

A Study on the Extension of the IP Value Chain for Cultural and Creative Products in the Digital Age—Taking Pop Mart as a Case Study

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ABSTRACT

This paper constructs a five-stage analytical framework—creative incubation, design and production, channel operations, derivative consumption, and value recycling—based on value chain theory and intellectual property (IP) derivation patterns. Using Pop Mart as a case study, it examines the extension pathways and sustainability challenges of the IP value chain for cultural and creative products in the digital age. The findings show that Pop Mart has achieved both horizontal expansion and vertical deepening through industrialised IP operations, emotional consumption engagement, category innovation, and global expansion. However, top-tier IP concentration and the de-narrativisation of trendy toy IPs pose sustainability challenges. The “horizontal extension + vertical reflux” dual-circulation perspective proposed here challenges linear assumptions in existing IP value chain research, reveals the organisational logic of IP value evolving from chain to network, and offers a new theoretical framework for character-based IP value management.

Keywords: Digital Age; Cultural and Creative Products; IP Value Chain; Value Chain Extension; Pop Mart; Sustainability

1. INTRODUCTION

1.1 Research Background

Driven by mobile Internet, social media and consumption growth, cultural industries is changing its working style. “digital age” (around 2015 ~ now) is characterized by the release of algorithms, the consumption of live streaming and short-video.

In this context, Pop Mart is the top company in trendy toy industry in China, which is a valuable research case for analyzing and expanding the intellectual property (IP) value chain. In 2024, Pop Mart achieved revenue of 13.04 billion yuan (up by 106.9% over the previous year)^[1]. By 2025, the income will reach 37.12 billion yuan (up 184.7% year-on-year). Muppets amounted to 18.78 billion yuan (up 560.6% year-on-year), surpassing hand-made puppets as the largest category. It accounts for 50.4% of the total income. THE MONSTERS’ income reached 14.16 billion yuan (up 365.7% year-on-year). The proportion of total income has increased from about 23% to about 40%^[2]. However, after the announcement of this result, the market became more uneasy about “the company is too dependent on an IP” and the stock price suddenly fell. This coexistence of “explosive growth” and “doubt whether it can be sustained” will become important materials for studying the ways to expand the IP value chain and the problems in it.

1.2 Significance of the Study

This study puts value chain theory into the analysis of cultural industry in the digital age. Through the establishment of IP value chain framework, new theoretical discoveries are created for the study of cultural industry. Explain the original mechanism of extending IP value chain in deep digitalisation by using Pop Mart. Adding the issue of sustainability to the framework and carefully considering the relationship between “value addition” and “dependence” should not only be optimistic about the industry, but also be carefully considered.

In practice, the strategic difficulty between “blockbuster-driven” approach and “long-term operational” approach is analyzed, and how to create the value of cultural product in the digital age is explained, providing an analytical lens for understanding Generation Z’s shift to meaning-driven consumption.

1.3 Research Methods

This study uses a combination of the following survey methods:

Case study method. Pop Mart is the only research object. The reason is that Pop Mart is a representative example of “IP value chain extension”. In five years, Pop Mart has grown rapidly from a startup to a market value of 100 billion, but on the other hand, there are also structural problems of top-level IP concentration. Therefore, this study has both successful examples and possible dangers worth analyzing.

Literature review. According to value chain theory, IP derivation patterns, digital consumer culture and trendy toy industry, the research results at home and abroad are sorted out and summarized for investigation.

Text and discourse analysis. Analyze the financial reports, prospectuses, public speeches and industry news articles of Pop Mart from 2019 to 2025. Xiaohongshu will collect 50 highly reactive posts with “# popmart”, # labubu “and “#CustomisedDolls” from January 2024 to June 2026 (like > 1,000). 50 short videos and comments with “# popmart” and “# labubu” with strong reaction during the same period were also collected on TikTok. Content thematic classification and discourse strategy analysis are used in the analysis.

