

IMPLEMENTATION OF COOPERATIVE DIGITALIZATION AT KUTA MIMBA COOPERATIVE IN THE ERA OF THE INDUSTRIAL REVOLUTION 4.0

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Abstract

The writing of this paper aims to determine the paradigm of sustainable development of cooperative digitalization in the era of the Industrial Revolution 4.0 in order to increase competitiveness. This paper employs a literature review method (library research). From the discussion, it can be concluded that the decline in the number of cooperatives over the past five years has not diminished the intention of other cooperative actors to continue innovating and enhancing their creativity. One of the cooperatives implementing digitalization in the era of the Industrial Revolution 4.0 is the Kuta Mimba Cooperative, with digital services at hand that can be accessed anywhere and at any time. The government provides training assistance for other cooperatives to implement digital services. Thus, the three economic pillars, one of which is cooperatives, develop on an equal footing with state-owned enterprises and the private sector. Cooperative digitalization in the era of the Industrial Revolution 4.0 currently requires the contribution of ideas from the millennial generation to ensure the sustainability of cooperatives in the future.

Keywords: cooperative digitalization, competitiveness, MSMEs, Kuta Mimba Mobile.

Introduction

Cooperatives occupy a highly honorable position in the Indonesian economy. The explanation of Article 33 paragraph (1) of the 1945 Constitution of the Republic of Indonesia explicitly mandates that the economy be structured based on the principle of kinship. According to Bung Hatta, kinship refers to cooperatives. As cited from detik.com, in the current digital era, cooperatives must immediately improve themselves by following technological trends. Cooperatives will certainly be increasingly abandoned by society if they do not modernize. The rapid development of technology has become a shared challenge for the cooperative movement in the millennium era. Cooperatives must undergo digitalization by following technological developments, as there are no regulatory issues from the perspective of cooperative regulations. Regulation of the Minister of Cooperatives No. 2 of 2017 permits cooperative digitalization. Therefore, the mindset of cooperative management (chairperson, secretary, and treasurer) must change in line with technological developments. Such management practices have caused cooperatives to operate less optimally.

Suroto (2016) explains that so far there has been an error in building the paradigm of cooperatives. Ontologically, the paradigm has shifted from being an alternative to becoming sub-ordinative. Dependence on assistance in general constitutes a cooperative syndrome. From the beginning, cooperatives were established as self-help organizations through cooperation among members without discrimination. The fading meaning of independence and the conception of cooperatives as enterprise entities in accordance

with economic democracy have experienced degradation and alienation from modern business competition.

Cooperatives must be able to become contemporary cooperatives by utilizing information technology in business management. With technology-based application systems, it is expected that services to members will become faster, safer, and more convenient (<https://watyutink.com>). At a minimum, cooperatives must have and activate websites and social media that are active and easily accessible to members, prospective members, and the public. Institutionally and in terms of business operations, cooperatives must be easily accessible online so that they begin to market products and services online. Member services must also be developed online. Thus, members obtain facilities through mobile applications via mobile phones, enabling them to transact with cooperatives, check savings balances, identify loan positions, and conduct transactions directly via mobile phones within 24 hours (www.solopos.com).

Arief (2012) explains that based on the Indonesian constitution, national economic development is built on three economic pillars, namely state-owned enterprises, the private sector, and cooperatives. These three economic pillars constitute the infrastructure of the Indonesian economy in accordance with Article 33 of the 1945 Constitution. Ideally, all three should be organized in accordance with the founding ideals of the nation. Therefore, all three must become pillars of the economic system as a manifestation of collective effort based on the principle of kinship. They must be able to realize the ideal that branches of production which are important for the state and affect the livelihood of many people are controlled by the state. These three pillars must also ensure that land, water, and natural resources contained therein are controlled by the state and utilized for the greatest prosperity of the people. All of these are implemented under economic democracy, with principles of togetherness, efficiency, justice, sustainability, environmental awareness, independence, and by maintaining progress and national economic unity. This is the constitutional mandate of the Republic of Indonesia.

