

## Article

# Sustainable Partnership: Operational Condition Analysis for Brand Value Co-Creation

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**Abstract:** Enterprises are the origin of social innovation. Enterprises implement sustainable relations through “people-oriented” social value creation, particularly other economic developments in the post-2020 COVID-19 pandemic no longer show linear development but more diversity. On the one hand, enterprises must face the fast social transformation towards AI and superintelligence. On the other hand, enterprises must cope with green sustainable development, emphasizing corporate social responsibility in innovative research and development. An increasing number of enterprises respond to the service-oriented and green sustainability-based consumer market today by expanding and collaborating between the upstream and downstream relations in supply chains. Therefore, enterprises must construct a healthy and sustainable dynamic value chain through value co-creation. The study analyzes the types of the dynamic brand value chain and the operational conditions that provide enterprises with the direction in searching for and establishing a sustainable partnership. We employ literature review, case analysis, and in-depth interviews to determine the types and causes of the dynamic brand value chain, followed by integrating sustainable design to verify the sustainability in the dynamic brand value chain model. The study findings show that growth in quadrants of culture for the tandem brand value chain acts as the primary motivation to strengthen a sustainable relationship. Subsequently, the development in pursuit of brand value creation will intensify the sustainable relationships and activities of the brand, causing sustainable partnerships to be more intense. The primary motivation for the branch brand value chain lies in the growth in quadrants of culture; the more extensive the development system, the more diverse the participating niche brand, and the brand value innovation of pursuit climbs higher.

**Keywords:** sustainable partnership; enterprise brand; value co-creation; integral sustainable design

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## 1. Introduction

As technology rapidly advances, the availability of the internet and mobile communication and maturity in mobile payment substantially upgrade consumers' demand for social networking and shopping. The sustainable idea emphasizing human-oriented and equal attention on the economy, technology, and people culture becomes the critical corporate management strategy. Therefore, stagnation in the old organizational structure and marketing practice will not keep enterprises updated with social networks. In some cases, enterprises offering a single brand value could easily face hardship in innovation and the predicament of being trapped in red oceans [1,2].

In recent years, enterprises add more sustainable innovation value to products and services. Many researchers have proposed the view on sustainable brand value co-creation, including the corporate social responsibilities, green cycle, B2C relation, and how to transform from Industry 4.0 to Society 5.0. These papers include implementing social responsibility, seeking common good in the green supply chain of brands, and encouraging enterprise innovation to transform social patterns [3–6]. In the idea of service-dominant logic (SDL)

today, services are regarded as the core to all exchanges. The value co-creation between brands forms the co-creation of all participants in resources of business relations [5].

The United Nations proposed 17 sustainable development goals in 2015. Goal 17 aims to strengthen the means of implementation and revitalize the global partnership for sustainable development [7]. After the pandemic swept the world, the desire for a green environment and AI technology and attention is drawn to intelligent social development from the society have changed the development status of the brand value chain.

Thus, the research question of this study is “What are the Operational Condition for Brand Value Co-creation in Sustainable partnership?” To answer this research question, we explore the sustainable partnership between brands from a more comprehensive perspective. On the one hand, partners must be able to innovate value together continuously. They must be able to form a consensus culture based on core concepts and stabilize the partnership. The overall structure of this research is shown in Figure 1:

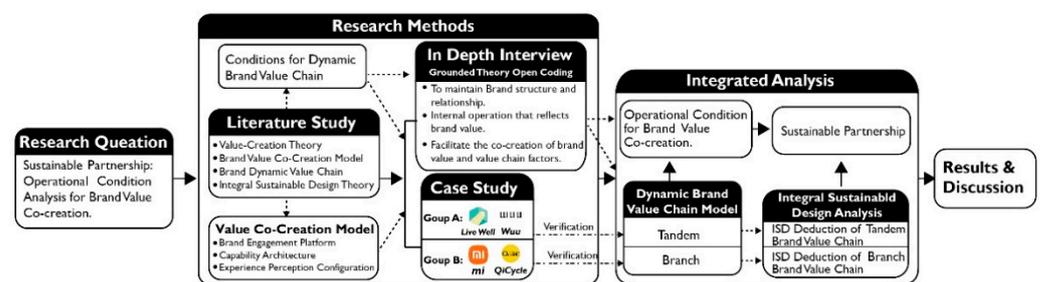


Figure 1. Research structure (resource: offer from this study).

This study discovers the Brand Value Co-creation Model and Brand Dynamic Value Chain through a literature study.

The Brand Value Co-creation model consists of three main elements: a brand engagement platform, an experience perception configuration, and a capability architecture. Based on these three elements, four case studies are adopted in this study to validate their usage. The four case studies are set into two groups, which derive two dynamic value chain models: tandem and branch.

The dynamic brand value chain exports three main components of the in-depth interview questionnaire. Based on the text analysis of in-depth interviews, this study integrates the construction factors of a dynamic brand value chain. The applicable operational conditions are discussed separately for the tandem and branch brand dynamic value chain models to understand how to construct sustainable partnerships through external value.

We found that almost all value creation research focuses on optimizing the external environment, including improvements in products or services and systems or organizations. However, the culture of intrinsic meaning and consensus about people using products, services, or organizing tasks is rarely explored in the business world. Yun analyzed “how Alibaba became the world’s top e-commerce company in China in a short time through in-depth interviews, participatory observations, and meta-analysis.” The findings show that Alibaba has overcome open innovation’s complexity and destructive effect through a “friendly culture” in integrating different brand systems [8]. All market demand comes from people’s inner desires. The culture of the community brings together people who share the same beliefs. With more consensus in the culture, the partnership will be more solidified. People’s demand for truth and beauty is never-ending, so cooperative brands can naturally maintain a sustainable relationship to innovate and meet market demand. In this study, we use integration sustainable theory to derive the sustainability of dynamic brand value chain models.

