

Digitalization Transformation of Fashion MSMEs in Bandung 2000 - 2022

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Abstrak

Penelitian ini bertujuan untuk menganalisis transformasi digital pada sektor Usaha Mikro, Kecil, dan Menengah (UMKM) fashion di Kota Bandung dalam rentang waktu dua dekade (2000-2022). Sebagai pusat industri tekstil nasional, Bandung mengalami pergeseran fundamental dalam pola distribusi dan pemasaran produk fashion. Dengan menggunakan metode penelitian sejarah, artikel ini melacak transisi dari dominasi penjualan offline di sentra-sentra industri dan ritel menuju teknologi digital. Temuan penelitian menunjukkan bahwa adopsi mobile banking (m-banking) menjadi fondasi utama yang mengubah perilaku transaksi, yang kemudian diperkuat oleh peran platform e-commerce sebagai salah satu peran penting selama masa transisi. Pandemi Covid-19 diidentifikasi sebagai faktor disruptif yang secara paradoks memberikan dampak positif berupa percepatan kematangan ekosistem digital bagi UMKM fashion untuk bertahan di pasar global.

Kata kunci: digitalisasi umkm, fashion bandung, e-commerce.

Abstract

This research aims to analyze digital transformation in the fashion Micro, Small and Medium Enterprises (MSME) sector in the city of Bandung over a period of two decades (2000-2022). As the center of the national textile industry, Bandung is experiencing fundamental changes in the distribution and marketing patterns of fashion products. Using historical research methods, this article traces the transition of offline sales dominance in industrial and retail centers towards digital technology. Research findings show that the implementation of mobile banking (m-banking) is the main foundation that changes transaction behavior, which is then strengthened by the role of e-commerce platforms as an important role during the transition period. The Covid-19 pandemic was identified as a disruptive factor that paradoxically had a positive impact in the form of accelerating the digital ecosystem for fashion MSMEs to survive in the global market.

Keywords: digitalization of msme, bandung fashion, e-commerce.

INTRODUCTION

The city of Bandung has a long and crucial historical track record as the epicenter of the fashion and textile industry in Indonesia. Long before the digitalization era disrupted the modern economic landscape, the foundation of Bandung's identity as a fashion city had been laid since the colonial era with the nickname Paris van Java, which later transformed into the backbone of the national manufacturing industry at the end of the

20th century.(John R. W. Smail, 2009)
Entering the 1990s decade, the Jalan Cihampelas area made phenomenal history as the largest conventional jeans (denim) retail center in Indonesia, relying on a mass tourism strategy with the visual identity of giant statues. During this period, Majalaya was even briefly nicknamed the "Dollar City" due to the high volume of exports of textile products, woven fabrics, and yarn to the global market (Hardjono Notodihardjo, 2009).

The business model in the 1990s relied heavily on a conglomerate structure; production was controlled by large factories with rigid physical supply chains, relying on massive numbers of factory workers and a conventional distribution system between middlemen (Hill, 1999). However, the glory of this macro textile industry collapsed dramatically due to the impact of the Asian Monetary Crisis in 1997-1998. The depreciation of the Rupiah exchange rate against the US Dollar caused the price of imported cotton raw materials to soar uncontrollably, triggering a wave of mass layoffs and the bankruptcy of hundreds of large textile factories in the Greater Bandung area (Basri, 2001). The collapse of large-scale textile industry hegemony in 1998 actually triggered the birth of a new economic phenomenon that became the starting point of a historical shift towards the millennium era. As a form of resilience (survival) from the economic crisis, former textile workers and creative youths in Bandung began initiating Micro, Small, and Medium Enterprise (MSME) scale clothing businesses by independently producing ready-to-wear clothes, which later gave birth to the independent clothing line culture in the early 2000s (Oktavia & Zein, 2014).

Unlike the mass-oriented Cihampelas, this movement centered its ecosystem around the Jalan Trunojoyo and Sultan Agung areas, targeting a niche

market shaped by underground music and extreme sports subcultures (Martin-Iverson, 2012). For comparison, the jeans shops in Cihampelas targeted the mass market—meaning anyone (fathers, mothers, and children) who arrived on tourism buses. Conversely, Distros in Trunojoyo targeted a niche market—namely specific groups of teenagers who were willing to save up to buy custom-designed t-shirts that were not mass-produced in factories. This early 2000s period marked the dominance of offline sales, where home-based convection centers and physical outlets became the centers of local economic circulation, heavily dependent on the physical presence of consumers and cash transaction systems (Sofyan, 2017). As the decade changed, this conventional business pattern began to be challenged by the currents of modernization. Based on the framework of Technology-Based Economic Growth Theory and the Technological Determinism approach, new technological innovations gradually but surely dictate changes in social structures, including the economic behavior of society (Smith & Marx, 1994).

The adoption of Mobile Banking (m-banking) innovations and instant messaging (such as BlackBerry Messenger, Facebook, and Kaskus) in the early 2010s became the "Proto E-commerce" that laid the foundation for consumer trust in long-distance non-cash transactions. In the

context of Bandung's economic historiography, the introduction of mobile banking (m-banking) services by banking authorities around 2010 became the first driver in creating digital transaction literacy, successfully tearing down the obligation for face-to-face meetings in the payment process. (Smith & Marx, 1994) This financial innovation was later accelerated by the massive penetration of electronic commerce (e-commerce) platforms that provided a virtual market infrastructure without geographical boundaries (Noor, 2024). This transition was then sharply accelerated by the presence of giant marketplaces in the 2015-2019 period, which democratized logistics access and altered the cost structure of business actors; shifting from expensive physical store rental investments (CAPEX) to digital marketing expenditures (OPEX) (Kotler et al., 2017).