Comparison of multi-source data. In order to confirm the correctness of the research results, we combine the data of financial reports, industry reports, SNS and other directions of the company for Triangulation.

2. THEORETICAL FOUNDATION AND LITERATURE REVIEW

2.1 Definition of Core Concepts

1. The Digital Age. As defined above: approximately 2015 to present, characterised by mobile internet, social media, algorithmic recommendations, and live streaming/short videos.
2. “IP” here means copyright-based content assets—characters, stories, world-building—extendable across media for scale and network effects^[3]. Its core is value-maximising operations. This paper distinguishes “narrative IP” (story-centred, e.g., film/literature) from “visual IP” (image-centred, e.g., trendy toys), focusing on the latter—character-based IPs like Pop Mart.
3. The IP Value Chain is defined as a dynamic system wherein IP assets realise value appreciation and boundary expansion across five stages: creative incubation, design and production, channel operations, derivative consumption, and value reflux. This integrates Porter’s value chain with cultural industry IP derivation patterns, expanding the unit of analysis from single enterprise to cross-organisational value-creation network.
4. Value Chain Extension is operationalised as the dynamic process through which IP assets achieve value appreciation and boundary expansion across the five stages, observable through: (1) changes in intra-stage value creation efficiency; (2) changes in inter-stage linkage strength; and (3) intensity of cross-stage value feedback.

2.2 The Evolution of Value Chain Theory and Its Application to the Cultural Industries

Porter broke down a firm’s value creation activities into primary and support activities; his core contribution lay in decomposing the sources of a firm’s competitiveness into identifiable value creation stages.^[4] However, the unique characteristics of the cultural and creative industries pose theoretical challenges to the traditional value chain model. These industries follow the law of ‘increasing marginal returns’—creative ideas are central to product value-added, and value growth exhibits characteristics of networked diffusion and amplified multiplier effects.^[5] Furthermore, whilst Porter’s model takes internal corporate activities as its unit of analysis, the value creation of cultural and creative products often transcends corporate boundaries, forming complex collaborative networks amongst diverse actors.

Faced with this theoretical dilemma, academia has gradually developed more applicable analytical tools. The introduction of the concept of the ‘Creative Value Chain’ extends Porter’s ideas on corporate value chain management to the entire process, from the source of creativity to the commercialisation of creative outputs. In the specific context of the cultural industries, Wang Pengtao and Zhu Henan, drawing on Porter’s value chain theory, constructed a full-chain planning system comprising ‘upstream resource aggregation—midstream process optimisation—downstream channel development—and extended value extraction’.^[6] The aforementioned research has accumulated experience in the localised application of classical value chain theory within the cultural industries, but it also reflects that there remains scope for adapting this framework to the analysis of the IP economy in the digital age. Other scholars have systematically analysed the value composition of digital cultural and creative products from a value chain perspective, breaking it down into a progressive chain comprising ‘cultural content mining—design and creation—promotion and marketing—distribution and trading—

perception and feedback’, thereby providing a methodological reference for the five-stage classification proposed in this paper: ‘creative incubation—design and production—channel operation—derivative consumption—value reflux’.^[7]

2.3 Research on the Patterns of IP Value Flow and the Cultural Industry Chain

The central role of IP in the cultural industry has been widely recognised. Zhang Jun’s (2017) study, “A Study on the Patterns of IP Value Flow in the Cultural Industry Chain”, laid an important foundation for this field. Its key breakthrough lies in proposing that ‘the development patterns of IP within the cultural industry chain are, in essence, the patterns of IP derivation’, and on this basis, it reconstructed the analytical framework of the cultural industry chain: The upstream sector provides original creative concepts; the midstream sector transforms the original IP into cultural products suitable for large-scale dissemination; and the downstream sector maximises the release of IP value through in-depth development of derivative products.^[3]

Zhang Jun’s “horizontal/vertical derivation” framework primarily applies to narrative IP (stories, characters, world-building). However, trendy toy IPs like Pop Mart are image-based—their value attaches to visual symbols, emotional associations, and consumer experience, not storytelling. Their extension follows “consumption scenario expansion” and “emotional connection deepening” rather than “content format transformation,” requiring structural adjustments to the analytical framework.

