

Art Infusion in Digital Service Innovation Platform Ecosystems

Li-Jung Liu and Chun-Liang Chen

Graduate School of Creative Industry Design, National Taiwan University of Arts,
New Taipei City, Taiwan

ABSTRACT

Cultural and creative industries (CCI) are the most rapidly developing business sectors globally. Rapid developments in science and technology have required CCI to adjust to meet the challenges of digital transformation by providing opportunities for value cocreation with partners. The present study investigated TT, a Taiwanese culture and creative brand, as a case study of digital transformation, how this firm employs digital platform strategies to achieve value cocreation among brand suppliers and how this digital transformation has reshaped its organizational operations and partner relationships. This established an organizational framework comprising inclusive values, art infusion digital platform services, and cultural resources to provide a reference for CCI struggling with digital transformation and value cocreation. It revealed that TT develops designs grounded in Taiwanese cultural imagery to create products that capture the essence of its cocreated new brand. Furthermore, TT implements brand marketing and cobranded product services, employing art infusion not merely as a tool to add value but rather as the core of a value cocreation platform driving brand collaboration and customer participation. This study extends the theoretical applications of service-dominant logic by demonstrating that art infusion functions as an intermediary mechanism for integrating cultural resources and value cocreation. This study incorporates art fusion into the analytical framework of value co-creation, suggesting that it is not only part of the value proposition but also a key mediating mechanism that facilitates resource integration, participant interaction, and its mutually beneficial coexistence. As suggested by the SDL, this perspective expands the theoretical boundaries of value co-creation, thereby making design and cultural resources a core resource for digital transformation.

Keywords: Culture and creative industry, Value co-creation, Art infusion, Platform ecosystem

INTRODUCTION

Culture and Creative Industries Facing the Challenges of Digital Transformation

Cultural and creative industries (CCI) contain some of the fastest growing businesses in the world, and governments are beginning to realize the value of cultural and creative manufacturers as a driving force for social and economic progress. Cultural and creative manufacturers were heavily impacted after 2020, and practitioners explored ways to cope with the situation, which accelerated the digital transformation of CCI (Lazić, 2023). These sectors

have “growing social, political, and economic significance” (UNCTAD, 2022). The CCI and its entrepreneurs are attributed with contributing, innovation inspiration and creation. In the digital transformation process of cultural and creative manufacturers, the trends of digital transformation, the resulting value it creates, data utilization, and actual online-merge-offline (OMO) practices were all rather unfamiliar to them.

There has been little exploration of microculture and creation manufacturers undergoing digital transformation. We need to know how they practice value co-creation, the actual mechanism they employ, and the challenges they experience in the course of value co-creation (Lerro et al., 2022; Nasta, 2025). Among culture and creation manufacturers, some businesses with smaller sizes and limited resources lack digital building capability, whereas others with multiple stakeholders with conflicting interests lack a systematic understanding of the value co-creation model (Lazzeretti et al., 2022).

Value Co-Creation Under Digital Transformation

Vargo and Lusch (2004) proposed a new approach called service-dominant logic (SDL) and established a new marketing model (Grönroos, 1997). From the SDL perspective, customer information should be considered valuable or effective. SDL stresses that a business needs to devise useful strategies to identify, develop, and allocate resources and find better ways to provide guidance on how to serve customers (Grönroos, 2024). Value co-creation is the core concept of SDL (Vargo & Lusch, 2008). SDL can meet the related needs and provide a logical solution (Kowalkowski, Witell, & Gustafsson, 2013; Vargo et al., 2023).

