QRIS) for Payment. Jakarta: Bank Indonesia.
- Battilana, J., & Dorado, S. (2010). Building Sustainable Hybrid Organizations: The Case of Commercial Microfinance Organizations. *Academy of Management Journal*, 53(6), 1419–1440. <https://doi.org/10.5465/amj.2010.57318391>
- BAZNAS. (2024a). Annual report 2023: Strengthening trust through digital governance. *Badan Amil Zakat Nasional*.
- BAZNAS, P. (2024b). Indonesia zakat outlook 2024. Jakarta: Pusat Kajian Strategis BAZNAS.
- Bedoui, H. E., & Mansour, W. (2015). Performance and Maqasid al-Shari'ah's Pentagon-Shaped Ethical Measurement. *Science and Engineering Ethics*, 21(3), 555–576. <https://doi.org/10.1007/s11948-014-9561-9>
- Beik, I. S., & Arsyianti, L. D. (2016). Measuring Zakat Impact on Poverty and Welfare Using Cibest Model. *Journal of Islamic Monetary Economics and Finance*, 1(2), 141–160. <https://doi.org/10.21098/jimf.v1i2.524>
- Bekkers, R., & Wiepking, P. (2011). A Literature Review of Empirical Studies of Philanthropy. *Nonprofit and Voluntary Sector Quarterly*, 40(5), 924–973. <https://doi.org/10.1177/0899764010380927>
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. <https://doi.org/10.1191/1478088706qp063oa>

- Braun, V., & Clarke, V. (2019). Reflecting on reflexive thematic analysis. *Qualitative Research in Sport, Exercise and Health*, 11(4), 589–597. <https://doi.org/10.1080/2159676X.2019.1628806>
- Caniëls, M. C. J., & Rietzschel, E. F. (2015). Organizing Creativity: Creativity and Innovation under Constraints. *Creativity and Innovation Management*, 24(2), 184–196. <https://doi.org/10.1111/caim.12123>
- Carlile, P. R. (2002). A Pragmatic View of Knowledge and Boundaries: Boundary Objects in New Product Development. *Organization Science*, 13(4), 442–455. <https://doi.org/10.1287/orsc.13.4.442.2953>
- Choudhury, M. A. (2018). Tawhidi Islamic economics in reference to the methodology arising from the Qurʾān and the Sunnah. *ISRA International Journal of Islamic Finance*, 10(2), 263–276. <https://doi.org/10.1108/IJIF-02-2018-0025>
- Çizakça, M. (2011). Islamic Capitalism and Finance. In *Edward Elgar*. Edward Elgar Publishing. <https://doi.org/10.4337/9780857931481>
- Cropley, A. (Emeritus P. of P. (2015). Creativity in Education and Learning. In *Routledge*. Routledge. <https://doi.org/10.4324/9780203826270>
- DiMaggio, P. J., & Powell, W. W. (1983). The Iron Cage Revisited: Institutional Isomorphism and Collective Rationality in Organizational Fields. *American Sociological Review*, 48(2), 147. <https://doi.org/10.2307/2095101>
- DSN-MUI. (2017). Fatwa No. 116/DSN-MUI/IX/2017 on Syariah Electronic Money. *Jakarta: Dewan Syariah Nasional - Majelis 'ulamā' Indonesia*.
- DSN-MUI. (2018). Fatwa No. 117/DSN-MUI/II/2018 on Information-Technology-Based Financing Services in Accordance with Sharia Principles. *Jakarta: DSN-MUI*.
- Dusuki, A, W., & Abozaid. (2007). A critical appraisal on the challenges of realizing maqāṣid al-Sharī'ahh in Islamic banking and finance. *International Journal of Economics, Management and Accounting*, 15(2), 143–165. <https://doi.org/10.31436/ijema.v15i2.133>
- Eisenhardt, K. M., & Graebner, M. E. (2007). Theory Building From Cases: Opportunities And Challenges. *Academy of Management Journal*, 50(1), 25–32. <https://doi.org/10.5465/amj.2007.24160888>
- El-Gamal, M. A. (2006). *Islamic Finance law, Economics, and Practice*. Cambridge University Press.
- Fauzia, A. S., Mulatsih, S., & Alexandi, F. (2022). Mapping the Potential of Zakat Collection Digitally in Indonesia. *International Journal of Zakat*, 6(3), 1–22. <https://doi.org/10.37706/ijaz.v6i3.355>