The restructuring of state-owned enterprises must be in accordance with this mandate and cannot be separated from the restructuring of the other two pillars of the Indonesian economy, namely the private sector and cooperatives. However, the conditions of the three economic pillars in Indonesia have not yet operated in accordance with the mandate of independence and may have deviated from previously stated economic principles. The most concerning among the three pillars is cooperatives. Therefore, this study discusses the paradigm of sustainable development of cooperative digitalization in the era of the Industrial Revolution 4.0 in order to increase competitiveness.

Efforts that must be undertaken to revive cooperatives as the backbone of the national economy in the era of the Industrial Revolution 4.0, amid rapid technological development, have become a shared challenge for the cooperative movement in the millennium era. Zabadi (2018), cited in possore.com, states that cooperatives must undergo digitalization by following technological developments, and from a regulatory perspective there are no issues. For cooperative business actors, the use of digital technology will provide advantages, including sources of service revenue obtained if cooperatives provide member transaction services such as mobile phone credit top-ups, water utility payments, and the payment of principal and mandatory savings that can be conducted by members using their mobile phones.

Regulation of the Minister of Cooperatives No. 2 of 2017 permits cooperative digitalization. In response to this, it is essential to empower cooperatives and all cooperative members through efforts such as enhancing entrepreneurial spirit, training in the use of information technology, effective management systems and governance, building business networks, managing organizational structures, and other relevant training. The adaptation process of cooperatives to technological developments will expand the operational scope of cooperatives, which previously did not possess connectivity networks as extensive as the banking sector.

Joewono (2018), cited in possore.com, states that the Industrial Revolution 4.0 or Cooperatives and MSMEs 4.0 is relevant in the current era. The implementation of technology can attract young people to participate in cooperatives. The Industrial Revolution 4.0 or Cooperative 4.0 currently faced has entered an era dominated by the internet. Therefore, all parties, including the government, entrepreneurs, cooperatives, and workers, must be prepared to face the ongoing changes.

President Jokowi stated that cooperatives are one of the important people's economic institutions in facing future challenges. Therefore, cooperatives must be strengthened and empowered collectively. Innovation is required, as it is no longer large countries that defeat smaller ones, but fast countries that defeat slower ones. Thus, rapid movement is necessary to compete with other countries. The research results of Tayibnapi et al. (2019) show that innovation, creativity, and empathy in the era of digital technology and economic disruption are key success factors for companies to remain competitive in increasingly unfavorable markets. Rapidly changing consumer behavior due to the widespread use of social media, along with employee support in facing rapid change, including organizational flexibility, will determine company success in the current era of digital technology and economic disruption.

The Minister of Cooperatives and MSMEs, Puspayoga, stated that the Ministry of Cooperatives and MSMEs has undertaken cooperative reform through planned, conceptual, and sustainable steps to realize cooperative independence. Cooperative reform is divided into three stages: (1) cooperative rehabilitation, namely organizational renewal through updating cooperative data by freezing and dissolving cooperatives; (2) cooperative reorientation by shifting the paradigm from a quantity-based approach to a quality-based approach; and (3) development through gradual and measurable changes, including reviewing regulations that hinder cooperative development, strengthening access to financing through people's business credit and revolving funds from LPDB-KUMKM, and developing the real sector.

In the development process, cooperatives must become strategic partners of the government in driving development toward public welfare. Cooperatives play an important role in mobilizing the economic and social strength of society to meet living needs. The philosophy of cooperatives represents enterprises that implement efficient production, consumption, and distribution strategies, as members' economic needs are fulfilled collectively.

Indonesia's economy in 2019, following the general election, began forming a new normal following the development of the digital economy and leisure economy, which are expected to create new opportunities and businesses in 2020. The era of disruption based on digital technology requires companies to possess intrinsic capabilities (Tayibnapi et al., 2019). Various developments in the digital world have brought about new changes in

information exchange, trade, social networking, and global communication, making the world appear within reach. Developments in information technology hardware and the internet present both opportunities and threats for the business world in general and MSMEs/cooperatives in particular. Therefore, digital adoption is a prerequisite that must be fulfilled if cooperatives and MSMEs are to progress and take advantage of these business opportunities (Setiawan, 2011).