On the other hand, following the accelerated digital transformation of CCI enterprises, art infusion has become an important strategy for CCI enterprises to enhance their brand variation and to reinforce their customers’ valued experience (Hagtvedt & Patrick, 2008). Art elements may not only reinforce the beauty and cultural connotations of a product or a service, but may also, in a digitally facilitated situation, enhance customers’ emotional connection and their brand identification (Baltezarevic et al., 2015). This is especially true to those micro CCI enterprises: using the art infusion strategy, they can effectively amplify on the digital platform the narrative of their brands, and that can further promote among consumers a deeper level of interaction and value co-creation (Gupta et al., 2023). Existing research findings reveal that in a digital environment, inclusion of art elements in product designs or in marketing strategies can obviously elevate consumers’ positive attitude and their intention to purchase (Hagtvedt & Brasel, 2016), and that will help the business to establish its unique market positioning in the vigorously competitive market.

However, most recent studies about art infusion are still focused on large scale business or well-developed brands (Hagtvedt & Patrick, 2008; Hagtvedt & Brasel, 2016; Gupta et al., 2023). As for micro CCI enterprises in the process of digital transformation, how to make use of art infusion to promote value co-creation and how to ensure sustainability are issues that lack systematic exploration. In view of this, this study will move one step forward to explore the role played by art infusion strategies when micro

CCI enterprises are undergoing digital transformation, and to analyse their influences on the effectiveness of value co-creation, with the intention of alleviating the insufficiency of existing literature.

Research Purpose and Research Questions

This study adopts the theoretical perspectives of digital transformation and value co-creation to investigate the digital transformation process of micro CCI cluster firms and understanding the role played by art infusion in the transformation process of CCI manufacturers.

How does art infusion influence leading businesses in their digital transformation?

LITERATURE REVIEW

Digital Transformation

Digital transformation is an innovative developmental strategy that guides an enterprise in applying new digital technologies to undergo transformation and upgrades. Applying digital technology is the foundation for further digital economic development. Business actions can be improved by adopting and utilizing digital technology (such as digital platforms and big data analyses). Examples include shortening the operational process and creating a new trading model, new customer experience, and new type of loyalty (Singh & Hess, 2017). Bharadwaj et al. (2013) showed that digital strategies, fundamentally influence commercial strategies, business processes, resource allocation, core company abilities, integration of products and services, and expanding relationships between key partners in the business network.

Therefore, digital transformation emphasizes the connection of information technologies with business value-creation activities (Li et al., 2018). Henriette et al. (2016) pointed out that a business places users' needs in the strategic core position of digital transformation development, and that users not only include company customers but also internal users such as coordinators and staff. Building a digital culture mobilizes all stakeholders, even those workers at the far end, to enter a new collaboration mode.

The Cultural and Creative Industries (CCI) Digital Transformation

In recent years, the connection between CCI and the economy has risen continuously (UNCTAD, 2004) and has exerted an influence on the labour market and the quality of social life (Smagina and Lindemanis, 2012). These industries are defined as "a trade or a profession that originates from individual creativity, skills and talents, and that through production and utilizing intellectual property rights, they have the potential of creating wealth and employment opportunities" (DCMS UK, 2001); they produce "experience commodities that possess some elements of creativity, and deliver them to the consumers' market via massive retail" (Peltoniemi, 2015). UNCTAD (2018) mentioned the continuous tendency to apply digital technologies to culture and creative enterprises, including artificial intelligence, big data capture and analysis, blockchain, enhanced reality, virtual reality, digital marketing, and online advertising.

Recent academic research shows that in the fields of creativity, design, culture, and art, even extending to the fields of commerce, science, and technology, there is a growing need for cross-over thinking and inclusion, and for all the above-mentioned systems and backgrounds to spread (Lerro et al., 2016; Savino et al., 2017a).

Value Co-Creation

The main way an enterprise can gain a competitive advantage is by creating its own unique value. In the past, the Schumpetterian style of innovation emphasized “producer-led innovation” to create value.

Vargo and Lush (2016) pointed out that the process of value co-creation involves resource integration and that all participants in reciprocal services require broader positioning. The producer (enterprise) and consumer (customer), who are always subjects of concern, are transformed into participants and actors. By coordinating participants and actors, a mutually reliant system is established and managed, and a service-dominant value co-creation arrangement develops into a service ecosystem.