The culmination point of this transformation process occurred in the 2020-2022 period due to the pressure of the global health crisis. Unlike the 1998 crisis that destroyed the industry, the Covid-19 pandemic paradoxically acted as an agent of "Creative Destruction" that shattered the reluctance to adapt (Joseph A. Schumpeter, 1943). Policies restricting physical mobility paradoxically had a massive positive impact in the form of total digitalization acceleration; forcing Bandung fashion MSMEs to fully migrate to the electronic commerce ecosystem to

avoid economic extinction. Although many studies have discussed e-commerce in general, literature dissecting the full historical-spatial timeline of MSME transformation from Offline Cihampelas and Trunojoyo to the online ecosystem in the city of Bandung is still very limited. Therefore, this article aims to reconstruct the economic history of Fashion MSMEs in Bandung from 2000 to 2022

METHODS

This research uses the historical research method, which begins with historical data collection (heuristics), followed by source criticism, interpretation, and concludes with the writing process (historiography). One of the most crucial stages in this process is the search and collection of historical sources, as it is through these sources that facts can be revealed and used as a foundation to reconstruct past events (Kartodirdjo, 1993). Data collection was carried out by tracing various primary and secondary sources, including photo archives, economic statistics, and documents from contemporary newspapers and magazines such as *Pikiran Rakyat*, *Kompas*, and *SWA*, combined with the oral history method through podcast interviews with historical actors of MSMEs. In addition, this study also utilized secondary sources such as books, academic journals, and electronic media articles that provide additional analysis and perspectives. These research sources

were obtained from various institutions, including the Bank Indonesia Library, the Regional Library and Archives Agency (BAPUSIPDA) of West Java Province, and the Data Center of the Central Statistics Agency (BPS) of Bandung City, all of which offered access to documents and archives supporting this study. After the data was collected, the validity of the sources was verified through internal and external criticism. Internal criticism aims to assess the content and credibility of the information sources (including the memory of interview informants), while external criticism is used to determine the physical authenticity of the documents and the context of their creation. The verified data was then analyzed using an economic history and sociological approach to understand digital transformation as a form of technological adaptation, spatial space shifts, and business resilience dynamics. The final results of this research are presented in the form of analytical-descriptive historiography that reconstructs the structural meaning behind the evolution of operational business for Bandung City fashion MSMEs in the period from 2000 to 2022.

RESULTS AND DISCUSSION

The Glory Era of Offline Sales and Bandung's Distro Ecosystem 2000 - 2010

To understand the roots of the fashion economic spatial planning in Bandung City in the new millennium, historical

investigation must be drawn to the 1980s up to its peak in the 1990s and early 2000s. At that time, the glory of physical retail was absolutely dominated by the Jalan Cihampelas corridor. This area made phenomenal history as the epicenter of the largest denim pants industry in Indonesia and gained an international nickname as "Jeans Street".



Figure 1. Jeans in Bandung
(Source: Mode, Magazine, no 3 TH. XIV
February 18, 1990)

The Cihampelas ecosystem was built on the foundation of the mass market and tourism. The marketing strategy used in this pre-digital era heavily relied on eccentric visual merchandising. Store owners competed to display fiberglass statues of pop culture characters and giant superheroes such as Superman, Spiderman, Rambo, and Batman on the facades of their buildings. These statues functioned as visual landmarks to attract the attention of tourism buses from out of town (Suganda, 2007)



Figure 2. Iconic Statues at the Cihampelas
Jeans Center
(Source: TINTAHIJAU.com - Portal Berita
Generasi Milenia)

In this era, older generation entrepreneurs acted as "pure traders" with large capital. Goods production was carried out on a mass scale with minimal design differentiation. They relied on the labor of sewing workers in home-based convection centers, while cash flow bookkeeping was recorded manually using ledgers.

The glory of the macro-scale textile industry in Bandung faced a deadly turning point due to the 1997-1998 Asian Monetary Crisis. The plummeting rupiah exchange rate caused the price of imported raw materials to rise sharply and triggered a wave of mass layoffs (PHK) in large-scale factories (Basri, 2001). However, this economic pressure actually gave birth to a sociological response in the form of a grassroots economic phenomenon that became the antithesis of Cihampelas's mass culture.

Entering the early 2000s decade, young people in Bandung responded to the crisis with a Do It Yourself (DIY) ethos of independence. Capitalizing on makeshift spaces such as turning a garage or house pavilion into a store they initiated micro-scale ready-to-wear clothing businesses that would later be known as Clothing Lines and Distribution Outlets (Distro) (Oktavia & Zein, 2014). Unlike Cihampelas which targeted all types of tourists, the Distro movement centered its operational

spaces in the areas of Jalan Trunojoyo, Sultan Agung, and Dago. Their marketing concept aimed at a niche market shaped by underground music subcultures and extreme sports such as skateboarding and surfing (Martin-Iverson, 2012).

The structural consolidation of this new ecosystem was driven simultaneously by three main historical actors, namely Reverse, 347 Boardrider Co., and Ouval Research, each bringing a sociological dimension, spatial scarcity strategies, and specific market penetration tactics.