The development of information and communication technology in Indonesia, based on available data, remains relatively low compared to neighboring countries. ICT development across regions remains uneven. The indication that ICT development is related to inequality levels in Indonesia does not suggest halting technological development for equalization. Awareness of the skill-biased nature of technology requires the government to encourage community capacity in innovation and technology use in order to obtain greater benefits from technology (Fuady, 2018). Aristi and Janitra (2019) explain that based on diffusion of innovation theory, ICT adoption among the Adat Naga traditional village community is at the early majority level, while digital readiness remains within the unprepared group. The increasing use of digital technology offers hope for reducing economic inequality in Indonesia. According to research by the International Monetary Fund (IMF), the main factor driving increased inequality in various countries is technological advancement (Jaumotte and Topalova, 2007).

As business entities, cooperatives operate within a space constrained by their identity and by the rules governing free market players. Identity refers to personality, characteristics, traits, and nature that distinguish an individual or a cooperative. In other words, if cooperatives' thoughts, attitudes, and actions do not align with this identity formulation, it can be said that the cooperative has deviated or lost its identity (Soedjono, 1999). Cooperative identity is a fundamental characteristic inherent since its inception, having undergone a long process of growth and maturation and crystallized into its present form. Cooperatives also operate in competitive market economies as well as environments where market rules do not fully apply. Therefore, it is essential for cooperatives and other stakeholders to understand their position at any given time to maintain and safeguard cooperative identity, with the objective of sustaining their existence as cooperatives.

The demands of the current digital era require micro, small, and medium enterprises to be able to utilize markets at both national and international scales. The absence of geographical boundaries provides significant opportunities for the creation of broader markets. It is time for MSME actors to begin utilizing the digital world, particularly online commerce, to advance their businesses (Arsyad et al., 2015). The MSME sector in Indonesia has not yet been able to increase competitiveness in facing the era of Industry 4.0. One strategy that MSMEs can utilize in the current digital era is leveraging technological advancement (Akbar et al., 2018).

Strategies that can be utilized by MSMEs are related to the social capital they possess. Putnam defines social capital in the form of voluntary associations, networks, norms, reciprocity, cooperation, and behavior based on social trust and mutual respect. Strong social capital is associated with active participation in problem-solving, rapid economic development, and effective governance. This definition has been widely cited in literature on social capital as the Putnam instrument (Schideler, 2005). Coleman (1998) redefines social capital as a productive asset that functions similarly to other forms of

capital but is also distinct, as social capital cannot be separated from relationships among individuals. Putnam (1993) refined Coleman's definition by identifying mechanisms for social capital formation. Like Coleman, Putnam refers to trust, norms, and networks as dimensions of social capital, emphasizing that the productive capacity of social capital can increase efficiency in society by facilitating coordinated action. Putnam further focuses on the importance of reciprocity in social capital formation, defining it as a relationship of continuous exchange involving mutual expectations, where benefits expected in the future are realized in the present.

Digital literacy policy represents a form of social capital that increases efficiency in societal activities by facilitating coordinated action. Digital literacy policy plays an important role in sustaining the activities of women MSME actors in the Special Region of Yogyakarta, while internet access increases women's economic sustainability (Widyastuti et al., 2016). Digital marketing strategies contribute to MSME competitive advantage in product marketing by 78%, with the remaining 22% influenced by other factors such as capital capability, resource supply, and managerial professionalism (Wardhana, 2015). Sari (2019) explains that factors supporting and hindering the MSME sector from a digital economy perspective include knowledge of technology media use as an indicator supporting digital economic success.

Large-scale cooperatives in Bali during the 2019 period in terms of asset growth, membership, and business volume include: (1) Koperasi Pasar Srinadi Klungkung, (2) Koperasi Pasar Kumba Sari, (3) Koperasi Kredit Tri Tunggal Tuka Badung, (4) Koperasi Kuta Mimba, and (5) Koperasi Kredit Kubu Gunung Tegal Jaya Badung. Koperasi Kuta Mimba is one of the large-scale cooperatives in Bali established in 1983. To continue growing and developing, since 2015 Koperasi Kuta Mimba has undertaken amendments to its articles of association to serve a broader market, namely the Province of Bali.