Furthermore, research on “bidirectional flow” shows that downstream consumer feedback can feed back into upstream creativity, transforming the IP value chain from a linear system into a cyclical one—as seen in Disney’s Lina Belle case, where user participation via social media drives IP value “reflux.”

2.4 Research on Digital Consumer Culture and Trend Toy Consumption

The profound transformations in cultural consumption in the digital age provide a necessary theoretical lens for understanding the extension of the IP value chain. Featherstone’s concept of ‘new instruments of consumption’ reveals the primacy of emotional experiences and symbolic meaning in contemporary consumption—consumers purchase not only the use-value of an object, but also the lifestyle and identity attached to it.^[8] Appadurai, from the perspective of material culture, points out that the meaning of commodities is constantly ‘socially constructed’ and ‘re-contextualised’ during the process of circulation; this insight provides a theoretical anchor for understanding the phenomenon of trend-toy IPs being imbued with personalised narratives on social media.^[9]

The aforementioned theories have found empirical corroboration in the field of trendy toy consumption research. Domestic scholars have identified several key research areas centred on the Pop Mart phenomenon: firstly, studies on the motivations behind blind box consumption, which largely focus on the psychological mechanisms of ‘uncertain rewards’ and the behavioural logic of ‘collecting’; secondly, research into trendy toy communities, examining fans’ practices of ‘showcasing their collections’, fan art creation and the construction of identity; and thirdly, research into IP operational strategies, which deconstructs Pop Mart’s commercial success from dimensions such as artist incubation, product category innovation and globalisation. However, much of the aforementioned research tends to take the form of ‘phenomenological descriptions’ and ‘strategic summaries’, and has yet to systematically incorporate empirical observations into a theoretical framework of the IP value chain for analysis. This paper attempts to integrate existing findings through a ‘five-stage + dual-cycle’ framework as an analytical lens for the visual IP value chain. Given the single-case scope, the framework is proposed as a tentative model that invites further empirical testing across diverse IP types and contexts.

2.5 Literature Review and Theoretical Gaps

Taking the above literature into account, existing research has made significant progress in the following areas: establishing a basic framework for analysing the IP value chain; revealing the profound reshaping effect of digital technology on cultural consumption; and accumulating empirical research on the operation of trendy toy IPs, as exemplified by Pop Mart. However, three significant theoretical gaps remain in current research: existing analyses primarily focus on narrative-based IPs, lacking targeted explanatory power for ‘de-narrativised’ image-based IPs; existing frameworks largely follow a linear ‘upstream—midstream—downstream’ logic; whilst a few studies have addressed the phenomenon of ‘value reflux’, this has not yet been systematically integrated into analytical models; and most studies tend to describe ‘success stories’, lacking a sufficiently critical examination of the tension between the centralisation of top-tier IPs and the sustainability of the IP life cycle. It is precisely these three gaps that constitute the starting point for this study.

3. CONSTRUCTION OF THE IP VALUE CHAIN ANALYSIS FRAMEWORK

3.1 The Logical Framework of the ‘Five-Stage’ Model

Drawing on Porter’s value chain theory, the “creative value chain” concept, and IP derivation patterns, this paper constructs a five-stage IP value chain framework: creative incubation → design and production → channel operations → derivative consumption → value reflux.

The framework follows two reasoning lines. Theoretical deduction: starting from Porter’s primary activities and combining with cultural industries’ “increasing marginal returns,” traditional linear stages are transformed into networked stages suited to the IP economy. Empirical induction: based on Pop Mart’s financial reports and operational practices (2019–2025), key value-creation nodes are identified and summarised as the five stages. Cross-validation ensures both theoretical foundation and empirical validity.