According to Lusch and Nambisan (2015), a digital platform, as a promoter of multilevel interaction among participants, can act as a resource of digital information in operation, making direct participation in social or market changes one of its forms, and thus a cultural service ecosystem is formed.

This paper mainly emphasizes attaining the goal of value co-creation through participants’ “collective” and “collaborative” efforts. Following the “service-dominant logic” and taking the perspectives of “integration” and “interaction,” the products are attached with resources and power to create the customer’s experiential value. At the same time, it also incorporates the service ecosystem’s operating mode to achieve value co-creation through resource integration (Vargo & Lusch, 2016).

METHOD

Case Study & Selection

According to Yin (1994), a case study is a research method that explores specific phenomena in a real-life context. This study took the perspectives of “digital transformation” and “value co-creation” to explore how the case company undergoes digital transformation and co-create values with cultural creative brand clusters.

This research chose Taiwan’s most representative print design brand, TT as the case company mainly for the following reasons: 1) Specificity, as TT is a unique case; and 2) representativeness, as TT is generally representative of cultural creative brand manufacturers’ responses to digital transformation. (3) A representative case: the TT company as a cultural creative brand manufacturer possesses its general representative nature and can reflect the commonality of cultural creative brand manufacturers’ response on digital transformation.

The data collected in this study can be classified according to primary and secondary sources. This study employed the interview method to collect a significant amount of primary information (Patton, 1987). To ensure data accuracy, this study adopted in-depth interview data, secondary data, and participant observations to perform data validity verification. The primary data were supplemented by secondary data. Simultaneously, similar questions were asked when interviewing different interviewees so that cross-validation of the data could be performed (Cardinal, Sitkin, & Long, 2004).

Case Briefing

The TT Company was established in 2008 in the Dadaocheng district of Taipei and provides three main types of services: printed fabric products, silkscreen printing courses, and customized corporate gifts. In addition to selling its own brand, “TT Together,” it has invited up to 20 Taiwanese hand-made brands to set up stations in its stores; and it has integrated coffee and handicraft sales into the shopping experience, enabling customers to have a fully Taiwanese designed life-style and brand experience. In addition, it has a self-built website and e-commerce platform. Recently, the development of customized corporate gifts and brand licensing services has been emphasized.

TT Company collaborated with at least 25 designer-brand micro-businesses and proposed a digital transformation plan named “Fusion of Data and Creativity: Shaping the Future of Taiwan Designer Lifestyle Brands.” In addition to collecting consumers’ basic information and purchase behaviour data for membership categorization and tag management, it also shares consumers’ behavioural data, market sales trends, product popularity, and similar key data among business cluster members to help them devise precise marketing strategies in digital transformation.

FINDING AND DISCUSSION

Art Infusion has Become the Strategic Core of Driving Platform Value Co-Creation

Art as the Cultural Language of Brand Identity

The leading manufacturer, TT company takes “New Taiwanese test” as its brand core, emphasizing the reinterpretation of local cultural imagery (such as Taiwan’s unique plants, animals, street scenes, daily life utensils, etc.) with modern design vocabulary. Through artistic translation, these cultural symbols are embodied in fabric printing, cultural and creative products, and spatial design. This art infusion not only provides consistency in brand identity but also allows group partner manufacturers to create products with common value through this cultural visual language when collaborating with leading manufacturers. The project manager said: Printing Music Company cooperates with tea brands and local cultural and creative museums to develop exclusive printed packaging or limited-edition products, and strengthens the local story through artistic language, and they are all key partners of the new Taiwanese brand.