Koperasi Kuta Mimba welcomed the era of the Industrial Revolution 4.0 or Cooperatives and MSMEs 4.0 by providing digital services to members through the Kuta Mimba Mobile application since December 2016. These digital services facilitate new prospective members in opening accounts and enable the utilization of various transaction services, including boarding house rent payments, garage rent payments, school tuition payments and savings for early childhood education, services for non-permanent residents, mobile phone credit top-ups, PLN tokens, Gopay, GrabOVO, e-toll, PLN, Telkom, PDAM, BPJS payments, inter-member payments using QR payment, and other digital services. This digital application also assists cooperative members in registering their merchants as promotional media and helps increase members' sales transactions with the objective of improving member welfare.

Koperasi Kuta Mimba is one of the cooperatives that utilizes digital technology through the Kuta Mimba Mobile application as a manifestation of increasing competitiveness with other financial institutions, in accordance with cooperative identity and principles, with the ultimate goal of community welfare for cooperative members. Other digital services include payroll payments, savings and loan payments, and cooperation with a private bank to facilitate members in withdrawing their savings funds held at Koperasi Kuta Mimba. The digitalization carried out by Koperasi Kuta Mimba represents a new breakthrough for cooperatives through continuous innovation and system updates aligned with member needs, particularly those of the millennial generation.

Theoretical Perspective

Coleman (1986) defines social capital as a set of resources that cannot be separated from relationships within families as well as within community and social organizations, and that are useful for the cognitive or social development of children and young generations. Over time, this definition has been considered too narrow in the context of contemporary use. In his further study, Coleman (1998) redefined social capital as a productive asset that functions similarly to other forms of capital, yet is also distinct from them, in that social capital cannot be separated from relationships among and between individuals. Putnam (1993) refined Coleman's definition of social capital by identifying the mechanisms of social capital formation. Similar to Coleman, Putnam refers to the dimensions of trust, norms, and networks as manifestations of social capital. Strong (high) social capital is associated with active participation in problem-solving, rapid economic development, and effective governance. This definition is widely referred to in various social capital literature as the Putnam instrument (Schideler, 2005).

According to Cox (1995), social capital is a series of processes of relationships among humans that are supported by networks, norms, and social trust, enabling efficient and effective coordination of cooperation for mutual benefit and common good. Meanwhile, Fukuyama (1999) defines social capital as everything that enables society to unite in order to achieve shared goals based on togetherness, bound by values and norms that grow and are upheld. Although there are various definitions of social capital, Putnam's definition is the most frequently used. According to the World Bank, social capital is defined as something that refers to institutional dimensions, created relationships, and norms that shape the quality and quantity of social relations within society (Hasbullah, 2006). Social capital is not merely a collection of institutions or groups that support social life, but rather encompasses a broader spectrum as a social glue that maintains the unity of group members collectively.

According to Hasbullah (2006), social capital has six main elements, namely norms, values (social values), trust, reciprocity, participation, and proactivity. The rationale for the existence of these six elements is that the core discussion of social capital lies in how the ability of a community within an entity or group to cooperate is formed. The success of cooperation depends on the level of participation of group members. Such cooperation is characterized by reciprocal relationships that are mutually beneficial and built upon trust, which is supported by strong and positive norms and social values. This strength will be maximized when supported by a proactive spirit in establishing relationships based on the principles mentioned above.

According to new institutional economics, institutions are used as drivers for the functioning of the market system. New institutional economics represents a new paradigm in studying, understanding, examining, and even analyzing economics. Regardless of organizational form, if an organization is established on a foundation of society that possesses a high level of mutual trust, it will encourage rapid and positive organizational development. Both formal and informal institutions will be strong if the individuals within them also possess strong social capital. Social capital is closely related to a high level of mutual trust and a strong spirit of togetherness, whether within organizations or between organizations and their external relations. Social capital will increase the level of coherence of actions related to organizational stability and the presence of mutual understanding.

According to Law No. 11 of 2009 concerning Social Welfare, social welfare is a condition in which the material, spiritual, and social needs of citizens are fulfilled so that they can live properly and develop themselves, thereby enabling them to perform their social functions. Social welfare is an organized system of social services and institutions aimed at assisting individuals and groups in achieving satisfactory standards of living and health, as well as personal and social relationships that allow them to develop their abilities to the fullest extent and improve their welfare in harmony with the needs of families and society. Social welfare encompasses various efforts developed to improve human living standards in physical, mental, emotional, social, economic, and spiritual aspects. According to the Central Bureau of Statistics (2007), welfare is a condition in which all physical and spiritual needs of a household can be fulfilled in accordance with its standard of living. Arthur Dunham, as cited in Sukoco (1991), defines social welfare as organized activities aimed at improving welfare from a social perspective.