The ground zero of this cultural transformation started with the establishment of Reverse in 1994 in a hidden secondary residential pavilion on Jalan Sukasenang by Richard Mutter, Helvi Sjarifuddin, and Marin Ramdhani (Buana Pradipta et al., 2021). Sociologically, Reverse acted as a bridge marrying the underground music scene (metal, punk, and alternative) centered at GOR Saparua with the clothing industry. In the pre-internet era when the flow of lifestyle globalization was hindered by distribution limitations, Reverse filled the niche market void by becoming an importer and curator of foreign cultural products, ranging from cassette tapes, vinyl records, zines, to official international band t-shirts (Luvaas, 2010).

The impact of the 1997/1998 Monetary Crisis then forced Reverse to make radical innovations. Due to the skyrocketing exchange rate of the dollar

against the rupiah which killed import channels, they shifted to applying a Do It Yourself (DIY) work ethic by producing an independent clothing line titled Airplane System (Buana Pradipta et al., 2021). The limited-edition Airplane System t-shirts printed using a network of local home screen-printing vendors did not merely function as clothing products, but transformed into "walking billboards" that represented the wearer's musical ideology and identity of resistance in public spaces.

The ethos of economic independence pioneered by Reverse was later developed to a more conceptual level of visual aesthetics by 347 Boardrider Co. (now known as UNKL347) in 1996. Founded by Dendy Darman together with a group of design and fine arts students in the Dago area, this brand was born out of a form of sociological frustration over the lack of accessibility to functional surfing and skateboarding apparel in the domestic market ((Buana Pradipta et al., 2021). The political-economic genius of 347 lay in its courage to overhaul the conventional garment business model through the application of an artificial scarcity strategy.

Unlike the Cihampelas convection factories that pursued efficiency through the mass production of thousands of pieces, 347 treated graphic designs on a piece of fabric like exclusive visual artworks that were only produced in under 50 pieces for each design article. This

tactic successfully created a sense of prestige and consumption hysteria among middle-class youth. In terms of urban morphology, the presence of 347's physical store successfully demarcated spatial boundaries by establishing the Jalan Trunojoyo and Sultan Agung corridors as a gathering center for contemporary "visual intellectuals", which radically separated itself from the commercial aesthetics of the roadside (Oktavia & Zein, 2014).



Figure 3. Several T-Shirt designs functioning as identity differentiators for each wearer.

(Source: Bandung Distro Spatial Documentation Archive Jurnal Rekarupa Itenas 2014)

The solidification of this subculture retail ecosystem reached its peak when Ouval Research was founded in 1997 by M. Rizki Yanuar, Firman Mutakin, and friends. If Reverse was rooted in the music ecosystem and 347 relied on surf culture, Ouval Research positioned itself at the intersection of urban skateboard culture and street typography. Ouval's greatest contribution in local creative economic history lay in its highly aggressive pre-

digital guerrilla marketing strategy innovations.

Before having sufficient capital to rent a permanent showroom in the city center, Ouval Research distributed their products from hand to hand (door-to-door) at sociological concentration centers for youth, such as the Traffic Park (Taman Lalu Lintas) and the GOR Saparua sports arena. They pioneered a visual infiltration movement through the massive pasting of stickers in public facilities (sticker bombing) as an instrument of brand indoctrination without formal advertising capital. Furthermore, Ouval implemented a sociological barter scheme by subsidizing clothing for skateboard athletes and local musicians, which effectively converted stage exposure into brand validation confirmation (Martin-Iverson, 2012).



Figure 4. Poster pamphlet of the band Pas, founders of Reverse at Gor Saparua
(Source: wrarchives.wordpress.com/category/1994)

An analytical synthesis of the movements of these three pioneers shows a structured convergence pattern: Reverse provided the mass base and the logic of music-fashion synergy; 347 supplied high

aesthetic legitimacy and a limited production model; while Ouval Research completed the ecosystem through urban guerrilla tactics and street penetration. The organic collectivity of these three pioneers successfully formulated a blueprint for offline retail operations resilient to economic shocks. Amid the collapse of formal retail due to reliance on post-1998 global supply chains, the distro cluster driven by Reverse, 347, and Ouval was actually able to survive and seize control over the city's urban economic layout. Through the utilization of domestic raw materials, solid community-based distribution networks, and the manipulation of subcultural capital, this phenomenon succeeded in triggering the decolonization of Indonesian youth lifestyles fundamentally transforming them from mere passive target markets of Western corporations into active producers who held sovereignty over the economic and spatial landscapes of their own city (Luvaas, 2010).



Figure 5. Models wearing streetwear clothing in the 1990s period (1994)
(Source: Swirl Magazine 1st edition Page: 15, 1994)

Business operations from 2000 to 2010 were still heavily restricted by the limitations of information technology infrastructure. Sales purely relied on direct interaction (location-based). Promotional media at that time still took the form of distributing printed flyers, placing advertisements in teen magazines (such as Hai and Ripple), and subsidizing local musical performance events (Sitorus, 2008).

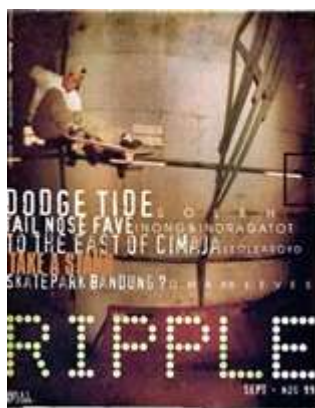


Figure 6. Cover of the First edition of Ripple Magazine (September, 1999)
(Source: Ripple Magazine Twitter Account In the 2000s period)

From an operational economic perspective, this era was fraught with high Transaction Costs (Williamson, 1981). If a teenage consumer from Jakarta or Surabaya wanted to buy a limited-release t-shirt from Trunojoyo, they had to navigate the friction of a bureaucratic mail-order system. Consumers were required to call the store using a landline, physically go to the bank to make a cash deposit through a teller, then rent a facsimile (fax) machine at a

telecommunications stall (Wartel) to send proof of payment to the distro.



