

---

## **EXPLOITING AND DEVELOPING COLLECTIVE MARKS AND CERTIFICATION MARKS FOR KEY PRODUCTS IN THE MEKONG DELTA REGION IN THE CONTEXT OF DIGITAL TRANSFORMATION**

**Le Quang Viet**

School of Economics, Can Tho University, Vietnam.

**Quoc Nghi Nguyen**

School of Economics, Can Tho University, Vietnam.

\*Corresponding Author: [quocnghi@ctu.edu.vn](mailto:quocnghi@ctu.edu.vn)

### **Abstract**

*The study analyzes the current situation, opportunities, and solutions for exploiting and developing collective marks and certification marks of key products in the Mekong Delta (MD) in the context of digital transformation. The study shows that although the MD possesses 471 protected collective and certification marks, the level of digital technology application in managing, exploiting, and developing these brands remains very limited. This study emphasizes the role of digital transformation in digitizing intellectual property data, product traceability, e-commerce, and big data analytics to enhance the intellectual property value of key products. On that basis, several policy implications are proposed to promote the exploitation and development of collective and certification marks for key products in the MD in the digital transformation context.*

**Keywords:** *collective marks, certification marks, digital transformation, key products, Mekong Delta*

### **Introduction**

The Mekong Delta (MD) plays a vital role in Vietnam's food security and agricultural value chain, contributing the majority of the nation's rice, seafood, and fruit exports. However, the region faces challenges in market organization, supply chain management, and agricultural competitiveness (Nguyen & Mai, 2021; Son et al., 2023). The development of collective marks and certification marks serves as an important legal and marketing tool to ensure product origin, combat counterfeiting, and enhance the added value of key regional products (Mai et al., 2022). Meanwhile, digital transformation and the rise of e-commerce have opened new avenues for the MD's key products to reach both domestic and international markets. This situation calls for the integration of brand development strategies with digital platforms. At the same time, the MD is attracting strong investment in agriculture - both an opportunity to develop high-quality specialized farming and a challenge for large-scale collective brand management. This paper analyzes the current exploitation and development of collective and certification marks for key products in the MD, and proposes appropriate policy frameworks and solutions to optimize their added value in the context of digital transformation.

---

**The role of digital transformation in the exploitation and development of collective and certification marks**

***Digitization and intellectual property management:*** The digitization of intellectual property assets - including registration records, certificates, ownership rights, and mark usage data - forms the foundation for digital transformation in developing collective and certification marks. In Vietnam, according to the National Digital Transformation Program, the management and integration of national intellectual property databases are considered one of the three strategic pillars. According to the 2024 National Digital Transformation Management Report, the Government has promoted the creation of a National Data Repository to connect sectoral databases, enabling data retrieval and sharing. This allows intellectual property authorities and localities in the MD to digitize mark records, monitor usage history, renewal, and inspection of infringements through digital information systems. Consequently, brand managers can centralize management, reduce information loss risks, and establish a foundation for integrating technologies such as traceability systems.

***Application of technology for product traceability and transparency:*** Traceability and product transparency are key to making collective and certification marks meaningful to consumers. In the digital era, technologies such as blockchain, IoT, QR codes, smart barcodes, and environmental sensors can be integrated to record the product's data chain - from production and transportation to market distribution. Globally, blockchain is used to ensure the immutability of agri-supply chains. In Vietnam, while large-scale implementation remains limited, pilot projects in smart agriculture have emerged in the MD. For example, some cooperatives have experimented with QR codes, enabling consumers to access information on product origin and production processes - such as harvest dates, quality control indicators, and brand management entities. This transparency not only reinforces brand value but also serves as a crucial checkpoint in the value chain to combat counterfeiting and commercial fraud.

***E-commerce and digital marketing:*** E-commerce and digital marketing tools play a central role in promoting and monetizing collective and certification marks. In Vietnam, the 2024 e-commerce market reached approximately USD 32 billion, growing 27% from the previous year (VECOM, 2025). Vietnamese consumers spent around USD 16 billion on online shopping in 2024, mainly through Shopee, Lazada, and TikTok Shop (VietnamPlus, 2024). In the MD, more and more OCOP and specialty local products are listed on e-commerce platforms. Digital marketing activities - such as social media advertising, search engine optimization (SEO), and livestream selling - help distinctive brands reach domestic and international customers. Moreover, e-commerce enables brand owners to collect consumer data for personalized marketing strategies, enhancing competitiveness in the digital transformation era.