Data

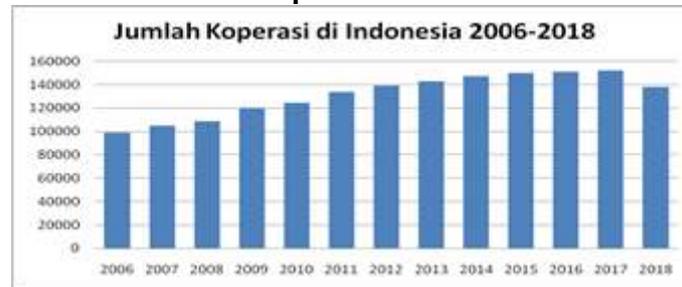
The existence of cooperatives, when viewed from their age of 73 years at present, indicates that they are relatively mature. In the opening remarks of the Minister of Cooperatives at the opening of the 2019 coordination meeting in the field of cooperatives and MSMEs, it was stated that the development of cooperatives is currently increasingly dynamic and healthy, although the number of cooperatives has declined to 138,140 units, of which 43,000 units have had their legal status revoked. This reduction in number represents the government's commitment to jointly implement a total reform of the national cooperative system so that in the future only cooperatives that are truly healthy and ready to carry out activities properly will remain, in order to encourage the vitality of their members.

Table 1 presents the number of cooperatives in Indonesia for the period 2006–2018. It can be observed that the number of cooperatives increased each year. In 2017, the government implemented cooperative reform through cooperative rehabilitation, resulting in a slight decrease in the number of cooperatives in 2018 due to the revocation of cooperative legal status. This was acknowledged by the Secretary of the Ministry of Cooperatives and MSMEs, Prof. Rully Indrawan (2019), who stated that the number of cooperatives over the past five years has indeed experienced a significant decline. However, this occurred because the Ministry of Cooperatives and MSMEs launched the Total Cooperative Reform program, under which only high-quality cooperatives will exist in the future.

The Industrial Revolution 4.0 is a revolution that brings markets closer to producers. The presence of the Industrial Revolution 4.0 can be utilized for industrial development. Dian Permanasari, M.Dev, Subdirector of Research Methodology and Analysis at the Creative Economy Agency, stated that Indonesia's population totals 262 million people, with more than 50 percent actively using the internet. Unfortunately, 87.13 percent of the 143.26 million internet users in Indonesia use it solely for social media, even though the internet can actually be used to increase productivity. The internet can be utilized to improve marketing, branding, and shopping activities. Of the 143.26 million users, 50.08 percent access the internet via mobile phones. Data from Indonesia Digital Landscape 2018 show that, on average, Indonesians spend 90 minutes per month on

online shopping. This figure is quite substantial, indicating that the internet provides significant opportunities for growth.

Table 1. Number of Cooperatives in Indonesia 2006-2018



Source: www.depkop.go.id, 2019

Indonesia's science and technology capacity to date remains at level 3, where more than 75% of its technological needs are sourced from imports. In fact, a nation can be designated as a developed nation if its science and technology capacity reaches level 1, meaning that more than 75% of its science and technology needs are the result of its own national innovation (UNDP, 2010, cited in kumparan.com). The development of information and communication technology (ICT) in Indonesia, based on available data, indicates that it remains relatively low compared to neighboring countries. ICT development across regions is still uneven. The indication that ICT development is related to inequality levels in Indonesia does not imply a recommendation to halt technological development for the sake of equalization. Awareness of the skill-biased nature of technology requires the government to encourage community capacity in innovation and technology utilization if greater benefits from technology are to be achieved (Fuady, 2018). Aristi and Janitra (2019) explain that based on diffusion of innovation theory, ICT adoption among the Adat Naga traditional village community is at the early majority level, while digital readiness falls into the unprepared group. The increasingly widespread use of digital technology provides hope for a reduction in economic inequality in Indonesia. According to research by the International Monetary Fund (IMF), the main factor driving increasing inequality in various countries is technological advancement (Jaumotte and Topalova, 2007).