Figure 7. Several Offline Distro Stores in Bandung
(Source: Distro as a Form of Communication and Identity for Youth in Bandung City, Jurnal Rekarupa Itenas 2014.)

Although this logistical inefficiency held back the scalability growth of MSMEs from rapidly expanding to a national level, this limitation actually possessed a sociological advantage. The absence of instant access (the internet) made the value of a "physical store" highly sacred. A distro was not just a place where economic transactions of commodities took place, but functioned as a "Monument of Communication". The physical store was a space for validating youth existence, a place for them to exchange references for independent music cassettes, foreign magazines, and a communal space (hangout spot) that nurtured the militancy of customer loyalty (Oktavia & Zein, 2014) a socio-cultural function that slowly began to erode when

the internet and e-commerce finally took over that role in the following decade.

M-Banking as the Foundation of MSME Digital Transaction and Retail Industry Transformation in Bandung (2010-2015)

The development of the retail industry and Micro, Small, and Medium Enterprises (MSMEs) in Bandung cannot be separated from the changes in payment technology that have occurred in the last two decades. This transformation took place gradually, starting from a conventional cash-based transaction system to developing into digital transactions currently dominated by various e-wallet services and financial technology (fintech). Prior to the emergence of modern digital payment services such as GoPay, OVO, DANA, ShopeePay, and QRIS, the period of 2010-2015 was a highly important transitional phase in building society's habits towards a cashless payment system. Tracing further back, the development of Mobile Banking (M-Banking) services in Indonesia began in the early 2000s. One of the main pioneers was Bank Central Asia (BCA) which in 2001 launched m-BCA services based on SIM Tool Kit (STK) and SMS Banking (Jogiyanto, 2007).

In its early stages of development, this technology was still very simple. Customers had to use text-based menus available on a SIM card or send a short message (SMS) with a specific format to

conduct banking transactions. Besides having a limited interface, using these services also required relatively expensive credit costs because every transaction was carried out through the telecommunication operator's SMS network. The available features were also still limited to checking balances, simple transfers, bill payments, and several other basic services (Jogiyanto, 2007).

Major changes began to occur entering the 2010s decade when smartphone usage increased significantly. The arrival of BlackBerry devices, followed by Android and iOS operating systems, changed the way people interacted with digital technology. National banks began developing internet-based M-Banking applications that offered more attractive visual interfaces, easier navigation, and far more comprehensive features compared to previous SMS Banking services (Püschel et al., 2010). Users no longer had to memorize specific SMS formats or navigate complex text menus. All transactions could be conducted through an intuitive application interface with just a few touches on the mobile phone screen.

This technological transformation had a tremendous impact on the MSME sector and creative industries, especially in Bandung which is known as one of the centers for the national fashion creative industry. Before M-Banking technology developed widely, business actors faced

various obstacles in the transaction and product distribution process. The payment system was still highly dependent on cash transactions and manual bank transfers. For local buyers, transactions were generally carried out directly via cash payments at the store or through a cash on delivery (COD) system. Meanwhile, buyers from out of town had to transfer funds via an ATM machine.



Figure 8. Proof of Deposit from one of the banks for transaction evidence
(Source: Andreas Dewantoro, Web-Based Cash Sales Accounting System Design at Goodfellas Clothing)

This process often required a considerable amount of time. Consumers had to look for the nearest ATM location, wait in line, make a transfer, and then keep the receipt as proof of payment. From the seller's side, the payment verification process was no less complicated. Distro or MSME owners had to manually check accounts to ensure the funds had arrived before the goods were shipped. Many business actors still had to visit ATM machines periodically to view account mutations or print their passbooks at bank branches. These activities consumed time, energy, and operational

costs that should have been allocated for production or marketing activities.

Along with the increasing internet penetration in Indonesia, various digital community platforms began to develop and open new opportunities for online commerce. One of the highly influential platforms at that time was Kaskus through its Buy and Sell Forum (FJB). In addition, Facebook Groups also became an effective marketing medium as it allowed sellers to build customer communities based on specific interests and lifestyles. For fashion MSME actors in Bandung, the existence of Kaskus and Facebook provided tremendous benefits because they no longer had to expend massive capital to open physical stores in strategic commercial areas such as Jalan Cihampelas or Dago (Fahmi et al., 2015).

At the same time, the development of the internet opened new opportunities for MSME product marketing. Before the emergence of modern marketplaces such as Tokopedia, Shopee, or Lazada, many business actors utilized internet forums and social media as promotional and sales tools. One of the platforms that had a massive influence during that period was Kaskus through the Buy and Sell Forum (FJB). Besides Kaskus, Facebook Groups and Facebook Fan Pages also became popular marketing media as they allowed business actors to directly build customer communities.

For fashion MSME actors in Bandung, the presence of Kaskus and Facebook provided an opportunity to expand markets without having to open many physical stores. Previously, many business actors depended on strategic locations such as Jalan Cihampelas, Dago, Trunojoyo, and Sultan Agung to reach consumers. However, through the internet, products could be promoted to prospective buyers from various regions merely by uploading product photos and information online. In that early digital commerce ecosystem, seller reputation became an extremely important factor. On Kaskus FJB, the level of consumer trust was built through buyer testimonials, the number of successful transactions, and the Recommended Seller status given by the user community. Thus, sales success was no longer solely determined by store location, but also by the digital reputation built by the business actors (Sutrisna & Astiti, 2015).