***Big data and market analytics:*** In the era of big data, analyzing consumer behavior, market trends, product feedback, and logistics information plays a strategic role in developing collective and certification marks. Intelligent systems - including data analytics, machine learning, and artificial intelligence - can synthesize data from online/offline sales channels, social media, customer reviews, weather data, and supply chains to forecast consumption trends, detect brand weaknesses, and optimize promotional strategies. In the highly competitive agricultural market, the ability to forecast export demand, adjust production, and dynamically price products by season depends

heavily on big data analytics. Applying such systems to brand management will help owners of key MD products better navigate market orientation and enhance competitiveness in the digital transformation context.

## **The current situation of exploiting and developing collective and certification marks in the Mekong Delta**

### **Current exploitation and development status**

The MD holds a strategic position in Vietnam's agricultural production, particularly in fruit, rice, and seafood. However, brand building through collective and certification marks remains relatively limited. Between 2018 and 2022, the region recorded nearly 9,870 intellectual property applications and over 5,800 granted protection titles for local products. As of September 2025, the MD has 399 collective marks and 72 certification marks. Some prominent key products and specialties have achieved notable success - for instance, Sóc Trăng aromatic rice (ST), particularly ST24 and ST25, which were named "World's Best Rice" in 2019, and Cat Hoa Loc mango, which has been exported to Japan, South Korea, and Canada.

In the process of developing collective and certification marks for key MD products, state policy support - especially through local intellectual property development programs - has been significant. In Can Tho City, the Intellectual Property Development Program to 2030 established procedures for surveying and selecting products and entities, consulting on searches, monitoring registration, and managing rights post-grant. In addition, local governments have supported brand owners in listing OCOP products on e-commerce platforms to expand sales channels and modernize agricultural value chains. Brand managers have also become more proactive in trade promotion, improving packaging and design, and frequently engaging in online marketing to increase brand visibility in the marketplace.

Table 1: OCOP products in the Mekong Delta region

City/Province	OCOP product	3-star	4-star	5-star	Managing entities	Update time
DongThap	1002	799	199	4	444	10/2025
Can Tho	895	649	242	4	449	10/2025
Ca Mau	343	266	75	2	62	09/2025
An Giang	582	515	53	14	324	07/2025
Vinh Long	1083	881	189	13	542	06/2025

Source: Author's synthesis, period 06/2025-10/2025

The exploitation and development of collective marks and certification marks for key products in the MD have made initial progress, but still face numerous practical challenges. In reality, the proportion of key regional products carrying collective or certification marks remains modest compared to the total volume of goods on the market, with many products still distributed mainly in raw form and lacking a clear brand identity. In addition, many products, despite being granted protection certificates, are not consistently labeled on packaging, product tags, or communication materials. The linkages between trademark owners, businesses, e-commerce

platforms, and distribution channels remain weak, resulting in key product brands not fully realizing their potential value. Moreover, support tools such as QR codes for traceability and barcodes are not yet widely implemented, and their effectiveness in practice remains limited.

### **Limitations and existing issues in the exploitation and development of collective and certification marks**

**Limited awareness and capacity of trademark owners:** One of the fundamental obstacles in the process of developing collective trademarks and certification trademarks for key products in the MD region is the limited awareness and capacity of management entities. Many cooperatives and agricultural organizations consider registration for protection as just an administrative procedure, not aware of the strategic value of the brand in the agricultural value chain. After being granted protection certificates, many organizations neglect the maintenance, promotion, or consistent use of their marks on commercial products, resulting in mere “*paper brands*” — brands that exist only in documents but lack real market presence. (VietnamPlus, 2023).

**Financial challenges and investment limitations in brand management:** The second major barrier comes from limited capital and brand maintenance costs. Developing collective trademarks and certification trademarks requires a continuous chain of investments, including identity design, protection registration, quality control, communication strategy, and trade promotion. For cooperatives and small businesses in the MD, this cost exceeds the mobilization capacity, causing many branding projects to be interrupted or not reach commercial scale. In addition, the lack of financial support mechanisms and professional consulting services increases risks in the management process, leading to the phenomenon of “protection but not exploitation”.

**Fragmented production and lack of uniformity in raw material areas:** A key factor affecting the development of collective brands and certification marks for key products is the fragmentation in agricultural production in the MD. Most key products (rice, fruits, seafood) are produced on a household scale, small-scale, lacking uniformity in technical processes and quality standards. The lack of a unified raw material management system makes it difficult to trace the origin and ensure the quality of branded products. This undermines the brand’s reputation and hinders the ability to expand export markets (VietnamPlus, 2023).

**Weak value chain linkage and brand management:** The fragmentation in value chain linkage and cooperation between brand owners and distribution businesses or e-commerce platforms is a significant barrier. In many cases, collective brands are “personalized” by some units and are not used uniformly throughout the chain, causing the brand to lose consistency and making it difficult to expand its recognition. The loose relationship between cooperatives, businesses, and management organizations makes the key product brand management mechanism lack strategy, leading to the brand not being able to play its role in adding value and building its image in the market.

