

*Research Article***Legal Protection Model for Superior Village Products Based on Digital Transformation and the Role of Village-Owned Enterprise (BUMDes)**Nelly Ulfah Anisariza^{1*}, Endang Purwaningsih², Basrowi Basrowi³, Randy Joy Magno Ventayen⁴^{1,2}Faculty of Law, Universitas Yarsi, Indonesia³Faculty of Economic and Business, Universitas Bina Bangsa, Indonesia⁴College of Business and Public Administration, Pangasinan State University, Philippines

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ABSTRACT

This research addresses the digital divide between urban and rural areas in Indonesia by examining the digital transformation of superior village products through branding and strengthening Village-Owned Enterprises (BUMDes) in Kadumaneuh Village, Pandeglang. Despite existing legal frameworks, village-level digital implementation remains suboptimal, with only 30% of villages having adequate internet access and 40% of BUMDes using digital technology. The study aims to develop an integrated digital transformation model tailored to Indonesian villages' needs, focusing on product branding and BUMDes strengthening. Using a normative-empirical approach, the research combines literary and field studies with statutory and sociological approaches. Data collection involved literature review, interviews, and questionnaires. Results reveal a significant gap in understanding and implementing digital transformation and branding among micro-enterprises. The study proposes a holistic model integrating digital infrastructure development, product digitalization, branding, legal protection, literacy enhancement, economic empowerment, and multi-stakeholder collaboration. The research concludes that optimizing BUMDes' role in digital transformation requires comprehensive strategies, including capacity building, policy development, and strategic partnerships. The proposed model offers a framework to address technological, legal, and economic challenges faced by village enterprises in the digital era.

Keywords: Digital Transformation; Village-Owned Enterprises (BUMDes); Rural Development; Product Branding; Digital Literacy.

A. INTRODUCTION

The digital age has had a huge effect on the world economy, and Indonesia is no exception. Digital transformation is essential for both large businesses and micro, small, and medium enterprises (MSMEs), even to the village level (Purwaningsih & Suhaeri, 2019). This is achievable, however Indonesian villages have a number of challenges that make it hard for them to go through digital transformation. Some of the

biggest challenges are that village business owners don't know much about technology, the digital infrastructure isn't good enough, and they can't get to enough money and technology (Westerman, Bonnet, & McAfee, 2014). These issues exacerbate the digital gap between urban and rural regions, hindering economic growth for all (Nasar & Salsabila, 2024; Supriyanto & Hana, 2020; Yu, Wang, & Moon, 2022).

Adding digital technology to every area of

an organization is called digital transformation. This affects how the firm works and how it delivers customers value (Westerman, Bonnet, & McAfee, 2014). Digital transformation can make better village products more productive, efficient, and competitive in bigger markets (Purwaningsih & Suhaeri, 2019; Rahayu & Day, 2017). Regulations on BUMDes and other legal frameworks that govern village businesses are a good starting point for getting people to use technology, but in practice, they often need policies that support them, programs that build their skills, and programs that teach them how to use technology (Kurniawan, 2020; Kementerian Desa dan Pembangunan Daerah Tertinggal, 2021).

Several communities have effectively utilized digital tools to market their products and enhance operational efficiency. For example, several BUMDes have begun adopting online stores, social media marketing, and digital payment systems, which has helped them sell more and reach more people (Ariyanti, 2020; Susanti, 2023). These examples show that villages may overcome problems like low digital literacy and poor infrastructure if they get enough help and training (Hidayat, Suryanto, & Hidayat, 2023). By using these kinds of examples and talking about specific concerns, policymakers and village leaders may build better plans for digital transformation. This will make sure that everyone in Indonesia may be a part of the digital economy.

A lot of rural areas have problems like slow

internet access, bad infrastructure, and low levels of digital literacy among both business people and local government officials (Maulana & Wijaya, 2024). These restrictions often make it hard for village-owned businesses (BUMDes) to use digital platforms to manage and sell local goods effectively. Digital transformation is the process of putting digital technology into every part of a business, which changes how it works and how it gives value to customers (Westerman, Bonnet, & McAfee, 2014). In the context of village development, it can serve as a catalyst to enhance productivity, efficiency, and the competitiveness of superior village products in larger markets (Nasar & Salsabila, 2024; Rahayu et al., 2024; Yu, Wang, & Moon, 2022). But for this change to happen, there needs to be not only ready infrastructure and people, but also legal frameworks that support it. Law No. 6 of 2014 on Villages and Ministerial Regulations that govern BUMDes operations are two examples of rules that can help villages become more powerful. However, these legal tools need to be more clearly linked to plans for getting people to use digital technology. This means that regulatory support should include incentives for training in digital skills, building infrastructure, and making e-commerce easier.

Digital transformation has the potential to happen at the village level in Indonesia, as shown by real-life examples from different parts of the country. For example, Desa Ponggok in Central Java used digital marketing and online booking

systems to successfully promote its local tourism village. This brought in more money and created new jobs. In the same way, Desa Pujon Kidul in East Java used social media marketing to promote its BUMDes café, which brought in tourists from both inside and outside the country. These cases show that when infrastructure, digital literacy, and legal frameworks are in place, rural communities can use digital technology to reach more customers, improve their product branding, and keep the economy growing over the long term. So, to make sure that development is fair and long-lasting, a strategic plan for digital transformation in villages needs to include technological readiness, building people's skills, and regulatory support.

Law Number 6 of 2014 on Villages gives villages the right to manage their own resources and potential (Mulyono, 2014). Article 87 of the law says that Village-Owned Enterprises (BUMDes) must be set up as the main way for the village economy to work. Also, Government Regulation Number 11 of 2021 on Village-Owned Enterprises makes BUMDes's role in building a village economy based on local potential stronger (Muzaqqi & Fitrianto, 2023). Presidential Regulation Number 95 of 2018 on Electronic-Based Government Systems and Presidential Regulation Number 39 of 2019 on One Data Indonesia set the legal framework for the digitalization of public services and data management, even in villages (Rahman, 2021). At the same time, Law Number 11 of 2008 on

Information and Electronic Transactions, which was changed by Law Number 19 of 2016, gives electronic transactions a legal basis that can help with the digital marketing of village products (Hartono & Rahardi, 2021).

The legal framework is in place, but the village-level implementation of digital transformation is still not very good. This is based on information from the Central Statistics Agency (2021). Research by the Ministry of Villages, Development of Disadvantaged Regions, and Transmigration (2022) shows that only 40% of BUMDes have used digital technology in their work (Marselina et al., 2024).

Village superior products, which should be the backbone of the local economy, often have a hard time getting into bigger markets because they don't know much about digital marketing or how to get to them. A 2023 study by the Indonesian E-Commerce Association (idEA) found that less than 15% of MSMEs in rural areas have used e-commerce platforms to sell their goods (Madyatmadja, Nindito, & Pristinella, 2023).