One example of a Bandung fashion MSME that grew during that era is Maternal Disaster. Established in 2003, Maternal Disaster grew out of the independent music, skateboard, and alternative culture communities developing in Bandung. (Pandita Bastari et al., 2021) Its strong visual identity and closeness to youth communities gave this brand a loyal consumer base. During its development process, Maternal Disaster utilized the internet as a tool to build

relationships with its consumers. Its products were promoted through websites, blogs, Facebook, and various popular online community forums at the time. Although not always selling through an official store on Kaskus, Maternal Disaster products were widely traded by resellers and consumers via Kaskus FJB stalls. This phenomenon demonstrates how internet forums were able to expand MSME product distribution without requiring large investments to open branch stores in various regions.

The success of Maternal Disaster lies not only in its product quality, but also in its ability to build a digital community. Through the internet, information regarding new product launches, community activities, and collaborations with musicians could spread quickly to consumers. This strategy illustrates how creative MSMEs leveraged digital technology to build customer loyalty while expanding the national market.



Figure 9. Sales of Maternal Disaster Distro Clothing on Facebook through albums.
(Source: Maternal Disaster Facebook Account Album 2010)

Another example is Peter Says Denim (PSD), a fashion brand from Bandung founded by Peter Firmansyah in 2008. Unlike Maternal Disaster which focused on community building, PSD directly utilized the internet as its main marketing and sales channel. Since its inception, PSD actively used its official website, Facebook, and Kaskus to offer its products to consumers in various regions. In several interviews, its founder explained that selling through Kaskus and Facebook became one of the company's core strategies because it was capable of reaching a national market at a relatively low cost compared to opening physical stores.

Kaskus FJB became a highly effective medium for PSD because the majority of its users hailed from the youth demographic which was also the primary target market for denim and streetwear products. Through the forum, PSD was able to market its products directly to consumers, build reputation through customer testimonials, and expand its distribution network via resellers in various cities. Meanwhile, Facebook was used as a more personal communication tool with customers, including introducing new products, announcing promotions, and building a brand image through various visual content.

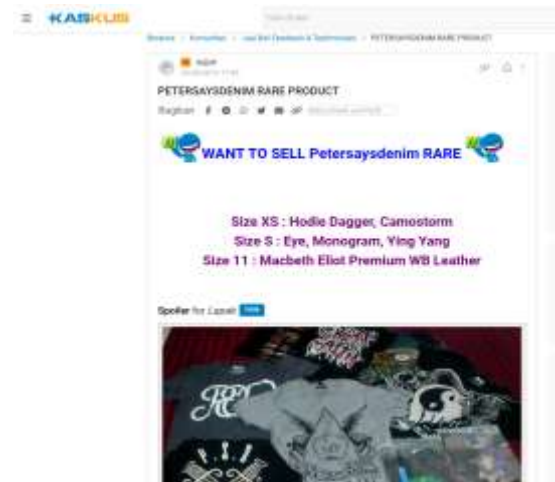


Figure 10. Sales of PSD Products in the Kaskus Buy and Sell Forum
(Source: Kaskus Website on the FJB thread)

The success of Maternal Disaster and Peter Says Denim indicates that the development of Bandung fashion MSMEs in the 2010-2015 period was not only determined by product creativity, but also by the ability of business actors to utilize digital technology. The Kaskus Buy and Sell Forum and Facebook functioned as promotional and marketing media, while M-Banking acted as the payment infrastructure allowing transactions to be completed quickly and efficiently. After consumers discovered products through Kaskus or Facebook, the payment process could be made via bank transfer which was then verified directly via the M-Banking application. The presence of account mutation checking features and transaction notifications allowed sellers to confirm payments within seconds without having to go to an ATM or bank branch.

The relationship between social media, internet forums, and Mobile

Banking formed the early foundations of Indonesia's digital economy. The collaboration of these three elements created a more efficient trading system, accelerated business capital turnover, and broadened the market reach of MSMEs across Indonesia. The experience gained by the public in using Kaskus, Facebook, and M-Banking during the 2010-2015 period became an important learning process that built trust towards digital transactions. It was this foundation that then supported the birth of modern marketplaces, fintech services, and various electronic payment innovations that developed rapidly in the following decade.

Transition Acceleration Through E-Commerce Ecosystems (2015-2019)

The 2015-2019 period was a crucial phase in the history of the creative industry and fashion business development in Bandung because during this time a rapid transition occurred from a social media-based marketing system to a more integrated e-commerce ecosystem. While in the previous period the internet was mostly used as a tool for promotion and communication with consumers via blogs, websites, Facebook, or buy-and-sell forums like Kaskus, since the mid-2010s business actors began utilizing marketplaces as centers of digital trading activity. The emergence of platforms such as Tokopedia, Bukalapak, Shopee, and

Lazada brought fundamental changes to the electronic trading system in Indonesia. Marketplaces no longer merely functioned as meeting spaces between sellers and buyers, but developed into digital business ecosystems integrating payments, promotions, distribution, up to customer service within a single platform (Kurniawan & Fitriani, 2019). Such conditions prompted Bandung fashion business actors to adjust their strategies to survive and compete amidst changing consumer behaviors that increasingly relied on digital technology in daily shopping activities.