Art Introduction Collaborative Process Mechanism

TT company art infusion strategy does not represent the creative output of a single designer but rather the cocreation of products with partner manufacturers through collaborative mechanisms. Designers from different fields (e.g., illustrators, craftspeople, and fashion designers) participate in ecodevelopment workshops, concept communication meetings, “specimen iteration” demonstrations, and other programs, establishing a highly interactive art production mechanism. This approach lowers the creative threshold for brand suppliers and stimulates creativity. In the interviews, cluster member “TT Company works with our local cultural and creative brand operators to design exclusive flower fabrics in workshops, jointly creating brand language and artistic totems that align with our mutual identities.”

A Cross-Border Co-Branded Brand Driven by Art Infusion

The leading manufacturer, the TT Company, uses art as a bridging mechanism to connect the emotional and aesthetic connection between brand suppliers and the consumer market. On digital platforms and social media, through “art story marketing”, “expert interviews”, “design concept videos” and other forms, the art creation process is concretized into communicable narrative content, to enhance the sense of brand value and consumer participation.

Art Infusion has Triggered the Development of New Overseas Market

TT Company leads the group of manufacturers to identify and highlight the Taiwanese characteristics of products through an innovative service model driven by digital transformation, using the “New Taiwanese Style” co-brand and its cultural symbols to develop new markets for group tourists and international tourists. In addition to selling products through virtual and physical channels, leading manufacturers also provide domestic and foreign tourists with brand experience activities such as physical cultural tourism and hands-on product production, such as organizing community excursions and DIY hand-painted work courses. The purpose of these activities is to allow consumers to gain a deeper understanding of the brand’s cultural connotation and product design concepts, in addition to enhancing the brand value of the New Taiwanese Style, and establishing deeper customer relationships with consumers.

Its Art Infusion Strategy Is to Provide the Design Brand Through New Product Design Idea Creation

When the art infusion strategy of the TT Company is analysed from the theoretical perspective of Service-dominant logic (Vargo & Lusch, 2004, 2008), it can further highlight how it can achieve value co-creation with brand suppliers through art design as the core mechanism of “service exchange” and “resource integration”. In SDL theory, value is not created by the firm alone, but is realized through the interaction of multiple participants

(Vargo & Lusch, 2008). The digital transformation of the leading company, the TT Company, embodies this theoretical viewpoint, and its art infusion strategy is not only to provide the design output of tangible products, but also to invite brand suppliers to participate in the process of new product design idea creation, product development and storytelling through art design as a co-service offering.

- 1) To facilitate resource integration and exchanges, the TT Company offers designer conferences, creative workshops, digital platforms, and customer databases to brand partners, forming a multiparty integrated service ecosystem. Through these design cocreation mechanisms, brand suppliers integrate their positioning, local culture, or product features with the design style of TT's prints to cocreate products reflective of Taiwan's culture, a process that embodies the tenet of SDL that an enterprise is primarily a value cocreation facilitator.
- 2) In its interactive OMO environment, the TT Company promotes artistic creation research and development processes and cobranded product proposals through digital and social media platforms, inviting consumers to participate in dialogues with partner brands and providing immediate feedback. This participatory mechanism enhances customers' emotional identification and cultural understanding of products and encourages brand suppliers to adjust product designs in response to market demand. Consequently, value extends beyond products to include the consumer experience and brand cultural identity.
- 3) As TT leads the digital transformation of its partner enterprises, art infusion transforms their role cultural resources mediation. By incorporating art design in its products, TT helps brand suppliers present their local culture or brand concept in a visible, tangible, and marketable form, transforming culture into a resource that is accessible to consumers and commercially viable. For microbrand suppliers with limited resources, art is a key medium for enhancing their value propositions. Through digital transformation, TT and its partners have cocreated a common value proposition by fusing data and creativity to shape the future of Taiwan's designer lifestyle brands.