In the current era of the Industrial Revolution 4.0, cooperatives must be able to adapt to technological developments. Technological and digital advancement requires all business actors, including cooperatives, to adapt. Based on data from the Ministry of Cooperatives and MSMEs, of the total 151,000 cooperatives recorded in 2017, only around 10% have moved toward and are based on information technology in their public reporting mechanisms.

The main concept of Industry 4.0 is the development of an information society. Technology penetrates into daily human life, with humans as the primary actors. Cooperative business processes or models in the digital era, including legally established cooperative entities and non-cooperative entities that adopt cooperative-oriented business models based on mutual cooperation and togetherness, will continue to develop. One such cooperative business model is cooperatives with core business activities in financing, which are now being developed by startups, where savings and loan cooperatives are expected to be equivalent to digital banking. The flagship service of this

model lies in the outcomes provided to cooperative members in digital form, offering convenience such as checking balances, making payments or loan transactions, and other services simply through applications without the need to visit cooperative offices. In this way, cooperatives become an alternative for the public in shopping activities. For example, when purchasing goods or food, the public may choose between cooperative stores and conventional stores, resulting in direct competition (inet.detik.com).

Kuta Mimba Net is one of the digital service facilities of Koperasi Kuta Mimba that provides secure and convenient access to members and prospective members through the internet network. Kuta Mimba Net can be accessed via a browser without requiring an installation process and can be used anytime and anywhere as long as an internet connection is available. Kuta Mimba Net utilizes responsive web technology, allowing access via computers, laptops, and smartphones or tablets with various screen sizes. The features currently available on Kuta Mimba Net include balance inquiries and account mutation records for all products subscribed to by members and prospective members of Koperasi Kuta Mimba. The data displayed on Kuta Mimba Net represent the most current data available in the online system of Koperasi Kuta Mimba.

The online system of Koperasi Kuta Mimba continues to be developed to support efficient and secure management systems, ensuring that Koperasi Kuta Mimba services remain within reach of members and customers throughout the Province of Bali. To support this objective, several Android-based applications available for download on the Google Play Store have been developed, including Kuta Mimba Mobile, as well as web-based applications such as MyKos (a boarding house payment application using transfer payment and QR code), My Garasi (a garage rental payment application using transfer payment and QR code), PAUD App (an application for tuition and savings payments for early childhood education), My Payment, Simwa, and the PNPku application (a non-permanent resident data management system), as illustrated in Figure 2. The service applications for members of Koperasi Kuta Mimba shown in Figure 2 not only serve economic aspects but also address demographic aspects related to non-permanent residents, referred to as PNPku.

Figure 2. Service Applications at Koperasi Kuta Mimba



Source: Kuta Mimba Cooperative, 2026

The My Kost application (Figure 3) is provided for members of Kuta Mimba Cooperative who operate boarding house businesses, to facilitate the payment system and monitor tenant discipline. This application also records boarding house tenants

originating from outside Bali Province, who are directly subject to PNPku payments. Consequently, Desa Adat Kuta is facilitated by the My Kost application in recording the number of non-permanent residents residing in Desa Adat Kuta, as they rent boarding houses within the area.

Figure 3. My Kost Application



Source: Kuta Mimba Cooperative, 2026

The My Garasi application (Figure 4) is designed to meet the needs of members who rent out car garages to the general public within the Desa Adat Kuta area. This application is not significantly different from the My Kost application. Garage renters from outside Bali Province are indirectly recorded as migrant residents and are required to make payments through the PNPku application. Thus, the My Kost and My Garasi applications greatly assist in recording migrant populations, who are subsequently required to make payments through the PNPku application. Through this effort, Kuta Mimba Cooperative seeks to support its surrounding environment, in addition to providing welfare benefits to its members by offering facilities aligned with their business needs. At the same time, it facilitates the collection of accurate data on non-permanent migrant residents, which has historically been difficult to determine precisely.

Figure 4. My Garage Application



Source: Kuta Mimba Cooperative, 2026

The PAUD application is one of the application programs that simultaneously teaches saving habits to early childhood education and kindergarten students, while also providing access to tuition fee payments through Kuta Mimba Cooperative or national public banks via virtual bank accounts assigned to each student as payment numbers. Kuta

Mimba Cooperative also provides service facilities for elementary school students under the product name SIMWA (Student Savings). SIMWA is a savings product that is relatively similar to the PAUD application service (Figure 5), with the objective of teaching students to save. Each year during grade promotion, Kuta Mimba Cooperative provides awards to three students in one school (PAUD, kindergarten, or elementary school) who have the highest savings balance. This initiative is conducted by Kuta Mimba Cooperative as a form of recognition for children's awareness in saving.