This transformation took place along with the increasing internet penetration and smartphone usage in Indonesia. Cheaper and wider internet access meant that online shopping activities were no longer limited to specific groups of society, but started becoming part of the consumer culture for both urban and regional populations (Rahayu & Day, 2015). Consumers did not only search for product information via the internet, but also began conducting the entire transaction process online, ranging from product searches and payments to delivery tracking. This behavioral change compelled business actors to modify marketing patterns previously reliant on physical stores, exhibitions, or community networks into a digital platform-oriented marketing system. In this context, marketplaces became facilities capable of

bridging the needs between sellers and consumers by offering transaction convenience, payment security, and a much wider market reach compared to conventional sales systems.

One example showing this adaptation process is Maternal Disaster. Founded in 2003 and growing from the environment of independent music communities and Bandung's skateboard culture, Maternal Disaster initially relied on community networks as its main marketing base (Saputra, 2021). Their products were marketed through distros, independent music events, community exhibitions, and friendship networks that were typical characteristics of the Bandung clothing industry in the 2000s era. However, as digital technology evolved, the company began changing its marketing strategy by utilizing its official website and social media as brand communication tools. Instagram, in particular, became an effective medium for showcasing product catalogs, building brand visual identity, and strengthening relationships with customers. This change demonstrated that digital media were not only used as promotional tools, but also as instruments for forming brand image which was previously heavily built through direct interaction in community spaces (Pambudi & Fikri, 2021).

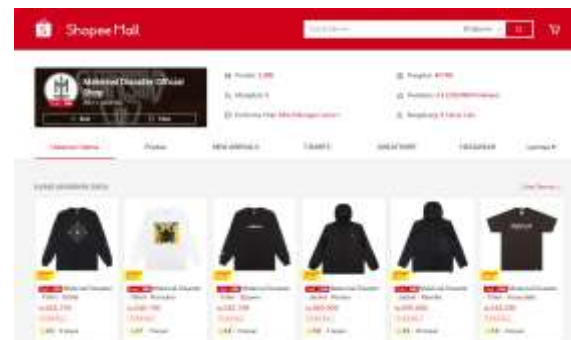


Figure 11. Maternal Disaster Shopee Account Data Details
(Source: Maternal Disaster Official Website on Shopee Marketplace)

The transformation of Maternal Disaster became more visible when the company started entering the marketplace ecosystem in the second half of the 2010s decade. The presence of their official store on e-commerce platforms allowed the transaction process to take place more systematically compared to the social media sales model. Previously, online transactions were generally conducted via personal communication between sellers and buyers, followed by manual bank transfers and separate payment confirmations. Such systems frequently created obstacles such as payment verification delays, fraud risks, and high administrative burdens for sellers. By utilizing marketplaces, this entire process could be conducted automatically through an escrow account system guaranteeing transaction security for both parties. Furthermore, various promotional programs such as free shipping, platform discounts, and national shopping campaigns organized by marketplaces helped increase product visibility and

expand Maternal Disaster's market reach outside of Java Island (Amalina et al., 2022).

A similar phenomenon can be found in Woodka, a creative MSME from Bandung that produces wooden watches and lifestyle products based on eco-friendly materials. Unlike Maternal Disaster which experienced a transition from a distro business model toward digitalization, Woodka grew at a time when the e-commerce ecosystem was rapidly developing, thus it was familiar with digital platform-based marketing systems from the start. The existence of marketplaces provided opportunities for Woodka to introduce its niche products to consumers from various regions without having to build a vast physical distribution network. In conventional trading systems, products like wooden watches possessed limited market access due to reliance on physical stores and relatively high distribution costs. However, through marketplaces, these products could be accessed by consumers from various cities with far more efficient marketing costs (Ramadhan & Sofyan, 2020).



Figure 12. Woodka Shopee Account Data Details
(Source: Woodka Official Website on Shopee Marketplace)

For Woodka, marketplaces not only functioned as places to sell, but also as digital business infrastructures supporting various operational aspects of the company. The automated payment system allowed the company to accept transactions from various payment methods without having to manage verification processes manually. Digital advertising features in marketplaces helped increase product visibility amidst an increasingly crowded competitive market. In addition, integration with logistics services allowed the delivery process to proceed faster and more transparently through automatic tracking systems accessible to both sellers and buyers. Thus, marketplaces played a role as facilities bringing together marketing, sales, payment, and distribution functions within an integrated system.

The changes occurring during the 2015-2019 period also could not be decoupled from digital technological developments in design and production aspects. In the fashion and creative industry sector, the use of design software like Adobe Illustrator, Adobe Photoshop, and CorelDRAW became increasingly common because it could speed up the product development process. While previously the design creation process was often done manually and required a relatively long time for revisions, digital technology allowed designers to produce various design variations in a shorter time.

Moreover, the internet provided broad access to visual references, international fashion trends, and global lifestyle developments that could be used as inspiration in product development (Sari et al., 2021). These conditions made it easier for Bandung fashion business actors to follow fast-moving market dynamics demanding continuous innovation.

In terms of production, digitalization also altered communication patterns between business owners, raw material suppliers, and production partners. The use of communication applications like WhatsApp allowed the coordination process to take place in real-time without needing face-to-face meetings. Business owners could send designs, product specifications, or production instructions directly to convection parties or raw material suppliers. Processes that previously required days could now be done in just a matter of minutes. Such efficiency contributed to accelerating production cycles while reducing the likelihood of communication errors that could impact product quality (Sari et al., 2021).