Integrating the above, TT Company effectively practices the concepts of value proposition, resource integration, customer participation, and mutual benefit and symbiosis in the Service-Dominant Logic (SDL), through art infusion. Its value co-creation model is not only a digital transformation-driven cooperation strategy, but also a cultural innovation practice under the concept of service logic, which has high reference value for understanding the value co-creation driven by digital transformation of Taiwanese cultural and creative manufacturers.

CONCLUSION

This study included art infusion in its analytical framework of value cocreation as a key intermediary mechanism of value propositions that promotes resource integration, participant interactions, and mutual benefits.

This framework extends the theoretical scope of value cocreation under SDL by considering design and culture as core resources for digital transformation. This study also proposes the following practical recommendations for promoting digital transformation and value cocreation on data-sharing platforms:

- 1) Exploration of art infusion or design as a cultural intermediary resource for digital platforms: CCI can reference the strategy adopted by TT to transform artistic elements from an individual creation to an integrated design platform, help partner brands explore cultural codes through data connections and data sharing, and communicate with the market by using their unique visual language. Such practices not only add value to products but also foster a deep cultural dialogue between brands. Additionally, through data-sharing platforms, appealing products can be codefined with users. Interactive platforms that enhance cultural elements through art infusion can promote the creation of rich digital content through resource integration and interactions.
- 2) Expanding market influence through co-branding: Leading companies may share information and data with enterprise clusters, provide precision marketing to customer groups, and enhance their shopping experience, thereby improving market insights and adaptive abilities. The cluster may integrate cultural values and provide customers with personalized recommendations, thus establishing a platform that offers value-differentiated service.
- 3) Development of flexible interdepartmental and cross-branding collaboration mechanisms: In response to market variations and the need for customization, CCI should develop task-oriented product innovation projects. Through flexible collaborative models developed in cocreation workshops and the use of digital tools, internal and external collaboration efficiency can be enhanced, cooperation with partner suppliers can be strengthened, and the pace of innovation can be increased.

REFERENCES

- Baltezarevic, R., and Baltezarevic, V. (2015). Impact of visual communication on consumer behavior, in *Marketing, business law and transformational governance* Faculty of Business Economics and Entrepreneurship, Belgrade, pp. 66–79.
- Bharadwaj, A., El Sawy, O. A., Pavlou, P. A., and Venkatraman, N. (2013). Digital business strategy: Toward a next generation of insights. *MIS Quarterly*, 37(2), 471–482.
- Cardinal, L. B., Sitkin, S. B., & Long, C. P. (2004). Balancing and rebalancing in the creation and evolution of organizational control. *Organization Science*, 15(4), 411–431.
- Department for Culture, Media and Sport (DCMS). (2001). *Creative Industries Mapping Document 2001*. London: DCMS.
- Grönroos, C. (1997). Keynote paper from marketing mix to relationship marketing towards a paradigm shift in marketing. *Management decision*.
- Grönroos, C., (2024). Business model innovation through the adoption of service logic: Evolving to servification, *Journal of Service Theory and Practice* 34(3), pp. 347–360.