Interviews with the individuals in charge of Kadumaneuh Village, Pandeglang, (Apud, 2024) showed that Kadumaneuh BUMDes has been formally created up and has a Legal Entity Registration Certificate number: AHU-06185.AH.01.33 of 2022. Husen has been in charge of these BUMDes from September 2022. But it simply gives people in the neighborhood safe water and doesn't produce much money.

This issue raises critical considerations about how to best use BUMDes's role in giving communities more power, helping small and medium-sized companies thrive, and safeguarding and marketing the best products from villages. The limited scope of BUMDes company in delivering drinking water suggests the poor application of the village's economic potential to enhance Village Original Income (PADesa) (Mahendra, Wulandari, & Lilis, 2023).

Also, the legal protection for village-made products like pandan mats and chips isn't strong enough for either the products or the people who manufacture them. These products are still sold the same way they always were, which suggests that they aren't particularly effective at exploiting technology or current marketing strategies. This issue highlights how crucial it is to properly think about what helps and hurts the growth of Kadumaneuh BUMDes. It is crucial to look closely at what the village administration and other groups are doing to get the most out of BUMDes's role. This is important not only to keep it going, but also to improve the health of the community and enhance the Village Original Income (PADesa). This study aims to identify the necessary modifications for BUMDes to become effective and sustainable catalysts for economic growth in communities.

This study is very important for rural economic development in the digital age. First, it knows that digital transformation may help the economy thrive by making village products better

at the local and national levels. Indonesian communities can get more clients and be more competitive by employing digital technology to better handle these items. Second, this project aims to develop a practical paradigm for digital transformation that can bridge the economic disparity between urban and rural areas. This is necessary for achieving improved equitable development throughout all areas of Indonesia.

This research is unique because it takes a holistic approach, combining elements of digital transformation, product branding, and strengthening BUMDes (Village-Owned Enterprises) institutions into one model. Particular emphasis is placed on safeguarding exceptional village products, a dimension frequently neglected in prior digital transformation research. This study also creates a digital transformation model that is specific to the needs and characteristics of Indonesian villages. It also uses a participatory approach that involves a range of stakeholders in the research and model development process.

The theoretical framework employed in this research is: 1) theory of digital transformation and 2) theory of branding. First, the digital transformation theory created by Westerman et al. (2014) gives us a way to think about how digital technology can completely change how a business works and what it offers. This theory can be used to look at different parts of BUMDes (Village-Owned Enterprises) and better village products, such as how to digitize production

processes and change business models (Roth, 2019). The Internet of Things (IoT) can help farmers get the most out of their crops, and e-commerce sites can help village products reach more people. Digital supply chain management can make the whole process more efficient, from getting raw materials to getting the final product to customers.

By giving BUMDes important information about market trends and what customers want, big data analysis can help them make better business decisions (Giannakopoulos et al., 2024). Digital transformation can also create new ways for businesses to make money, including the sharing economy or subscription-based services. This can help villages make more money. Using this theory in research can help make models that let BUMDes and high-end village products not only use technology but also make big changes to their organizational culture, skills, and business processes to fit in with the digital economy.

Second, branding theory, particularly the Customer-Based Brand Equity (CBBE) model proposed by Westerman et al. (2014), provides a framework for creating strong and meaningful brand identities for high-quality village products in the digital era. You can use this theory to come up with branding strategies that include making unique brand identities, using digital storytelling to get people to know about your brand, making people think of quality and authenticity in a positive way, and getting people to stay loyal to your brand through digital engagement. Digital

branding may harness the power of social media and shareable content to convey the story behind better village products. It can focus on local values and sustainability. Blockchain technology and digital certification can help keep items legitimate and make customers trust them.

When the conditions in the field don't match what was expected, a lot of crucial concerns come up. Registered brands should protect pandan mat and emping goods. These items are manufactured using the latest technology, can be bought online, and come with a well-designed company website. They also do well in marketing. But there are a lot of problems with digital transformation at the village level in real life. But in reality, there are a number of challenges with digital transformation in villages. The digital infrastructure is not very good. There isn't much internet connection, there aren't many IT support services, and people don't use digital technology very much. People in villages don't know much about technology and don't have many abilities in using it to build their enterprises, which makes things worse. Also, it's challenging for superior village items to compete in a bigger market because they don't have a decent branding plan.

Personalizing customer experiences through data analysis can strengthen the relationship between brands and consumers. Integrating Digital Transformation and Branding theories in this research can produce a comprehensive model that enables BUMDes to

adopt digital technologies and builds strong brands for superior village products in the competitive digital market. This model can include digital branding strategies that utilize technology for personalization, co-creation with consumers, and multi-format storytelling (Mu, 2024). Digital brand protection through advanced technologies such as blockchain can be important in protecting the value and authenticity of superior village products. With this integrated approach, the research can significantly contribute to developing strategies that enable superior village products to survive and thrive in the digital economy, while strengthening the role of BUMDes as a catalyst for local economic development.

The state of the art of this research can be seen from the results of previous studies that are relevant to this research. Previous studies indicate that a significant issue is the insufficient capacity of Village-Owned Enterprises (BUMDes) to lead digital transformation at the village level (Lidya, Mandagi, & Tumbel, 2024; Kristiyanti et al., 2025; Najmudin et al., 2024; Erwin & Amri, 2024; Supriyati & Bahri, 2022). The lack of a legal framework and effective mechanisms to safeguard the intellectual property of superior village products further exacerbates this issue, potentially jeopardizing the sustainability of local businesses (Bahtiar, Syukur, & Karim, 2021; Puri & Khoirunurrofik, 2021; Ritonga, Tanjung, & Permatasari, 2024; Al Asy'arie, Rahmanda, & Prasetyo, 2024). The lack of a unified digital transformation model that links production,

marketing (Rachbini, 2023), and financial management at the village level is a major barrier to building a complete and useful digital ecosystem for village economic growth (Ramdhan et al., 2024; Maulana et al., 2025; Fahmi et al., 2023). Research conducted by the Ministry of Villages, Development of Disadvantaged Regions, and Transmigration indicates that merely 40% of BUMDes have incorporated digital technology into their operations (Marselina et al., 2024). The majority of BUMDes have not been able to provide maximum results for increasing village income (Alfiansyah, 2022; Nurjana et al., 2020; Kristiyanti et al., 2025). Superior village products have not been protected in terms of brands (Dirkareshza & Sihombing, 2021; Sofyani, Atmaja, & Rezki, 2019; Srirejeki, 2018; Ritonga, Tanjung, & Permatasari, 2024). The majority of brands used by new village superior products are just labels that have not been registered (Aritenang, 2021; Prabowo et al., 2021; Putri, Saddewisasi, & Santoso, 2023). Legal and regulatory frameworks are still underdeveloped, impacting effective protection of intellectual property rights at the village level (Syaputra, Satoto, & Suryahartati, 2022; Al Asy'arie, Rahmanda, & Prasetyo, 2024; Destyarini et al., 2022; Tahir et al., 2023). Furthermore, the ignorance and lack of knowledge of copyright and patent rules among village players impede the protection and commercialization of outstanding village products (Baihaqi, Prima, & Widiyanto, 2021; Dirkareshza & Simanjuntak, 2023). Several