- Goldenberg, J., Mazursky, D., & Solomon, S. (1999). Toward Identifying the Inventive Templates of New Products: A Channeled Ideation Approach. *Journal of Marketing Research*, 36(2), 200–210. <https://doi.org/10.1177/002224379903600205>
- Greenwood, R., Raynard, M., Kodeih, F., Micelotta, E. R., & Lounsbury, M. (2011). Institutional Complexity and Organizational Responses. *The Academy of Management Annals*, 5(1), 317–371. <https://doi.org/10.1080/19416520.2011.590299>
- Hasan, Z. (2010). Islamic Finance: The Structure-Objective Mismatch and Its Consequences. *ISRA International Journal of Islamic Finance*, 2(1), 35–60. <https://doi.org/10.55188/ijif.v2i1.76>
- Hassan, A., & Mollah, S. (2018). Islamic Finance. In *Palgrave Macmillan*. Springer International Publishing. <https://doi.org/10.1007/978-3-319-91295-0>
- Hennessey, B. A., & Amabile, T. M. (2010). Creativity. *Annual Review of Psychology*, 61(1), 569–598. <https://doi.org/10.1146/annurev.psych.093008.100416>
- Indonesia, R. of. (2011). Law No. 23 of 2011 on Zakat Management. Jakarta: State Secretariat of the Republic of Indonesia.
- Iqbal, Z., & Mirakhor, A. (2017). Ethical Dimensions of Islamic Finance. In *Palgrave Macmillan*. Springer International Publishing. <https://doi.org/10.1007/978-3-319-66390-6>
- Kahf. (1999). Zakat: Performance in theory and practice. *International Conference on Islamic Economics Towards the 21st Century*.
- Kasri, R. A., & Yuniar, A. M. (2021). Determinants of digital zakat payments: lessons from Indonesian experience. *Journal of Islamic Accounting and Business Research*, 12(3), 362–379. <https://doi.org/10.1108/JIABR-08-2020-0258>
- Kent, D., & Dacin, M. T. (2013). Bankers at the gate: Microfinance and the high cost of borrowed logics. *Journal of Business Venturing*, 28(6), 759–773. <https://doi.org/10.1016/j.jbusvent.2013.03.002>
- Kuran, T. (2010). Islam and Mammon. In *Princeton University Press*. Princeton University Press. <https://doi.org/10.2307/j.ctt7srdj>
- Lincoln, Y., & Guba, E. (1985). Naturalistic inquiry. In *Sage*. Sage.
- March, J. G. (1991). Exploration and Exploitation in Organizational Learning. *Organization Science*, 2(1), 71–87. <https://doi.org/10.1287/orsc.2.1.71>
- O'Reilly, C. A., & Tushman, M. L. (2013). Organizational Ambidexterity: Past, Present, and Future. *Academy of Management Perspectives*, 27(4), 324–338. <https://doi.org/10.5465/amp.2013.0025>

- Obaidullah, M. (2016). Revisiting estimation methods of business zakat and related tax incentives. *Journal of Islamic Accounting and Business Research*, 7(4), 349–364. <https://doi.org/10.1108/JIABR-10-2014-0035>
- OJK. (2022). POJK No. 10/POJK.05/2022 on Information-Technology-Based Joint Funding Services. Jakarta: Otoritas Jasa Keuangan.
- Salamon, L. M., & Anheier, H. K. (1997). *Defining the nonprofit sector: A cross-national analysis*. Manchester University Press.
- Salido-Andres, N., Rey-Garcia, M., Alvarez-Gonzalez, L. I., & Vazquez-Casielles, R. (2021). Mapping the Field of Donation-Based Crowdfunding for Charitable Causes: Systematic Review and Conceptual Framework. *Voluntas: International Journal of Voluntary and Nonprofit Organizations*, 32(2), 288–302. <https://doi.org/10.1007/s11266-020-00213-w>
- Saxton, G. D., & Wang L. (2014). The Social Network Effect. *Nonprofit and Voluntary Sector Quarterly*, 43(5), 850–868. <https://doi.org/10.1177/0899764013485159>
- Smith, W. K., & Lewis, M. W. (2011). Toward a Theory of Paradox: A Dynamic equilibrium Model of Organizing. *Academy of Management Review*, 36(2), 381–403. <https://doi.org/10.5465/amr.2009.0223>
- Sonenshein, S. (2014). How Organizations Foster the Creative Use of Resources. *Academy of Management Journal*, 57(3), 814–848. <https://doi.org/10.5465/amj.2012.0048>
- Stake, R. E. (1995). *The art of case study research*. Sage.
- Stokes, & P., D. (2006). Creativity from constraints: The psychology of breakthrough. *Springer*.
- Suchman, M. C. (1995). Managing Legitimacy: Strategic and Institutional Approaches. *Academy of Management Review*, 20(3), 571–610. <https://doi.org/10.5465/amr.1995.9508080331>
- Thaker, H. M. T., Thaker, M. A. M. T., Khaliq, A., Pitchay, A. A., & Hussain, H. I. (2022). Behavioural intention and adoption of internet banking among clients' of Islamic banks in Malaysia: an analysis using UTAUT2. *Journal of Islamic Marketing*, 13(5), 1171–1197. <https://doi.org/10.1108/JIMA-11-2019-0228>
- Thierer, A. (2016). Permissionless innovation: The continuing case for comprehensive technological freedom. In *Mercatus Center*. Mercatus Center.
- Tracey, P., & Phillips, N. (2016). Managing the Consequences of Organizational Stigmatization: Identity Work in a Social Enterprise. *Academy of Management Journal*, 59(3), 740–765. <https://doi.org/10.5465/amj.2013.0483>

Andrarasmara, A. A., Suharnomo, S., & Andriyani, A.

UNDP. (2022). Islamic finance and impact investing: From compliance to impact. *United Nations Development Program*.

Yin, R. K. (2018). *Case Study Research and Applications: Design and Methods* (Sixth). SAGE Publications, Inc.