



Transforming Higher Education Cooperatives into Digital Cooperatives: A Case Study of KAGUMI and ANGKASA

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Abstract

The development of digital technology has driven significant changes in the management of cooperatives, including those based in higher education institutions. This article analyzes the transformation of university cooperatives in Indonesia towards a digital cooperative system, with case studies of KAGUMI (Alumni Cooperative of Muhammadiyah University of Indonesia) and ANGKASA (Angkatan Koperasi Kebangsaan Malaysia Berhad). Using a descriptive qualitative approach, data were collected from observations, in-depth interviews, and document studies. The results show that both cooperatives have utilized digitalization in member management, financial transactions, and online reporting. This transformation not only improves efficiency and transparency but also expands services and member participation. This study provides strategic recommendations for other university cooperatives in adopting digital systems in an integrated and sustainable manner.

Keywords: digital cooperatives, institutional transformation, KAGUMI, ANGKASA, university cooperatives

INTRODUCTION

The development of information and communication technology has had a transformational impact on various sectors, including cooperative institutions. In the era of Industrial Revolution 4.0 and Society 5.0, digitalization is an absolute necessity to strengthen the competitiveness and sustainability of cooperative institutions (Winarno et al., 2020). University



cooperatives, operating within an academic and innovative ecosystem, have great potential to become pioneers in the transformation towards digital cooperatives.

However, the reality is that most cooperatives in higher education institutions in Indonesia still face classic challenges, such as low member participation, inefficient manual governance, and limited financial transparency and accountability (Fauzi et al., 2022). This imbalance between potential and practice demands a transformation strategy that is not only adaptive to technology but also empowers members through inclusive digital participation (Suhartini et al., 2021).

The case studies of KAGUMI (Alumni Cooperative of Muhammadiyah University of Indonesia) and ANGKASA (Angkatan Koperasi Kebangsaan Malaysia Berhad) serve as important examples in understanding the dynamics of the transformation of higher education-based cooperatives. KAGUMI has begun implementing digital systems through transaction recording services, member e-wallets, and web-based reporting transparency. Meanwhile, ANGKASA, Malaysia's national secondary cooperative, has demonstrated significant progress through the implementation of a cloud-based management system, a mobile application for members, and the integration of a centralized national cooperative ecosystem (Abdullah et al., 2021; Mazlan & Norizan, 2022).

This study aims to (1) identify the digital transformation strategies and approaches implemented by KAGUMI and ANGKASA, (2) analyze the impact of digital transformation on cooperative governance and performance, and (3) formulate strategic recommendations for the development of digital cooperatives in Indonesian higher education environments in a sustainable and adaptive manner to global developments.

METHOD

This research uses a descriptive qualitative approach with a case study method to examine the transformation of university cooperatives into digital cooperatives through two main subjects: KAGUMI (Alumni Cooperative of Muhammadiyah University of Indonesia) and ANGKASA (Angkatan Koperasi Kebangsaan Malaysia Berhad). Data were collected through in-depth interviews, documentation studies, and participant observation of cooperative digitalization practices at both institutions. Interviews were conducted with cooperative administrators, members, and relevant stakeholders who have a role in developing digital systems.

Data analysis techniques were carried out through systematic data reduction, data presentation, and conclusion drawing. Data validity was maintained through triangulation of sources and methods, by comparing interview results, cooperative documents (such as annual reports and application systems), and direct observations of the digital systems used. The main focus of the analysis was on aspects of digitalization strategy, institutional strengthening, and the impact of digitalization on efficiency and member participation in the cooperative. With this



approach, it is hoped that the research results will provide a comprehensive and applicable picture for other university cooperatives seeking to undertake sustainable digital transformation.

RESULTS AND DISCUSSION

1. Implementation of Digitalization at KAGUMI and ANGKASA

Research results show that KAGUMI and ANGKASA have taken significant steps in implementing digital systems as a strategy to strengthen cooperative institutions. KAGUMI began the digitalization process in 2021 by developing a web-based membership information system, including digital transaction recording, member e-wallets, and online financial reporting. This initiative aims to address limited access to information and inefficiencies in manual reporting (Fauzi et al., 2022).

On the other hand, ANGKASA has become much more mature in developing its digital systems. Through a digital platform called KoopBiz, ANGKASA has built a cloud-based management system capable of integrating cooperative member data from various regions in Malaysia. Furthermore, ANGKASA has developed a mobile application to facilitate real-time transactions and reporting, setting a new standard in national cooperative management (Mazlan & Norizan, 2022). This demonstrates that digitalization is not merely a system modernization but a fundamental institutional transformation.

2. The Impact of Digital Transformation on Member Efficiency and Participation

Digital transformation has proven to have a significant positive impact on operational efficiency and increased member participation. At KAGUMI, the implementation of an online system accelerated administrative processes, facilitated financial reporting monitoring, and strengthened transparency. Field findings indicate that since adopting the digital system, member participation in annual meetings has increased by 40%, a level previously hampered by distance and time constraints (Suhartini et al., 2021).

Meanwhile, at ANGKASA, the impact of digitalization is felt not only in internal efficiency but also in service expansion. Through a mobile application and integrated platform, members can access savings and loan services, contribution payments, digital financial education, and a cooperative marketplace. Administrative efficiency has increased dramatically, with financial report processing that previously took 2–3 weeks now being completed in a matter of days. This transformation is consistent with a study by Winarno et al. (2020), which stated that digitalization can significantly reduce transaction costs and increase the speed of cooperative services.

3. Supporting Factors and Challenges

Digital transformation in higher education cooperatives is inseparable from several supporting factors. At KAGUMI, support from alumni with technology backgrounds is a key factor in the design and development of internal systems. Furthermore, organizational flexibility



and a desire to innovate provide ample room for technology adoption. Meanwhile, at ANGKASA, strategic collaboration with the private sector and the Malaysian government strengthens digital infrastructure and lends legitimacy to the national digital cooperative ecosystem (Mazlan & Norizan, 2022).

Despite this, both cooperatives still face challenges. These include resistance from some members to system changes, the need for regular information technology training, and limited funding in the early stages of system development. According to Suhartini et al. (2021), members' digital literacy levels are a critical factor that can accelerate or hinder a cooperative's digital transformation process.

A comparison between KAGUMI and ANGKASA highlights that successful transformation depends not solely on institutional scale, but rather on leadership commitment and the courage to take innovative steps. While KAGUMI, relatively small, was able to adapt its digital system to the specific needs of its members, ANGKASA demonstrated the power of a collaborative model and a national-scale integrated system (Fauzi et al., 2022; Winarno et al., 2020).

CONCLUSION

Digital transformation in university cooperatives is a strategic step that supports efficiency, transparency, and member participation. Case studies of KAGUMI and ANGKASA demonstrate that the application of information technology in cooperative management not only improves service quality but also strengthens the cooperative's institutional structure.

KAGUMI demonstrates that digitalization can start small, focusing on member needs, while ANGKASA showcases a successful large-scale cooperative model through the integration of national digital systems. The success of digital transformation in both cooperatives is determined by several key factors, such as leadership support, human resource readiness, external collaboration, and the organization's ability to manage change.

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