studies emphasize the importance of strengthening BUMDes through legal instruments such as notarial deeds and geographical indication registration to enhance product competitiveness (Idayu, Husni, & Suhandi, 2021; Fahmi et al., 2023; Sarpong & Nketiah-Amponsah, 2022; Dirkareshza & Simanjuntak, 2023). Community involvement and the use of digital platforms have been proven to improve the effectiveness of BUMDes in rural economic empowerment (Holisah et al., 2022; Al Ansori et al., 2023; Zulgani et al., 2023). However, challenges remain in fully integrating digital transformation with legal protections to support sustainable economic development at the village level (Supriyati & Bahri, 2022; Ramdhan et al., 2024; Setiani, Pratiwi, & Komara, 2024).

The purpose of this study is twofold: (1) to analyze strategies for optimizing the role of BUMDes in digitalizing and branding superior village products in synergy with village policies and stakeholder interests to enhance Village Original Income; and (2) to identify digital transformation approaches and the appropriate legal framework model to support the commercialization of superior village products through BUMDes.

B. RESEARCH METHOD

The research utilizes a comprehensive normative-empirical technique (Kamal & Irani, 2014). This methodology incorporates the analysis of both primary and secondary data, as

well as an examination of positive law, particularly within the context of Company Law, relevant to the research topic. The research design combines a literary analysis with an empirical inquiry, using both a legal framework and a sociological viewpoint (Rehman et al., 2023). This approach mix lets researchers learn a lot about the legal and practical sides of digital transformation and branding high-quality village goods, as well as how BUMDes fits into the social and economic life of villages. Data is collected from several sources, including extensive literature reviews, in-depth interviews with key stakeholders, and the distribution of questionnaires to capture broader perspectives from villages and local business participants.

The research is scheduled to be conducted in 2024, focusing on the location of Kadumaneuh Village, Banjar District, Pandeglang Regency, Banten Province. The research population covers all principles, theories, and legislation related to Legal Entity Business Entities and Positive Law on BUMDes. This includes, but is not limited to, Law No. 6 of 2014 on Villages, Government Regulation No. 11 of 2021 on Village-Owned Enterprises, as well as regulations related to digital transformation and intellectual property protection. The empirical sample of this research is BUMDes Kadumaneuh, which will be the subject of in-depth analysis to understand the dynamics of implementing digital transformation, branding strategies, and protection of superior village products in a real context. (Faeni et al.,

2025; Pratiwi, et al., 2025a; Pratiwi, et al., 2025b; Basrowi & Utami, 2023).

C. RESULTS AND DISCUSSION

1. Optimizing the role of BUMDes in digitalization and branding of superior village products, synergized with village policies and the interests of Village Original Income stakeholders

The optimization of BUMDes in digitalization and branding of superior village products must be anchored in a robust legal framework that governs its operations, intellectual property protection, and digital commerce. The legal foundation begins with Law No. 6 of 2014 on Villages, which grants authority for the establishment and management of BUMDes as village-owned legal entities (Sisworini & Rumawi, 2025). Furthermore, Law No. 20 of 2016 on Trademarks and Geographical Indications is critical in guiding BUMDes and micro-entrepreneurs in protecting product identity and preventing brand misuse (Dirkareshza & Sihombing, 2021). However, in practice, many micro-entrepreneurs face legal and bureaucratic hurdles, such as the complexity of brand registration procedures, high costs of certification, and limited awareness of intellectual property rights. Misunderstandings about the necessity of trademark protection and gaps in coordination between village authorities and government agencies often discourage rural entrepreneurs from pursuing legal safeguards.

From a legal standpoint, these issues

demonstrate that the digital transformation of BUMDes cannot be separated from regulatory harmonization. It is challenging for rural business owners to know what their legal rights are and how to enforce them because Village Law, Intellectual Property Law, and E-Commerce Law don't all relate properly. An examination of normative law reveals the imperative for a *sui generis* regulatory framework that caters to the unique socio-cultural setting of villages while guaranteeing adherence to national legal standards and international trade obligations. In this context, legal science provides both descriptive insights and prescriptive direction for the establishment of enforceable rights and obligations for all parties concerned.

This shows that there is an urgent need for a unified regulatory model that links frameworks for village governance, intellectual property, e-commerce, and digital taxation (Sofyani, Riyadh, & Fahlevy, 2019). This kind of model should make sure that the law is clear, open, and accountable, while also making it easier to protect brands and follow the rules for online businesses.

In order to turn legal provisions into measurable results, we need to take practical steps. First, local governments should set up workshops on intellectual property, digital branding, and e-commerce licensing that are specifically for BUMDes managers and rural entrepreneurs. They should also set up one-stop service units at the district level to make government processes easier, lower costs, and

help people register their brands directly. Second, the private sector can help by offering programs for transferring technology, mentoring in digital marketing, and partnerships that connect BUMDes products to well-known e-commerce sites. Third, NGOs and community groups can help by teaching people about digital literacy, the law, and how to run a business in a way that is good for the environment. This is especially important for business owners who haven't had much education or experience with formal procedures (Saputra et al., 2019).

From a legal point of view, a multi-level regulatory mechanism is also needed to connect central and local rules. If there isn't a clear division of power, there will continue to be overlapping rules between ministries, local governments, and village administrations. This will make it hard to enforce the law and create legal loopholes. So, legal science helps create a more organized system of government that protects the rights of both consumers and entrepreneurs while making sure that BUMDes can still do business online.

A solid multi-stakeholder framework should be made to make sure that people can work together well. This framework might include: (1) local government making it easier to follow the rules, (2) private businesses providing resources and connecting markets, and (3) NGOs running programs to build capacity and raise awareness. There should also be institutionalized joint monitoring and evaluation systems to keep track

of progress in branding, legal protection, and digital commercialization of village products. By working together in this way, BUMDes can break down structural barriers and fully take advantage of digital transformation to create sustainable Village Original Income (PADes).

The level of digital literacy among rural entrepreneurs is another important part of BUMDes digitalization. A lack of knowledge about digital tools, online marketing strategies, and data security often keeps BUMDes managers from getting the most out of digital platforms (Haryati, Handini, & Aprita, 2024). Research indicates that in the absence of organized capacity-building, digital transformation may devolve into superficiality, characterized by the adoption of online platforms that remain underutilized (Wijayanto, Mas'ud, & Sopanah, 2025). To make sure that rural business owners learn both technical and management skills, it is important to have long-lasting digital literacy programs that are part of village training programs and supported by colleges and universities.