Figure 5. PAUD Application



Source: Kuta Mimba Cooperative, 2026

The My Payment application (Figure 6) is a payment service application for contributions such as PKK fees and stall fees (vendors at the beach and vendors at the Kuta Beach art market). This application provides convenience for members by enabling online payments, allowing them to save time without needing to visit the cooperative office to make payments. Members can continue working in their respective fields without disruption.

Figure 6. My Payment Application



Source: Kuta Mimba Cooperative, 2026

The PNPku application (Figure 7) is one of the payment applications designed for non-permanent residents who come and reside in Desa Adat Kuta. PNPku was developed

as a form of concern by Kuta Mimba Cooperative for activities within its surrounding environment, providing solutions for the management and data collection process of non-permanent residents through collaboration between Kelurahan Kuta and Desa Adat Kuta. Kuta Mimba Cooperative utilizes the momentum of the widespread use of the Kuta Mimba Mobile service application as an access point to introduce Kuta Mimba as a market development strategy.

Figure 7. PNPku Application



Source: Kuta Mimba Cooperative, 2026

The Kuta Mimba Payroll application (Figure 8) is a facility provided by Kuta Mimba Cooperative to companies for the payment of employee salaries through Kuta Mimba Cooperative. The benefit for companies that are not yet able to provide loans to their employees is that, through cooperation with Kuta Mimba Cooperative, the employees of these companies are able to obtain loan facilities. This is implemented through salary blocking mechanisms, whereby employee salaries are transferred to Kuta Mimba Cooperative, ensuring that employees with loans fulfill their monthly payment obligations.

Figure 8. Payroll Application



Source: Kuta Mimba Cooperative, 2026

The conveniences available to members and customers through this Android-based application include balance inquiry, auto-debit services, mobile phone credit purchases, prepaid electricity token purchases, GoJek top-ups, OVO (Grab) top-ups, e-Toll top-ups, BPJS payments, Kuta Mimba merchant payments, transfers between Kuta Mimba Cooperative accounts and national bank accounts, transactions using virtual accounts, merchant registration, and many other services. All service facilities provided by Kuta Mimba Cooperative can be utilized by its members. However, if members have not upgraded their membership status by paying the principal savings and mandatory savings, they are not yet able to fully access the service facilities provided by Kuta Mimba Cooperative.

In accordance with its strategy, the number of members of Kuta Mimba Cooperative who registered as merchants in 2025 reached 764 merchants. The increase in the number of merchants registering with Kuta Mimba Cooperative continued until December 2026, reaching more than 775 merchants with various types of businesses owned by members.

Figure 9. Main Menu of Kuta Mimba Mobile Application



Source: Kuta Mimba Cooperative, 2026

These efforts were undertaken as a manifestation of improving services to members through the Kuta Mimba Mobile facility, supporting the development of members' businesses through online merchant facilities, and attracting public interest to become members of Kuta Mimba Cooperative. The improvements implemented by Kuta Mimba Cooperative to date are reflected in the main menu of the Kuta Mimba Mobile application, as presented in Figure 9. The main menu display of the Kuta Mimba Mobile application offers various service features designed to facilitate members' transactional needs and increase members' business volume.

Dialog

Regulation of the Minister of Cooperatives Number 2 of 2017 permits cooperative digitalization. The adaptation process of cooperatives to technological development will expand the operational scope of cooperatives that previously did not possess connectivity networks as extensive as those of the banking sector. Based on data from the Ministry of

Cooperatives and SMEs (Kemenkop UKM), out of a total of 151,000 cooperatives in 2017, only around 10% were oriented toward and based on information technology in their public reporting mechanisms. Not many cooperatives are able to compete in the international market, which contrasts with the early role of cooperatives as the backbone of the economy, having reached the age of 73 years in 2019. Cooperatives have not optimally utilized this regulation, combined with the low level of social capital within cooperatives.