---

### **Policy implications and solutions**

***Policy implications for localities in the MD:*** To enhance the effectiveness of protecting, exploiting, and developing collective marks and certification marks for key products, localities in the MD should formulate integrated policies that combine intellectual property development with digital transformation, in alignment with key product development strategies. Integrating data on collective and certification marks into geographic information systems and shared databases will promote transparency while strengthening monitoring capacity and brand positioning for key products. The MD currently has 471 protected collective and certification marks; however, most have not yet been digitized or connected to the national information portal. Therefore, local governments should prioritize investments in digital infrastructure and provide technical support for the registration, management, and monitoring of intellectual property rights. Besides, it is recommended to establish a Digital Transformation Advisory Group for key products to offer technological solutions, train digital branding skills, and support cross-border trade promotion for entities managing collective and certification marks of key products in the MD.

***Solutions for organizations managing collective and certification marks:*** Organizations representing the owners of collective and certification marks, such as cooperatives, associations, and agricultural extension centers-play a crucial role in brand governance, protection, and promotion. In the context of digital transformation, these entities need to standardize brand management processes on digital platforms, from registration and usage monitoring to trade promotion. Implementing traceability systems using QR codes, blockchain, or open data portals will help strengthen consumer trust and product traceability. Currently, over 70% of Vietnamese consumers tend to search for product origin information through online platforms, demonstrating an increasing demand for brand transparency. Brand management organizations should collaborate with local intellectual property authorities to periodically assess the effectiveness of mark usage and update relevant data on the IPPlatform of the Intellectual Property Office of Vietnam, ensuring consistency and preventing legal conflicts in exploitation.

***Solutions for related organizations:*** Research institutes, universities, and technology enterprises should actively participate in the ecosystem to develop collective certification marks for key products in the Mekong Delta through applied research in digital technology, intellectual property workforce training, and support for innovation in community brand governance models. Big data systems and market forecasting analytics can help identify consumer trends and optimize marketing strategies. Many experts recommend that combining digital technology with geographical indications can increase the export value of agricultural products. In addition, media and e-commerce organizations should establish networks to promote key and signature products of the Mekong Delta while supporting local enterprises' participation in electronic trading platforms. Public-private partnership (PPP) mechanisms in this field should be expanded to enhance data sharing, standardization, and benefit alignment, thereby improving the competitiveness of collective and certification marks for key products in the MD.



---

## **Conclusion**

The study clarifies the current situation of exploiting and developing collective marks and certification marks of key products in the MD in the context of digital transformation. Although the region possesses a large number of collective and certification marks, the levels of digitization, data connectivity, and commercial exploitation remain limited. Digital transformation is creating opportunities to enhance intellectual property value through data digitization, product traceability, and multichannel e-commerce. However, to maximize effectiveness, synchronized coordination is required among local authorities, management agencies, mark owners, and technology enterprises. Improving policy frameworks, developing digital infrastructure, and strengthening collective brand management capacity are essential conditions for the MD to transform from an “agricultural production region” into a “digital agricultural brand region,” thereby enhancing the competitiveness of key products, promoting economic development, and affirming the national brand’s position in the international market.

## **References**

- Mai, V. N., Ngo, A. T., & Nguyen, Q. N. (2022). The effect of risk on supply chain performance and operator performance: the case study of rice supply chains. *Uncertain Supply Chain Management*, 10(3), 703-710.
- Nguyen, Q. N., & Mai, V. N. (2021). The role of relationship quality and loyalty between rice farmers and food companies in supply chain. *Uncertain Supply Chain Management*, 9(3), 851-856.
- Son, N. T., Nguyen, Q. N., & Hoang, T. H. L. (2023). Factors influencing tourist satisfaction with agritourism in the Mekong Delta, Vietnam. *GeoJournal of Tourism and Geosites*, 49(3), 998-1005.
- VECOM (2025). *Vietnam E-Business Report 2025*. Vietnam E-commerce Association.
- VietnamPlus (2023). Affirming the brand, elevating the specialties of the Mekong Delta. Retrieved from <https://www.vietnamplus.vn/khang-dinh-thuong-hieu-nang-tam-dac-san-dong-bang-song-cuu-long-post849324.vnp>.
- VietnamPlus (2024). Vietnamese consumers spent 16 billion USD on online shopping in 2024. Retrieved from <https://en.vietnamplus.vn/vietnamese-consumers-spend-16-billion-usd-on-online-shopping-in-2024-post321782.vnp>