To help BUMDes get into the digital economy faster, it is also highly crucial to develop strong partnerships between the public and commercial sectors. Recent research indicates that collaboration with fintech startups, e-commerce platforms, and telecommunications firms significantly facilitates the initiation of rural entrepreneurs (Holisah et al., 2022). For instance, cooperating with digital payment businesses not only makes transactions safer, but it also makes

users more willing to trust BUMDes products. The government can make it a law that businesses work with the government on long-term capacity-building projects instead of short-term corporate social responsibility (CSR) programs.

In order for these partnerships to be legal, there needs to be a clear set of rules that follows Law No. 6 of 2014 on Villages, Government Regulation No. 11 of 2021 on Village-Owned Enterprises (BUMDes), and Law No. 20 of 2016 on Trademarks and Geographical Indications. If BUMDes doesn't follow these rules exactly, they could end up in a regulatory void that makes it harder to hold them accountable and defend their reputation. Lawful harmonization is not only useful, but it is also vital to make sure that BUMDes' digital transition is lawful.

Finally, it is necessary to keep an eye on BUMDes's digital transformation and check the policies to make sure they are in line with the country's economic goals. Evidence from experimental projects across different provinces demonstrates that poorly overseen digital initiatives often lead to project stagnation and misallocation of resources (Lidya, Mandagi, & Tumbel, 2024). To prevent this, policymakers ought to implement adaptive evaluation frameworks that engage all stakeholders and include quantifiable metrics such as sales growth, brand registration rates, and enhancements in digital skills. This approach not only enhances accountability but also ensures that legislative and institutional modifications remain aligned with

the evolving digital marketplace (Adawiyah, Mof, & Hermina, 2025).

Legally, the monitoring and evaluation stage should also include compliance audits with intellectual property rights and digital commerce laws. This will make sure that BUMDes does not break any laws while also protecting their own rights. By incorporating legal audits into policy evaluation, BUMDes' digital transformation can progress from mere economic efficiency to a framework of normative legality and sustainability.

Field observations indicate that numerous micro-entrepreneurs in villages are unaware of how to obtain legal protection for their brands, often due to intricate administrative procedures and restricted access to legal assistance (Nurjanah, Rahman, & Nurhadi, 2021). To fix this, we need to do the following: 1) Hold targeted workshops on trademark registration, geographical indication processes, and copyright protection that are tailored to the needs of rural producers; 2) Set up legal assistance units within BUMDes to help micro-entrepreneurs understand branding and digital commerce rules; and 3) Create a digital registry platform at the district or provincial level to make it easier to keep an eye on and protect registered brands.

These actions also show that we need a perfect legal model that combines administrative law (which covers registration and licensing), economic law (which makes sure there is fair competition), and information law (which protects data and digital transactions). The synergy of

these legal domains can provide a holistic framework for protecting village products while promoting sustainable digital branding.

These steps will not only make village products more competitive in national and global markets, but they will also make BUMDes activities more legally sound, which will lead to a long-term increase in PADes. Combining legal, economic, and technological approaches makes sure that digital transformation is not just a short-term operational upgrade, but a long-term, law-abiding change that protects and promotes rural economic growth (Aritenang, 2021).

It is important to remember that BUMDes's digital transformation and product branding must follow the rules that are already in place. These include Law No. 6 of 2014 on Villages, Government Regulation No. 11 of 2021 on Village-Owned Enterprises (BUMDes), and Ministerial Regulations on registering intellectual property. These legal frameworks give BUMDes operations not only formal legitimacy but also a clear separation of rights and duties for everyone involved. Without a normative basis, the economic initiatives outlined may lack enforceable regulations, compromising their sustainability and potentially leading to disputes regarding intellectual property rights, licensing, and revenue allocation.

To make the most of BUMDes's role in the digitalization and branding of high-quality village goods, it is important to give them specific, useful help. Many micro-entrepreneurs are still not

aware of how to get legal protection for their goods, especially when it comes to registering their intellectual property rights and brand names (Nugroho et al., 2021; Ritonga, Tanjung, & Permatasari, 2024). So, village entrepreneurs can better protect and market their goods by holding workshops and training sessions on intellectual property law, digital marketing, and brand development (Ramdhan et al., 2024). Additionally, creating a clear, step-by-step digital toolkit or platform managed by BUMDes can make the legal and administrative processes easier, making it easier for local stakeholders to make the switch to digital (Najmudin et al., 2024; Maulana et al., 2025). This proactive approach can make village products much more visible and competitive, which in turn helps to raise Village Original Income (Holisah et al., 2022).

Also, an ideal legal regulatory model should go beyond just descriptive policies and include prescriptive ones, like easier licensing systems for rural businesses, tax breaks for going digital, and fast-track registration for branding village products. Integrating these legal innovations into the comprehensive digital transformation agenda would harmonize BUMDes development with the principles of legal certainty (*kepastian hukum*), justice, and expediency, which constitute the fundamental objectives of Indonesian legal science.

To make BUMDes's digital transformation easier, different groups need to work together. Local governments can be very important by

making bureaucratic processes easier, giving money, and making sure that policies fit the needs of the village (Sidik & Habibi, 2024; Idayu, Husni & Suhandi, 2021). The private sector, particularly technology companies and marketing firms, can help by providing technical know-how, digital infrastructure, and access to bigger markets (Zulgani et al., 2023; Al Ansori et al., 2023). NGOs can also help with capacity-building programs and act as go-betweens between villagers and regulatory bodies to get around legal and bureaucratic problems that often slow down branding and protecting intellectual property (Destyarini et al., 2022; Supriyati & Bahri, 2022). Policymakers need to make sure that people understand the law and make it easier to get licenses in order to support long-term economic growth in villages (Fahmi et al., 2023; Tahir et al., 2023). These stakeholders can work together to build a strong, connected system that lets BUMDes use digitalization and branding to help villages grow economically.

The change to BUMDes must be in line with the current laws, especially Law No. 6 of 2014 on Villages and Government Regulation No. 11 of 2021 on BUMDes. Not only do these legal documents recognize BUMDes as legal entities, but they also set the rules for their business activities, financial responsibility, and branding rights. When it comes to digital transformation, it's important to have clear laws about licensing, taxes, and protecting intellectual property to avoid arguments and make sure that private businesses

can compete fairly. So, any plan for digital transformation should include a legal framework that protects micro-entrepreneurs under BUMDes and makes sure that everything is clear and accountable.

Interviews with different people in Kadumaneuh Village in 2024 showed that BUMDes "Selaras Kadumaneuh" is working to improve its role in the village's economic growth.

Husen, the head of BUMDes, said that the organization needs to get better at its skills and knowledge in order to help with the digitalization and commercialization of village products: "We need to improve our competencies and skills to support digitalization and commercialization of village products," he said (Husen, 2024).