Weak social capital within cooperatives results in weak cooperative performance. This condition is reflected in the work programs of the Ministry of Cooperatives and SMEs over the past five years, during which the number of cooperatives in Indonesia has declined, as many were closed by the government due to insufficient quality. Consequently, only cooperatives that truly possess quality will be able to survive. A cooperative as an institution will be strong if the individuals within it also possess strong social capital. Social capital is closely related to a high level of mutual trust and a strong spirit of togetherness, both within organizations and between organizations and their external relations. Social capital will increase the coherence of actions related to organizational stability and the existence of mutual understanding.

According to new institutional economics, institutions are used as drivers of the functioning of the market system. An important aspect of institutions lies in institutional arrangements, known as static aspects, and dynamic aspects referred to as institutional frameworks or mechanisms. Institutional mechanisms are dynamic, while institutional arrangements are static. Cooperative institutions fall within dynamic mechanisms, which contain components of potential capacity, carrying capacity, and supporting capacity. The relationship between institutions and transaction costs and information indicates that institutions emerge and develop to minimize transaction costs in order to improve economic performance. These transaction costs include costs related to information, negotiation, supervision, coordination, and contract enforcement. The relationship between institutions and social capital reflects the ability of communities within a group to cooperate in building networks to achieve shared objectives. Such cooperation is characterized by reciprocal and mutually beneficial interrelationships, built upon trust supported by strong and positive norms and social values. Social capital also has a strong effect on modern organizations in both formal and informal institutions. Strong social capital will reduce various forms of transaction costs, increase mutual trust, strengthen the spirit of togetherness within and between organizations and their external relations, enhance the coherence of actions related to organizational stability, and foster mutual understanding.

Social welfare refers to the scope of services aimed at fulfilling community needs, as well as the condition in which the material, spiritual, and social needs of citizens are met, enabling them to live decently and develop themselves so that they can perform their social functions. Social welfare is reflected in organized activities aimed at improving welfare from a social perspective, which can be demonstrated through cooperative activities.

Cooperatives are one of the people's institutions that possess social capital, institutional capacity, and contribute to the realization of community welfare. In the era of the Industrial Revolution 4.0, Kuta Mimba Cooperative has implemented digital application services through Kuta Mimba Net and the Kuta Mimba Mobile application. This demonstrates that Kuta Mimba Cooperative has strong social capital, institutional

relationships with social capital, institutional relationships with transaction costs, and institutional relationships with community welfare. The digital services implemented by Kuta Mimba Cooperative represent an effort to increase competitiveness in the internet-driven era, characterized by a predominantly millennial population with different consumption patterns. Thus, digital service applications, or cooperative digitalization carried out by Kuta Mimba Cooperative, enable all transactions to be conducted within hand-held devices, allowing transactions to be carried out anytime and anywhere, and contributing to the achievement of welfare for members in particular and society in general.

The paradigm of cooperative development has undergone transformation through cooperative digitalization in response to the millennial era and to increase cooperative competitiveness. Cooperatives, as the backbone of the economy, are expected to function as people-centered and sustainable institutions that contribute to the achievement of community welfare. Cooperative identity in the current digital era will play a crucial role in determining whether cooperatives are accepted by the millennial generation and in the creation of new employment opportunities, which will ultimately reduce poverty. Cooperative digitalization in the era of the Industrial Revolution is essential to increase cooperative competitiveness, ensuring sustainable development and enabling cooperatives to remain viable not only at the national level but also in the international arena.

Conclusion and Recommendations

Cooperatives are required to undergo transformation, commonly referred to as rebranding, in the current all-digital era. The declining number of cooperatives over the past five years has not diminished the commitment of other cooperative actors to continue innovating and enhancing their creativity. One cooperative that has implemented digitalization in the era of the Industrial Revolution 4.0 is Kuta Mimba Cooperative, which provides digital services within hand-held devices that can be accessed anytime and anywhere.

The government provides training assistance for other cooperatives to implement digital services. As a result, the three pillars of the economy, one of which is cooperatives, are expected to develop on an equal footing with state-owned enterprises and private enterprises. Cooperative digitalization in the era of the Industrial Revolution 4.0 currently requires the contribution of ideas from the millennial generation to ensure the sustainability of cooperatives in the future.

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