Meanwhile, in the distribution field, e-commerce developments created an increasingly integrated logistics system. Before modern marketplaces arrived, the product shipment process was generally done manually by visiting expedition offices, calculating shipping costs separately, and sending receipt numbers

to customers via private messages. During the 2015-2019 period, most of these processes were automated through integrations between marketplaces and logistics companies. Sellers could print receipts directly from the system, while buyers could monitor the position of goods through shipping tracking features available on the application. This convenience increased consumer trust in online transactions while speeding up the flow of goods distribution to various regions (Iqbal & Susanti, 2022).

The experiences demonstrated by Maternal Disaster and Woodka show that business success in the digital era is no longer determined solely by product quality, but also by the ability of business actors to integrate information and communication technology across the entire business value chain. Adaptation to these technological developments became an important factor allowing Bandung MSMEs and fashion brands to maintain competitiveness while expanding their markets amid increasing competition in the e-commerce era (Kurniawan & Fitriani, 2019).

Positive Impacts of the Covid-19 Pandemic: Total Digital Transformation (2020-2022)

The Covid-19 pandemic which began spreading in Indonesia in early 2020 became one of the most influential events regarding the development of the digital

economy and MSME transformation in Indonesia, including in the fashion sector in Bandung City. Social restrictions, shopping center closures, public mobility limitations, and changes in consumption patterns during the pandemic caused a significant decline in conventional trading activities. For many fashion MSME actors who for years relied on sales through physical stores, showrooms, bazaars, and product exhibitions, this situation created challenges they had never faced before. However, behind this economic pressure, the pandemic actually served as a catalyst accelerating the business digitalization process much more massively than in previous periods (Wahyudi & Wijaya, 2021). While in the 2015-2019 period digitalization was still viewed as merely an alternative marketing strategy, during the pandemic, digitalization turned into a primary necessity to sustain business operations. Many Bandung fashion MSME actors who previously still relied on offline sales were forced to migrate to digital platforms due to reduced physical interactions between sellers and consumers. This change created what could be called a total digital transformation, namely a condition where almost all business activities—from promotions, communications with customers, payment transactions, to product distributions were conducted via digital technology.

One of the most visible changes during this period was the increased use of social media as the main marketing tool. Platforms like Instagram, Facebook, TikTok, and YouTube were no longer just used to upload product photos, but evolved into active spaces for interaction and transactions. Fashion business actors began producing content more professionally through product photography, promotional videos, educational content, up to storytelling strategies aimed at building emotional connections with consumers. During the pandemic, when people spent more time at home accessing the internet intensively, social media became a highly effective communication channel for maintaining customer engagement towards a brand (Sari et al., 2021). Digital technology developments during the pandemic also gave birth to various new marketing innovations that had not previously been widely utilized by MSMEs. One of the most prominent innovations was the live shopping phenomenon. Through live broadcasting features on Instagram, TikTok, Shopee Live, or Tokopedia Play, business actors could introduce products in real-time to prospective consumers. This system provided a shopping experience resembling interaction in a physical store as consumers could see the products directly, ask questions, and obtain information instantly from sellers. In many

cases, this method proved capable of increasing consumer trust while encouraging spontaneous purchases (impulse buying). For Bandung fashion MSMEs, live shopping became a crucial solution to replace the face-to-face experience that had previously been a major strength in fashion product sales.

In addition to live shopping, business actors began utilizing social media and marketplace algorithms to reach more specific markets. Unlike conventional promotion methods that target general audiences, digital marketing allowed entrepreneurs to define target audiences based on age, location, interests, to consumption behavior. Through digital advertising features available on Instagram, Facebook, TikTok, and marketplaces, business actors could promote products to consumer groups possessing a high likelihood of making a purchase. As a result, promotional costs became more measurable and efficient compared to traditional marketing methods such as installing billboards, distributing brochures, or renting conventional advertising spaces (Hadi & Gunawan, 2022). Digital transformation during the pandemic also prompted changes in business operational systems. Many MSMEs began using stock management applications, digital financial recording systems, and software helping process orders automatically. Before the

pandemic, most small-scale business actors still recorded transactions manually. However, the increasing volume of online transactions during the 2020-2022 period encouraged them to adopt various technologies capable of improving work efficiency. Therefore, digitalization did not only occur in marketing aspects, but also covered internal company management. In the context of distribution, the pandemic accelerated integration between MSMEs and digital logistics services. Increased online transactions caused expedition companies to expand their services, while marketplaces strengthened shipping system integration allowing the distribution process to proceed faster and more transparently. Business actors could monitor goods shipments in real-time, print receipts automatically, and access various logistics service options through a single platform. These conditions helped Bandung fashion MSMEs maintain their national market reach despite restrictions on public mobility.



Figure 13. Survey on payment methods conducted by Goodstats
(Source: goodstats.id/infographic)

One of the most important positive impacts of digital transformation during the pandemic was the increasingly open access for MSMEs to international markets. Before the pandemic, many fashion business actors were still oriented toward local and national markets due to limited promotional access and high cross-border marketing costs. However, the development of social media, global marketplaces, and digital payment systems allowed local Bandung products to be introduced to consumers from various countries. Several local fashion brands began utilizing Instagram, Facebook Ads, and cross-border e-commerce platforms to reach buyers in Southeast Asia, Australia, and Europe. With relatively lower promotional costs compared to conventional expansion methods, opportunities for business internationalization became increasingly open.