The goal of BUMDes is not just to grow its own business, but also to help small businesses, especially those that make better village products (Karim, 2019). Dodi, the Acting Village Head, wants to make the most of the village's development potential. He said, "My goal is to maximize the village's potential by supporting all sectors, including BUMDes and micro-enterprises" (Dodi, 2024).

The Village Secretary, Indra Suryani, said that Kadumaneuh Village's two best products are chips and woven mats. There are more than 100 micro-entrepreneurs in Hamlet 1 and Hamlet 2, but they have to deal with a lot of problems. Entrepreneurs still have trouble getting capital and materials for production, and marketing is still done the old-fashioned way (Suryani, 2024).

Talking to micro-entrepreneurs helped me learn more about the problems they face. Idaningsih Fitriani hopes that micro-enterprises will grow in Kadumaneuh, but the main problems are with marketing and branding: "We really hope that micro-businesses can grow here, but marketing and branding are still big problems," she said. She also talked about how important it is for producers to have access to capital and a clear legal framework to protect them: "Access to capital is limited, and we need a legal framework that protects us as producers," she said (Fitriani, 2024).

Pauziah (2024) stressed the need to achieve village independence by raising Village Original Income, especially by selling village goods. "Village independence can be achieved by raising Village Original Income through product commercialization," she said. Johari also said that BUMDes has not been able to effectively reach out to micro-enterprises so far. He hopes that BUMDes can help with the commercialization process: "BUMDes has not yet effectively engaged with micro-enterprises; I hope they can help us with commercialization," Johari said (Johari, 2024).

These results show that there is a gap between the potential of better village products and the ability to make the most of that potential. Digital transformation and good branding are two important ways to close this gap. As an organization responsible for boosting the village economy, BUMDes plays a key role in making

this change happen.

The legal framework for BUMDes is based on Law No. 6 of 2014 on Villages and its related rules, like Government Regulation No. 11 of 2021 on BUMDes. According to these laws, BUMDes is a legal entity owned by the village that is in charge of managing economic activities for the good of the community. But these rules don't work very well in practice because the normative framework hasn't been fully turned into operational mechanisms that help with digital transformation and product branding. An improved regulatory model should give clearer rules on how to use digital technology, protect intellectual property, and work together with BUMDes and micro-enterprises. This will make sure that digital transformation is legal and helps villages become economically independent.

To make the most of BUMDes's role in the digitalization and branding of high-quality village products, a few strategic steps need to be taken. First, building capacity. BUMDes needs to improve the digitalization, digital marketing, and brand management skills of its employees. Intensive training and working together with schools or tech companies can help with this (Winarwan, 2021). Second, building up digital infrastructure. Investing in digital infrastructure, like e-commerce platforms for villages or supply chain management apps, can help micro-enterprises become a part of the digital ecosystem (Sofianto & Risandewi, 2021). Third, branding as a group. BUMDes can help create

collective brands for better village products, which can make them more visible and give them more power in larger markets (Prasetya & Prajanti, 2023). Fourth, making it easier to get capital. BUMDes can help micro-entrepreneurs get money from both the government and private businesses to get around their capital problems (Akhmadi, Fuady, & Pribadi, 2023). Fifth, legal safety: Work with the village government and other relevant agencies to make sure that the best village products are legally protected, such as by registering trademarks and geographical indications (Duha & Listyorini, 2023). Sixth, policy cooperation. Include digitalization and branding strategies in village development policies to make sure that BUMDes efforts are in line with the overall direction of village development (Suwito & Jannang, 2022). Seventh, working together with many different groups. To help with digital transformation and branding, work with a variety of groups, such as local government, businesses, and schools (Sukmawati & Maryanti, 2021).

By taking these steps, BUMDes can become a stronger force for digital transformation and the branding of high-quality village goods. This will help increase Village Original Income, give the community more economic power, and help the village become independent in the long term (Mahendra et al., 2023); (Mahendra & Ainulhaq, 2023). The success of these efforts, though, will depend a lot on how committed everyone involved is and how well they can adapt to the digital market, which is always changing.

Based on observations and surveys given to 75 small businesses in Kadumaneuh Village that make chips and pandanus mats, we can see how well Micro-Enterprise actors understand digital transformation and product branding:

Table 1. Understanding of How to Obtain Legal Protection and Brand Products

Table 1: Frequency and Percent of Valid Responses			
respond of respondent		Analysis	
		Frequency	Percent
Valid	1.00	49	65.4
	2.00	18	24
	3.00	7	9.3
	4.00	1	1.3
	5.00	0	0
	Total	75	100.0

Source: Processed by The Author

Table 1 shows that the majority of community members and Micro-Enterprise actors demonstrate insufficient knowledge regarding how to obtain legal protection and brand products. This is evidenced by the fact that none of the MSME actors and community members have very high knowledge, only 1 person (1.3%) has high knowledge, 7 people (9.3%) have moderate knowledge, 18 people (24%) have low knowledge, and 49 people (65.4%) have very low knowledge.

Thus, the level of knowledge among business actors regarding how to obtain legal protection and brand products is still in a low position.

Table 2. Understanding of The Relationship and Reciprocal Roles Between Micro-Enterprises and BUMDes.

respond of	Analysis
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respondent	Frequency	Percent
Valid		
1.00	22	29.3
2.00	43	57.4
3.00	7	9.3
4.00	2	2.7
5.00	1	1.3
Total	75	100.0

Source: Processed by The Author

Table 2 shows that the majority of Micro-Enterprise actors do not yet have high knowledge regarding the understanding of the relationship and reciprocal roles between Micro-Enterprises and the role of BUMDes. This is evidenced by the fact that only 1 person (1.3%) has very high knowledge, 2 people (2.7%) have high knowledge, 7 people (9.3%) have moderate knowledge, 43 people (57.4%) have low knowledge, and 22 people (29.3%) have very low knowledge.

Thus, the level of knowledge among business actors regarding the understanding of the relationship and reciprocal roles between Micro-Enterprises and the role of BUMDes is in a low position.

Table 3. Understanding of Product Digitalization Methods for Commercialization Efforts

respond of respondent	Analysis	
	Frequency	Percent
Valid		
1.00	46	61.4
2.00	19	25.3
3.00	4	5.3
4.00	6	8
5.00	0	0
Total	75	100.0

Source: Processed by The Author

Table 3 shows that the majority of community members and MSME business actors demonstrate insufficient knowledge regarding the understanding of product digitalization methods and promotion to support commercialization. This is evidenced by the fact that none of the micro-enterprise actors and community members have very high knowledge, 6 people (8%) have high knowledge, 4 people (5.3%) have moderate knowledge, 19 people (25.3%) have low knowledge, and 46 people (61.4%) have very low knowledge.

Thus, the level of knowledge among business actors regarding the understanding of product digitalization methods and promotion to support the commercialization of village products and superior village products is still in a low position.