- Gupta, M. and Joshi, R.M. (2023), "Art infusion phenomenon: a systematic literature review", *Journal of Product & Brand Management*, Vol. 32, No. 2, pp. 235–256.
- Hagtvedt, H., & Patrick, V. M. (2008). Art Infusion: The Influence of Visual Art on the Perception and Evaluation of Consumer Products. *Journal of Marketing Research*, 45(3), 379–389.
- Hagtvedt, H., & Brasel, S. A. (2016). Cross-Modal Communication: Sound Frequency Influences Consumer Responses to Color Lightness. *Journal of Marketing Research*, 53(4), 551–562.
- Henriette, E., Feki, M., & Boughzala, I. (2015). The shape of digital transformation: A systematic literature review. *Proceedings of the Mediterranean Conference on Information Systems (MCIS)*, 431–443.
- Kowalkowski, C., Witell, L., & Gustafsson, A. (2013). Any Way Goes: Identifying Value Constellations for Service Infusion in SMEs. *Industrial Marketing Management*, 42, 18–30.
- Lazić, M. (2023). Digitalization and Creative Industries-Trends and Perspectives. *Proceedings 2023*, 1–3.
- Lazzeretti, L., Oliva, S., Innocenti, N., & Capone, F. (2022). Rethinking culture and creativity in the digital transformation. *European Planning Studies*, 1–9.
- Lerro, A., Elia, G., Schiuma, G. and Passiante, G. (2016). Dimensions and practices of the collaborative relationships between cultural and creative organisations and business, *International Journal of Management and Enterprise Development*, 5 (2/3), pp. 209–229.
- Lerro, A., Schiuma, G. and Manfredi, F. (2022), "Editorial: Entrepreneurial development and digital transformation in creative and cultural industries: trends, opportunities and challenges", *International Journal of Entrepreneurial Behavior & Research*, Vol. 28, No. 8, pp. 1929–1939.
- Li, L., Su, F., Zhang, W., & Mao, J. Y. (2018). Digital transformation by SME entrepreneurs: A capability perspective. *Information Systems Journal*, 28(6), 1129–1157.
- Lusch, R.F. and Nambisan, S. (2015). *Service Innovation: A Service-Dominant Logic* Massi, M., Vecco, M., Lin, Y. (2020). *Digital Transformation in the Cultural and Creative Industries*, Routledge, London.
- Nasta, L. (2025). Understanding Digital Transformation in Creative and Cultural Industries: A Review. In: *Navigating the Paradoxes of Digital Transformation in the Creative and Cultural Industries*. Palgrave Macmillan, Cham.
- Patton, M. Q. (1987). *How to Use Qualitative Methods in Evaluation*. Newbury Park, CA: Sage Publications Inc.
- Peltoniemi, M. (2015). Cultural industries-Product-market characteristics, management challenges and industry dynamics. *International Journal of Management Reviews*, 17(1), 41–68.
- Savino, T., Messeni Petruzzelli, A. and Albino, V. (2017a). Teams and Led creators in cultural and creative industries: evidence from the Italian haute cuisine, *Journal of Knowledge Management*, 21, pp. 607–622.
- Singh, A., & Hess, T. (2017). How chief digital officers promote the digital transformation of their companies. *MIS Quarterly Executive*, 16(1).
- Smagina A. and Lindemanis A. (2012). What Creative Industries Have to Offer to Business? Creative Partnerships and Mutual Benefits, *International Journal of Business and Economics Engineering*, 6(11), 2012.
- UNCTAD (2004) "Creative Industries and Development" Published by: United Nations Conference on Trade and Development (UNCTAD). Date: June 2004. Occasion: 11th UNCTAD Ministerial Conference (UNCTAD XI), São Paulo, Brazil.

- UNCTAD (2018). Digital Economy Report 2019: Value creation and capture - Implications for developing countries. United Nations Conference on Trade and Development.
- Vargo, S. L., and Lusch, R. F. (2004). Evolving to a new dominant logic for marketing. *Journal of Marketing*, 68(1), 1–17.
- Vargo, S., Maglio, P. and Akaka, M.A. (2008) On Value and Value Co-Creation: A Service Systems and Service Logic Perspective. *European Management Journal*, 26, 145–152. <https://doi.org/10.1016/j.emj.2008.04.003>
- Vargo, S. L., and Lusch, R. F. (2016). Institutions and axioms: an extension and update of service-dominant logic. *Journal of the Academy of marketing Science*, 44, 5–23.
- Vargo, S. L., Peters, L., Kjellberg, H., Koskela-Huotari, K., Nenonen, S., Polese, F. et al. (2023). Emergence in Marketing: An Institutional and Ecosystem Framework. *Journal of the Academy of Marketing Science*, 51, 2–22.
- Yin, R. K. (1994). *Applications of Case Study Research*. Newbury Park, CA: Sage Publications.