The five stages are:

Creative Incubation (Upstream). The source of IP value: artist discovery, original design, IP concept formation. Horizontal expansion: from individual designers to global artist network. Vertical feedback: market data informing IP selection.

Design and Production (Midstream). Transforming ideas into mass-producible, iterable products: industrialised IP development, supply chain management, quality control, category iteration.

Channel Operations (Downstream I). Pathways to consumers: omnichannel network including physical retail, robot vending, online blind-box dispensers, e-commerce livestreaming, and cross-border e-commerce.

Derivative Consumption (Downstream II). Consumers purchase and experience IP products. In the digital age, this is not merely the “end point” but the “starting point” for new value creation—every consumer sharing and derivative creation regenerates IP value.

Value Reflux (Feedback Loop). Consumer purchase data, social media shares, derivative works, and community discussions feed back into upstream segments, transforming the chain into a circular system.

3.2 A dual-circulation perspective of ‘horizontal extension + vertical feedback’

Horizontal Extension. Expansion and deepening of IP value within the same stage – for example, in the “design and production” stage, the product line evolved from blind box figurines to plush toys, MEGA collectibles, and lifestyle merchandise. (Inter-stage synergy, such as feedback from downstream to upstream, is addressed under “vertical reflux” rather than horizontal extension.)

Vertical Reflux. Reverse flow of value from downstream to upstream: consumer purchase data, social media discussions, and UGC inform upstream creative incubation and product iteration.

The convergence of horizontal extension and vertical feedback constitutes the dynamic mechanism driving IP value chain evolution from a linear chain to a networked ecosystem.

4. EMPIRICAL ANALYSIS OF THE EXTENSION OF POP MART’S IP VALUE CHAIN

4.1 Creative Incubation: Artist Discovery and IP Reserve Mechanisms

The advantage of Pop Mart lies in the mechanism that artist discovers and accumulates IP in the plan. At the Shanghai International Trend Toy Expo held every year, I found a new artist, became good friends with designers at home and abroad, and also had my own design team. By the end of 2025, 6 Pop Mart IPs sold more than 2 billion yuan, and 17 POPMART IPs sold more than 100 million yuan. Horizontally, creative incubation originated from China’s local artist, and now it has become a network of designers in various countries. This can reduce the risk of dependence, enrich the style of IP, and be ready to support many IP balances. Vertically, the data purchased by consumers and many topics on social media have influenced the choice of IP. From 2023 to 2024, the works of an independent designer, which were talked about a lot in Xiaohongshu, were soon commercialized. However, this “way of using data” still relies on experience and lacks a planned feedback mechanism. Compared with Netflix data production, Pop Mart’s ability to give full play to consumers’ response in creative incubation is not enough. Most consumers are people who can only watch, not partners together.

4.2 Design and Production: Industrialised IP Development and Category Innovation

Pop Mart has transitioned from “artisan workshops” to “industrialised production,” transforming artists’ original designs into mass-producible, iterable product lines. Core capability: converting creative production—reliant on individual inspiration—into standardised, replicable, scalable processes.

Category innovation is the most notable change. In 2025, plush toys generated 18.708 billion yuan (up 560.6%), surpassing figurines (12.023 billion yuan, 32.4%) to become the largest category, its revenue share rising from 21.7% (2024) to 50.4%. This is not merely product-line adjustment but a qualitative business model transformation: blind boxes centre on “collecting and curiosity,” plush toys on “emotional connection and practicality.” Behind this lies IP value chain extension from “one-off transactions” to “emotional companionship.” The MEGA series generated 1.916 billion yuan (5.2%), while merchandise and other revenue totalled 4.473 billion yuan (12.0%).