Table 4. Understanding of How to Obtain Trademarks and Other Legal Entities

respond of respondent	Analysis	
	Frequency	Percent
Valid		
1.00	25	33.3
2.00	35	46.7
3.00	5	6.7
4.00	9	12
5.00	1	1.3
Total	75	100.0

Source: Processed by The Author

Table 4 shows that the majority of micro-enterprise actors do not yet have high knowledge regarding the understanding of how to obtain trademarks and other legal entities. This is evidenced by the fact that only 1 person (1.3%)

has very high knowledge, 9 people (12%) have high knowledge, 5 people (6.7%) have moderate knowledge, 35 people (46.7%) have low knowledge, and 25 people (33.3%) have very low knowledge.

Thus, the level of knowledge among business actors regarding the understanding of how to obtain trademarks and other legal entities is in a low position.

Table 5. Understanding of The Synergy Between The Roles of Bumdes, Village Original Income Stakeholders, and MSMEs

Original Income Statement, and Income			
respond of respondent		Analysis	
		Frequency	Percent
Valid	1.00	11	14.7
	2.00	22	29.3
	3.00	29	38.7
	4.00	9	12
	5.00	4	5.3
	Total	75	100.0

Source: Processed by The Author

Most people who work in micro-enterprises already know a lot about how BUMDes and MSME stakeholders can operate together, as seen in Table 5. This is indicated by the fact that 4 people (5.3%) have very high knowledge, 9 people (12%) have high knowledge, 29 people (38.7%) have moderate knowledge, 22 people (29.3%) have low knowledge, and 11 people (14.7%) have very low knowledge.

Business people don't know much about how BUMDes, Village Original Income stakeholders, and MSMEs interact together (Sara & Saputra, 2021). Using Village-Owned Enterprises (BUMDes) to digitalize and brand

high-quality village products is a smart method to enhance the lives of people in rural areas. This is done in a way that fits with the rules of the village and the needs of those who own Village Original Income (PADes). This means that you need to know the laws that govern how BUMDes work and how the people who work on them interact with each other (Sofianto & Risandewi, 2021).

You need to know a lot about a few different things in order to plan the expansion of Village-Owned Enterprises (BUMDes) strategically. For example:

First, what BUMDes is and the rules that govern it. Law Number 6 of 2014 concerning Villages stipulates that BUMDes can be a legal business. This rule grants localities the power to control their resources and potential. Muhammad and Prasetyanta (2023) state that BUMDes intends to make PADes stronger and give the local economy more influence. When it comes to running BUMDes, it must respect the legislation, including local regulations about how to organize, articles of association, and good governance (Winarwan, 2021). This legal structure safeguards BUMDes by making sure that it acts as both a business and a public legal entity that is responsible to the people. A robust legal framework allows persons who manage community resources the right to do so and makes sure they don't abuse their power or have a conflict of interest.

Second, giving Superior Products a brand and making them digital. Digitalizing BUMDes

management can help things operate more efficiently and bring in more consumers. Using information technology (Sukmawati & Maryanti, 2021), BUMDes can better handle the selling of better village goods. Good branding will make village goods seem better and help them compete better in a broader market (Sangadji, Muspida, & Loppies, 2022). This fits with the principle of good governance, which emphasizes that managing resources should be open and responsible (Prasetya & Prajanti, 2023). Digital branding efforts should also obey intellectual property regulations, consumer protection laws, and electronic transaction rules to avoid legal complications and make sure that digital innovations stay inside the limitations of national law.

Third, working with Village Policy. Policies in the village that assist BUMDes thrive must be open to everyone and focused on the good of the community (Roisah & Setiyono, 2019). Programs that engage people involved in making decisions can assist BUMDes and village policies operate together (Sukmawati & Maryanti, 2021). This is crucial to make sure that the needs of everyone involved, like the community, the village government, and investors, are addressed (Akhmadi, Fuady, & Pribadi, 2023).

Fourth, the interests of stakeholders in PADes. In the context of PADes, stakeholders have a variety of objectives, including improving public services and infrastructure and increasing community revenue (Disemadi & Roisah, 2019).

Through BUMDes, the village government and the people work jointly to manage the village's money (Purnomo et al., 2023). BUMDes needs to know what the community needs and wants in order to help PADes grow as much as possible (Duha & Listyorini, 2023). The legal role of BUMDes as a mediator must be specified by the accountability and audit systems outlined in public finance rules. This makes sure that PADes follows the laws of state financial legislation, which makes everything more open and less likely to be crooked.

To make the most of BUMDes's involvement in the digitalization and branding of high-quality village products (Trisnantari, Susilastuti, & Putri, 2023), there need to be clear regulations and policies that work together. By employing technology and putting the ideals of good governance first, BUMDes can help the village economy thrive in a way that lasts (Jamillah, Pradita, & Setyarti, 2022). To attain the goal of enhancing community welfare, everyone needs to cooperate closely together (Suwito & Jannang, 2022).

2. Appropriate digital transformation and legal protection models to support the commercialization of superior village products through BUMDes

Digital transformation is a key aspect of making Village-Owned Enterprises (BUMDes) run so that better products may be offered in the village. But there are still a lot of problems with putting digitalization into practice in villages

(Roisah et al., 2017). One big challenge is that BUMDes managers and village communities don't know much about computers, which makes it impossible for them to get the most out of information technology. Also, there aren't adequate physical resources and access to technology like the internet is still uneven, which are genuine challenges (Herlina & Andi, 2023). Because of these things, BUMDes has a hard time getting to digital marketplaces and using multiple e-commerce platforms well (Roisah, 2017). To fix this problem, we need full digital literacy training programs that involve the government, colleges, and businesses (Panda.id, 2025a).

The legal status of BUMDes is also very important for the digital transformation process. Law No. 6 of 2014 about Villages and Government Regulation No. 39 of 2021 about BUMDes are two significant rules that say how BUMDes can arise. Still, many BUMDes in the field have legal concerns (Republic of Indonesia, 2014). According to the data, most BUMDes do not have appropriate legal establishment paperwork, which makes it hard for them to get formal finance and business partnerships (Tombinawam, Thalib, & Tome, 2023). It is vital to make it easy for BUMDes to set up a legal body and make sure that everyone understands about these rules (Ruzayana, 2023).

The issue of digital transformation in BUMDes is closely related to the idea of legal certainty (*kepastian hukum*). Article 1, paragraph

(3) of the 1945 Constitution says that Indonesia is a country governed by the rule of law (*rechtsstaat*). A lot of BUMDes aren't very powerful legally, which makes them easy targets. For instance, they can't get formal credit, it's impossible to construct contracts that are legally enforceable, and digital transactions don't safeguard consumers very well. Digital branding for better village products also brings up intellectual property rights (IPR), including geographical indications and trademarks. To counter unfair competition, the law must defend these rights. Law No. 6/2014 on village autonomy and Law No. 11/2008 on ITE and its amendments on electronic transactions and Law No. 8/1999 on consumer protection should all be part of an ideal legal framework. This integration will make sure that BUMDes's digital transformation is both lawful and lucrative.