Figure 14. Pijakbumi Product Timeline from 2016 - 2022
(Source: Instagram Account @pijakbumi)

The manifestation of successful global market penetration through the optimization of digital infrastructure

amidst the pandemic crisis was clearly reflected in the profile of Rowland Asfales, founder of Pijakbumi. Starting his business from Bandung focusing on eco-friendly footwear products, Asfales faced severe challenges when domestic physical sales chains were hampered by social restrictions. Responding to the situation, Pijakbumi conducted operational transformation by maximizing visual social media and interactive websites to target the global niche market possessing high ecological awareness. Through strong digital content management and participation in international virtual exhibitions like MICAM Milano in Italy during the pandemic, Pijakbumi successfully attracted the attention of buyers from Japan, Europe, and the United States (Putri & Utama, 2022). Digitalization not only saved their business from pandemic stagnation but also reduced international expansion capital expenses (CAPEX) since product marketing and curation were entirely executed wirelessly from Bandung.



Figure 15. GMX Website which now supports payments from various Currencies besides Rupiah
(Source: Geoff Max Official Website)

Similar internationalization success was also achieved by Rio Friyadi and Yusuf

Ramdhani, the entrepreneurial duo behind the success of local footwear and streetwear brand Geoff Max (GMX). When the pandemic killed the turnover of physical distro outlets, Geoff Max immediately diverted all its focused energy toward the cross-border e-commerce ecosystem, specifically through the Shopee International export program to Southeast Asian regions like Malaysia, the Philippines, and Thailand (Kusumadewi & Ramadhan, 2024). Utilizing integrated logistics ecosystems and cross-border live shopping features, Geoff Max was able to record thousands of daily transactions from foreign consumers. The courage to adapt by utilizing digital advertising algorithms as well as global music collaborations disseminated online proved capable of elevating Geoff Max's name as one of the meccas for Indonesian casual streetwear successfully dominating the regional youth market amidst the squeeze of the global crisis.



Figure 15. Geoff Max Sales Ratings and Account Statistics on one of the E-commerce platforms
(Source: Official Shopee Geoff Max Account)

The digital transformation taking place during the pandemic was actually the peak of a change process that had

been ongoing since the early 2000s. In prior times, the development of the internet, social media, marketplaces, and Mobile Banking had gradually shaped the digital foundation for trading activities. Therefore, when the pandemic forced physical activity restrictions, business actors with prior experience using digital technology were able to adapt much faster than those still dependent on conventional systems. In that context, the success of digital transformation during the pandemic also explains why Mobile Banking innovations in the previous decade were considered a revolution disrupting the way Bandung fashion MSMEs conducted business. Before the presence of Mobile Banking, the financial transaction process still highly depended on ATMs, bank branch offices, and time-consuming manual payment verifications. Mobile Banking changed that pattern by allowing transactions to be done anytime and anywhere via mobile phones. This innovation gradually familiarized business actors and consumers with trusting digital transaction systems. Those habits later became an essential foundation for the development of marketplaces, digital wallets, and the e-commerce ecosystem in the subsequent periods. In other words, the ability of Bandung fashion MSMEs to adapt rapidly during the pandemic did not emerge abruptly, but was the result of a long digitalization process initiated since the Mobile Banking era and continued

developing through social media, marketplaces, and various other digital technology innovations.

That experience proves that MSME competitiveness in the modern era is no longer exclusively determined by product quality, but also by the ability to utilize information, communication, and digitalization technology comprehensively across every aspect of business activities.

CONCLUSION

The digitalization transformation of fashion MSMEs in Bandung City from 2000 to 2022 demonstrates a highly dynamic evolution in business adaptation. This journey shifted from the golden era of subculture-based physical retail to the establishment of online transactions driven by social media and mobile banking it can be concluded that this transformation is a dynamic and continuous process of evolutionary adaptation. In the early stages of its development in the 2000s, the industry heavily relied on the glory of physical retail driven by local communities and subcultures. However, along with shifting technological trends, entrepreneurs began building the initial foundation for online transactions through social platforms such as Kaskus and Facebook, supported by mobile banking facilities. This transition became more structured as MSMEs entered the e-commerce ecosystem, which fundamentally disrupted the way they

managed operational efficiency, inventory, and market expansion beyond geographical boundaries. This digitalization evolution then reached its peak acceleration when the Covid-19 pandemic struck. The pandemic acted as a crucial catalyst; the collapse of revenue from physical outlets did not decimate the creative industry, but rather sparked the resilience and fighting spirit of MSME actors to fully migrate to the digital ecosystem. During this critical phase, the digital maturity level of business owners was forced to increase drastically. Technology adoption was no longer limited to merely uploading product photos but evolved into mastering more complex features such as live shopping, understanding social media and marketplace algorithms, to utilizing cross-border export programs. The crisis proved that severe economic pressure actually accelerated a comprehensive digital transformation. From the long journey and the crises that have been navigated, it can also be concluded that the primary determinants of business resilience and sustainability for the local creative industry in the modern era have radically shifted. Business resilience no longer depends on the sheer size of material and financial capital, nor on the ownership of strategic physical store locations. Instead, business sustainability is highly determined by the intellectual agility and entrepreneurial mentality in integrating

technological innovations across the entire business value chain from production and interactive marketing to supply chain distribution. Overall, the history of these two decades serves as tangible evidence of how Bandung City's fashion MSMEs successfully turned the squeeze of a crisis into a stepping stone for innovation, transforming from physical-based "local champions" into an agile, adaptive, and globally competitive digital business force without losing their original creative roots.

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