4.3 Channel Operations: Omnichannel Reach and Global Expansion

In terms of channel operations, Pop Mart has established an omnichannel network covering both offline and online channels, as well as domestic and overseas markets. In 2025, the annual sales of Chinese market will be 20.85 billion yuan. An increase of 134.6 over the previous year. The market sales of Asia-Pacific reached 8.01 billion yuan, up by 157.6% over the previous year. Americas’ market sales amounted to 6.81 billion yuan, an increase of 748.4 over last year. Sales in Europe and other regions reached 1.45 billion yuan, an increase of 506.3 over last year.

The characteristic of Pop Mart’s globalization strategy is “It would be great if this were the case”. A long-established IP company like Disney will rely on “role+story” when communicating in different cultures, but Pop Mart is different. Like “cuteness” and “whimsy”, it focuses on what can convey common feelings in any culture. This strategy reduces the value loss caused by cultural differences, but when expanding the value of IP, it largely depends on the ability of visual symbols to attract people on the spot. LABUBU’s success is due to the establishment of a three-tier identity structure including “narrative-channels-industry”. Use stories similar to human beings to reduce the value reduction caused by cultural differences, use digital media to convey them to people who want to convey them correctly, and use the derived ecosystem to strengthen the emotional connection. The center has evolved from “aesthetic identification” to “cultural identification”, which provides a reusable method framework for the globalization of IP in China. ^[10]

4.4 Derivative Consumption: Emotional Consumption, Community Economy and the UGC Ecosystem

In the field of derivative consumption, Pop Mart has established an emotional consumption mechanism that transcends the form of goods. The structure of “uncertainty-reward” of blind box is to emit dopamine. The joy and disappointment when opening will become a special ceremony, creating other consumer experiences that are not available.

The community economy will make this kind of emotional connection even stronger. Through Xiao Hongshu and TikTok, User-made Content (UGC)-transforming hand-made, displaying hand-made, and decorating according to the scene-has created a vibrant ecosystem. According to the reporter’s analysis on Xiaohongshu, the themes of 50 posts responded by many people are: 34% hand-made renovation, 42% hand-made display, 16% scene decoration and 8% buying transaction.

On TikTok, users often refer to LABUBU as “my digital pet” or “my emotional support dog”. Use the expressions of treating people like people, the expressions of metaphors and the stories of scenes to make ordinary trendy toy IP have everyone’s emotional stories. The phenomenon of Labubu can be said to be “emotional consumption in mobile stories”-young consumers can transform IP roles in their own way, cooperate with scenes, and share what they look like together on the digital platform every day, which is an immobile trend toy. This practice will reshape the “production-use” relationship in the past IP value trend ^[11].

In summary, derivative consumption is no longer merely the endpoint of the value chain. Its horizontal expansion is reflected in the diversification of consumption scenarios from unboxing to showcasing and customising toys, while its vertical feedback loop is manifested in UGC retroactively endowing de-storyfied IPs with personalised emotional cores, thereby becoming a new driver of value growth.

4.5 Value Re-circulation: From a Unidirectional Chain to a Circular System

Empowered by digital technology, Pop Mart’s IP value chain exhibits “value reflux.” Consumer purchase data, social media shares, and second-hand market transactions inform upstream creative incubation and product design. The plush toy category’s explosive growth stems precisely from insights into and responses to shifts in consumer emotional needs (from “collecting” to “companionship”).

However, compared with Disney's Lina Belle, Pop Mart's value feedback mechanism remains nascent. UGC largely remains at the level of "showcasing" and "customising" products, and has not yet evolved into systematic "user co-creation." Among the social media content analysed, approximately 76% of UGC focused on display and secondary creation, with very few posts demonstrating substantive consumer feedback influence on product design. This weakness indicates that Pop Mart's IP value chain has not yet fully shed its linear characteristics, remaining some distance from a truly networked, circular ecosystem.