Several BUMDes have demonstrated the successful implementation of digital transformation models integrated with robust legal frameworks. For instance, BUMDes in Sleman have used e-commerce platforms and digital banking systems to make their finances more open and to reach more people with their ads for local items (Panda.id, 2025b). In other villages, such as Sukasari, sensor-based agriculture technology has significantly enhanced crop productivity (Panda.id, 2025c). These development models are further reinforced by augmenting human resource capability through digital training and the establishment of

accessible and user-friendly platforms (Badriyah et al., 2019). Using local stories on social media as part of a digital branding strategy has also performed successfully to create an image and get more people interested in a product (Riswandari & Rochman, 2024).

Law No. 6 of 2014 about Villages and Government Regulation No. 11 of 2021 about Village-Owned Enterprises (BUMDes) say that these practices must be followed. The Ministry of Law and Human Rights needs to officially register BUMDes and make sure that the regulations and laws (AD/ART) are explicit. When utilizing digital platforms, people must also observe the Electronic Information and Transactions Law (UU ITE) and data protection standards to make sure that people are responsible, consumers are protected, and things are transparent. Combining legal rules not only makes things more legitimate, but it also lowers the risk of controversies, enhances governance, and makes the process of going digital last longer.

To make BUMDes's digital transformation happen, a plan must include improving the village's digital infrastructure, building digital literacy skills, making it easier for businesses to get legal, and using digital platforms that can be changed to fit local needs (Yulianingrum, et al., 2023). Additionally, diverse sectors need to work together to create an environment that will help BUMDes go digital in the long future (Avianissa & Priyono, 2023).

Successful experiences from different villages can serve as models for other areas with similar traits to speed up the use of digital technology (Holisah et al., 2025).

A strong legal regulatory model should not only make it easy for everyone to use digital technology, but it should also allow rural communities flexible rules that take into consideration their needs and understanding. The central government would set stringent laws for this kind of arrangement, and the village level would have tools that might be used in many ways. This would help BUMDes come up with fresh ideas without having to follow regulations that are overly strict. This balance between legal certainty and regulatory flexibility makes it possible to link digital transformation projects to the principles of good governance and long-term rural development.

As a result, the combination of technology, human resources, and legal regulations is what makes the digital transformation of BUMDes for the sale of better village products possible (Aziz, Prananingtyas, & Irawati, 2019). This all-encompassing plan is expected to make village goods more efficient and competitive, as well as promote digital economic growth that is fair and long-lasting at the village level (Herlina & Andi, 2023).

For micro, small, and medium-sized enterprises (MSMEs) to flourish, they need to be able to handle money. This is especially true in developing nations like Indonesia. Entrepreneurs

with greater financial knowledge are more adept at managing cash flow, evaluating investment opportunities, and mitigating financial risks, hence enhancing the overall performance of their company (Youssef et al., 2021). The addition of financial technology (FinTech) makes this capability even better by making transactions easier, giving people more access to capital, and making it easier to connect with digital markets (Umar & Anggraeni, 2023). In Indonesia, where MSMEs are a large part of the economy and create a lot of jobs, the link between financial literacy and the usage of FinTech is highly crucial for getting more people to utilize the formal financial system and for getting more people to use it (Rahayu & Day, 2017). Better financial inclusion contributes to better financial performance by making it simpler to access credit, making better use of resources, and making people more resilient when the economy hits a tough patch (Sarpong & Nketiah-Amponsah, 2022). Consequently, understanding the interplay between financial literacy, FinTech adoption, and financial inclusion is essential for developing policies and training programs aimed at improving the competitiveness of MSMEs in the digital economy (Balqis & Santoso, 2020).

It is crucial to think about the interests and aims of local MSME players while designing the digital transformation and legal protection model for better village products (Andari & Ella, 2021). People who manage micro-businesses in Kadumaneuh Village said in interviews that they

desire MSME development to transcend beyond the local market and into markets in other areas. This involves selling BUMDes goods and crafts. It's also very important to make business capital more accessible to everyone, as this is expected to produce jobs for people in the neighborhood (Lubis, Rohmatillah, & Rahmatina, 2020).

A micro-enterprise actor said that everyone should help run BUMDes job programs, especially those that have to do with creating high-quality village goods like chips and pandanus mats. Another business owner, Ibit, indicated that it was vital to give micro-enterprise players IT training, help with legal issues, and help with skill development (Kusuma & Roisah, 2022). This observation suggests that many participants in micro-enterprises, especially those in senior roles, face difficulties in adopting digital technologies and understanding the legal dimensions of business. They have mostly focused on making things, so they often forget about marketing and protecting themselves legally (Syahza et al., 2021).

These findings indicate that the proposed digital transformation and legal protection model comprises several essential components (Sunaryo, Rizaldy, & Zulmi, 2022; Nurjana et al., 2020; Sara, Jayawarsa, & Saputra, 2021). First, the village company profile website needs to be made. Making an official village website that has information about BUMDes and its services all in one place. Enhancement of the digital service quality of the village and BUMDes for micro-

enterprise stakeholders and the broader community (Sangadji, Muspida, & Loppies, 2022). Second, digitalization of superior village products. Priority on superior products such as chips and pandanus mats. Development of attractive packaging designs and optimal product display on digital platforms. Encouraging sustainable product innovation to increase competitiveness (Najmudin et al., 2024). Third, assistance in legality and branding Aspects. Ensuring that every promotion and innovation does not violate the trademarks of other parties. Facilitation of trademark registration for superior village products. Development of digital transaction security systems to protect producers and consumers (Jamillah, Pradita, & Setyarti, 2022). Forth, capacity building program. Digital literacy and IT skills training for micro-enterprise actors. Workshops on legal aspects and business legality. Business management training and digital marketing strategies (Trisnantari, Susilastuti, & Putri, 2023). Fifth, capital access. Collaboration with financial institutions to provide appropriate financing schemes for village MSMEs. Development of digital-based crowdfunding systems for superior village products (Sara & Saputra, 2021). Sixth, multi-stakeholder collaboration. Building partnerships between BUMDes, village government, micro-enterprise actors, and external parties (such as universities and technology companies) (Purnaningrum & Roisah, 2025). Developing sustainable mentoring and assistance programs (Muhammad & Prasetyanta, 2023).

Sevent, monitoring and evaluation System. Development of a digital dashboard to monitor micro-enterprise development and the effectiveness of digital transformation programs. Regular evaluations to ensure programs remain relevant to business actors' needs and technological developmes (Makka & Roisah, 2023).

The change of BUMDes must follow the law, especially Law No. 6 of 2014 about Villages, Government Regulation No. 11 of 2021 about BUMDes, and other Ministerial Regulations. These legal documents are what BUMDes need to be set up, run, and held accountable as legal entities owned by villages. Furthermore, protecting superior village products through trademark registration and intellectual property rights is not only a technical suggestion but also a legal duty to protect the community's economic assets. The sustainability of digital transformation will be hampered by the risk of product imitation, unfair competition, and weak institutional governance in the absence of robust legal frameworks. An ideal legal regulatory model should therefore combine business digitalization with compliance tools, legal advice, and ways to settle disputes that are specifically designed for rural businesses.

The implementation of this model is anticipated to tackle three primary objectives identified in the research: augmenting legal literacy, advancing information technology competencies, and strengthening the economic

empowerment of the village community. The success of this model will hinge significantly on the collaboration among micro-enterprise participants, BUMDes support, and the engagement of additional stakeholders.

This comprehensive strategy will enhance the competitiveness of superior village products in larger markets while simultaneously empowering village communities both economically and technologically (Sara & Saputra, 2021; Bashir et al., 2024). This will help improve the well-being of village communities and make BUMDes a stronger force for the local economy in the digital age (Ujianti et al., 2022).

The digital transformation of Village-Owned Enterprises must comply with existing regulations, including Law No. 6 of 2014 on Villages, Government Regulation No. 11 of 2021 on Village-Owned Enterprises (BUMDes), and Law No. 20 of 2016 on Trademarks and Geographical Indications. These laws tell BUMDes how to do their jobs, making sure that the greatest village goods are protected, accountable, and legally certain. If these legal frameworks aren't closely tied to the conversation, it could end up being more descriptive than prescriptive, which would make it less useful for legal science.

To enable Village-Owned Enterprises (BUMDes) offer better village products, the correct digital transformation and legal protection model is a strategic move that must be taken as a whole (Puri & Khoirunurrofik, 2021). This includes not only the technological aspects but also the

legislative frameworks that oversee BUMDes activities and protect the items that are made (Tahada & Rahayu, 2025; Bahtiar, Syukur, & Karim, 2021).

In this context, the study should emphasize the imperative for an effective regulatory framework that not only promotes digital innovation but also delineates clear legal stipulations for intellectual property protection, consumer rights, and local government. These regulatory protections will make sure that BUMDes's digital transformation projects are more than just technical upgrades; they will also be backed by the law and can be enforced.

To improve BumDes, two things need to happen: First, BUMDes needs to become online. Digital transformation in BUMDes aims to enhance operational efficiency and expand consumer reach (Almusawir et al., 2025). Digitalization is employing information and communication technology (ICT) in all elements of BUMDes management, like managing money and marketing. Studies show that BUMDes workers' knowledge of ICT is very important for improving digital literacy and making operations more efficient (Prabowo et al., 2021). People who work at BUMDes need to learn how to utilize the software and apps that are necessary for their professions. The idea is to make it easier to convert from doing things by hand to doing them digitally (Prabowo et al., 2021). To sell better village goods, you need to use social media and e-commerce platforms (Agustia et al., 2022). This

will help the product get more attention and reach more people (Sofyani, Atmaja, & Rezki, 2019). It is also crucial to develop a robust digital infrastructure, such quick and reliable internet connection, which is necessary for BUMDes to work in the digital age (Syahza et al., 2021).

Second, the way the law protects people. To protect intellectual property rights and stop bad behavior, it is highly important to legally protect outstanding village products (Aritenang, 2021). You can utilize a few different kinds of legal protection: a) Registering Intellectual Property Rights (IPR). To safeguard copyright and prevent duplication, village items such as handicrafts or traditional cuisine must be registered as trademarks or patents (Prabowo et al., 2021). This is in line with Law Number 28 of 2014 about Copyright and Law Number 20 of 2016 about Brands and Geographical Indications (Sari et al., 2023). b) Keeping people safe. It is BUMDes's job to make sure that the things it offers are safe and of good quality. This is vital for keeping people safe and getting people to trust better village goods (Sofianto & Risandewi, 2021). c) The village's laws and rules (Tarlani & Sirajuddin, 2020). Village policies must support the growth of BUMDes and the protection of high-quality goods (Dirkareshza & Sihombing, 2021). These are regulations governing how to administer BUMDes, how to distribute revenues, and how to get the community involved in decision-making (Sofianto & Risandewi, 2021). d) The link between digitalization and legal

protection. Digitalization and legal protection need to work together to make it easier to sell superior local goods. Digitalization helps BUMDes operate their operations better and get more clients. On the other hand, legal protection protects the products safe from bad behavior (Istanti, 2021).

So, the ideal way to regulate BUMDes would be to have national laws and village-level rules operate together. This would make it obvious what BUMDes may do and how they can sell themselves. This approach should also include means to mediate disagreements, make it easier to preserve intellectual property rights, and give villages more power over economic operations. In Indonesia's legal system, this would make BUMDes both businesses and legal entities.

So, BUMDes will have a strong platform from which to produce and commercialize high-quality village products if they go through the correct digital transformation and have a strong legal protection mechanism. This will assist the town's initial income (PADes) go up and make life better for everyone in the hamlet.

D. CONCLUSION

To successfully digitize BUMDes, we need to take a broad approach that includes better digital literacy, better infrastructure, and clear legal rules. By dealing with these problems and using best practices from the best villages, BUMDes can help sell better village products, boost economic growth, and support long-term,

inclusive development at the village level.

Improving BUMDes' Role in Digital Transformation and Branding of Superior Village Products: The results of the data analysis show that there is a big gap in understanding and putting into action digital transformation and branding of high-quality village goods. People who work in micro-enterprises still don't know much about legal protection, branding products, going digital, and marketing. Likewise, comprehension of the reciprocal dynamics between Micro Enterprises and BUMDes, along with the processes for acquiring trademarks and ensuring business legitimacy, remains insufficient. But people are pretty aware of how important it is for BUMDes, Village Original Income (PADesa) stakeholders, and MSMEs to work together.

To fill this gap, a full plan is needed that includes: a) structured capacity-building programs for people who work in micro-enterprises that cover legal issues, digital technology, and running a business. b) Making BUMDes a stronger part of digital transformation and promoting the best village products. c) Making village rules that help with digitalization and protect high-quality goods. d) Making strategic partnerships with different groups to help the village's digital ecosystem grow.

The main parts of this model are: first, building digital infrastructure, which includes making a website for the village company profile that includes information and services for BUMDes, and making the quality of digital

services better for villages and BUMDes. Second, digitalization and branding of high-quality goods, which include focusing on high-quality goods like chips and pandanus mats, creating eye-catching packaging and product displays for digital platforms, and encouraging sustainable product innovation. Third, legal protection and legality, which includes help with registering trademarks and other intellectual property rights, as well as training on the legal issues that are important to small businesses. Fourth, improving digital and legal literacy, which includes full training programs to help micro-business owners become more "technologically literate" and "legally literate." Fifth, economic empowerment, which includes helping people get access to capital and building digital marketing networks. Sixth, working together with multiple stakeholders, which means getting BUMDes, the village government, micro-enterprise actors, and outside parties to work together.

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