5. THE SUSTAINABILITY DILEMMA OF IP VALUE CHAIN EXTENSION

5.1 Concentration of Top IPs: The Dialectical Relationship Between Explosive Growth and Accumulated Risks

The biggest sustainability problem is that revenue is concentrated on flagship IP. In 2024, THE MONSTERS accounted for about 23% of the total revenue, and increased sharply to about 40% in 2025. Revenue changed from 3.04 billion yuan to 14.16 billion yuan, an increase of 365.7%. This kind of concentration is good and bad. Although it can extend the performance well, it is very dependent on an IP. After the settlement was published, the market suddenly responded and showed this situation. To make matters worse, the "siphon effect" of top-tier IP will destroy the balance of portfolio. Resources, channels and marketing are all biased towards the top IP, which reduces the growth of middle and lower IP. In 2025, six IPs earned more than 2 billion yuan, but THE MONSTERS alone accounted for 40%, and the current structure is still completely unbalanced.

5.2 Design-driven vs Story-driven: Differences in the Life Cycle Structures of Trend Toy IPs

The original "de-storyfication" in the collectible toy IP is the second structural problem. Disney's IP has long been popular because of "role+story+theme park+ movie and TV content", and its value will be constantly updated through sequels and derivatives. Once a trendy toy's visual imagery is fixed, new value sources are difficult to identify once novelty fades. The cycle of aesthetic fatigue with visual symbols is shorter than emotional attachment to story characters—a structural "ceiling" for trendy toy IP value chain extension. While short-term data (LABUBU maintained 365.7% growth in 2025) show no obvious decline, indirect indicators suggest warning signs: second-hand resale premiums for core limited-edition models fell from 200–300% (early 2024) to 50–100% (end 2025); Xiaohongshu posts about "quitting Pop Mart" and "aesthetic fatigue" increased significantly in late 2025. These signals suggest popularity based purely on visual symbols may wane faster than narrative-core IPs, and that once visual novelty wears off, trendy toy IPs lacking a narrative "value anchor" will face a structural disadvantage due to low consumer switching costs, accelerating marginal value decline.

5.3 Conditions for Sustainability: Between 'Blockbuster-Driven' and 'Long-Term Operations'

Pop Mart's predicament stems from an imbalance between horizontal scale expansion and vertical value deepening. To achieve a transition from "blockbuster-driven" to "long-term operations," systematic measures across four dimensions are required: balancing the IP portfolio—reducing flagship IP reliance and cultivating multiple stable-revenue IPs; deepening core value—identifying value anchors beyond visual symbols, with "emotional companionship" as a promising but unproven experiment; systematising user co-creation—transforming consumers from passive buyers into co-creators and establishing feedback channels from UGC to product iteration; and balancing globalisation with localisation—embedding culturally adapted content in specific markets beyond a purely de-narrativised strategy.

6. CONCLUSIONS

This paper proposes a "five-stage + dual-circulation" framework for analysing IP value chain extension in the digital age, demonstrating through the Pop Mart case that the core dynamic of extension lies in the interplay between horizontal expansion (across stages and categories) and vertical reflux (from downstream consumption back to upstream creation). The case reveals that category innovation—particularly the shift from figurines to plush toys—does more than diversify revenue streams; it redefines the value anchor of visual IPs from collectibility to emotional companionship, thereby lengthening the consumer engagement horizon. Yet this very success exposes a structural paradox: the same mechanisms that drive explosive growth—character concentration and visual immediacy—also generate sustainability constraints that narrative-based IPs, with their story-driven renewal cycles, are better positioned to mitigate. In the case of de-narrativised IPs, extending the sustainable value chain for this paper is not so much a change in various forms of product as a good production of the content made by users returning to the growing structure of IP. In this way, consumers are not passive shoppers, but co-creators. This view of dual-circulation regards IP value as a constantly changing and repetitive network,

rather than a straight chain with a beginning and an end. This difference is not only helpful to the theory of cultural industry research, but also helpful to the practice of using roles to formulate IP portfolio strategy.

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