## 2. Literature Study and Theoretical Background

### 2.1. Value Creation Theory

Value creation theory analyzes the way enterprises create value. Value creation provides customers with novel, more effective, or higher-quality products or services that bring new economic benefits to the enterprises. The following discusses the different dimensions of value creation, including the evolution of the marketing model and the category and level of resources [9,10].

#### 2.1.1. Evolution of Marketing Model

Service is a complete process for solving customer problems, and a product is just a tool to solve a problem. Customers want solutions, services, not just products. As the value creation model changes, the marketing strategy changes. Physical commodity manufacturing is very mature nowadays, and the commodity cannot be sold solely by good product specifications. The corporate must upgrade its brand using a service-oriented strategy [10,11], and consumers must be pulled into the value creation process [12]. From the 1900s to the 2000s, brand values evolved from consumer identification to a highly interactive, engaging process [13]. Verganti states that consumers will pay attention to the inner meaning of products when purchasing the products. Both the physical products purchased and intangible services come with inner senses for consumers [14]. Apart from pragmatism, emotional factors, psychological factors, and social factors will affect consumers' choices. Enterprises communicate with consumers through brands by creating new meanings with participants' viewpoints integration. The more value creation activities between enterprises and participants, the more senses come. Thus, these brand significances with value commitment will build the value propositions of an enterprise.

#### 2.1.2. Category and Hierarchy of Resources

Service-oriented marketing is required to draw attention to the operant active resources constituting competitive advantage and performance competency [11]. Resources can be operand or operant. Operand resources refer to materials, animals, plants, and other material substances, where operant resources refer to skills, knowledge, or relation. Operant resources are divided into three levels of hierarchy [15]. The bottom layer consists of the primary operant resources such as skills, knowledge, or relationship. Combining the primary operant resources forms the middle layer, and the top layer integrates the primary operant resources for interconnectivity. The competitive advantages tend to last longer when moving upward, while the development costs also increase with more difficult evaluation [15].

### 2.2. Brand Value Co-Creation Model

This section discusses how to expand the traditional value creation theory of co-production and value using and turn the idea into a sustainable value co-creation model supported by brand engagement platform, experience perception configuration, and capability architecture.

#### 2.2.1. Co-Production and Value in Use

Under the product-oriented marketing strategy, the process of traditional value creation is placed inside the enterprise. Thus, the enterprise is the sole creator of value, turning tangible resources into product sales for wealth [9]. On the contrary, a service-oriented marketing strategy turns joint engagement into a new solution for enterprise value creation [9]. Consumers are placed at the center of value creation and under the collaboration of production and consumer phases [12,16] to co-create value through an approach more appealing to the enterprise. Such a strategy detaches from the distant market survey as a method to understand consumers. Engagement, interaction, self-service, and user experience are considered the critical factors in value co-creation [17]. Modern research

shows more than 27 definitions of value co-creation mechanisms. Ranian and Read [18] have summarized these definitions in two dimensions: co-production and value in use.

A co-production platform, also known as a brand engagement platform, is the venue for co-creating value. Consumers can directly or indirectly engage in the production of products or supply of services on the forum. Through mutual exchange and collective activities, enterprises can acquire professional knowledge and improve products and services [19]. Consumers and enterprises engage in-depth and integrate their resources for value co-creation through an open and equal relation.

Co-production requires three essential elements: knowledge sharing, equality, and interaction. These three elements also serve as the criteria for determining if the value co-creation activity is effective.

Knowledge sharing is an essential managerial resource and the leading Resource in service-oriented marketing strategy, including the expression of demand, sharing knowledge, information, ideas, creativity, and relation from the enterprise and consumers [20]. Consumers tend to produce integrated learning at different periods and thus form an active and continuous feedback mechanism.

Equality reflects enterprises' willingness to share the power of control to support consumers to contribute to co-creation to the fullest. The operational process of decentralization makes the information non-rigid and unpredictable and consequently more appealing to the actual requirement of users. Hence, resources need to be integrated with more creativity in the best interest of both entities promptly.

Interaction helps us comprehend and share requirements, making instant evaluation and adjustments at investing resources. Some research reveals that consumers show a distinguished value creation effect in co-production through good interaction and constructive participation. Interaction activities involve event participation and conversation. The communication will increase consumer engagement through the praises, criticism, and suggestions for the products and services, expanding the scope of attention and receiving instant feedback. The high intensity of conversation can trigger massive implementation and minimize alienation due to time and space. For this reason, the interaction itself acts as a source of value.

The previous discussions suggest that the effectiveness of co-production determined by the three elements, including knowledge sharing, fairness, and interaction, is the mandatory criteria for the venue of value co-creation activities. In a binary relation between enterprise and clients, co-production offers the framework to value creation activities. In contrast, the value in use of consumers exhibits the perceived value of products or services.

Value in use also requires three elements: experience, relation, and personalization. Value in use reflects how consumers learn to use, repair, and maintain products or services [21]. Value in use originates from the user environment and process of consumers. Apart from time, venue, and other conditions [21,22], the unique personal experience, story, perception, and signs of consumers are also essential [23]. Consumers perceive value in the process of using a product or service since consumers evaluate product or service value based on their uniqueness and if such value appeals to their motives, knowledge, skills, and judgment standards.

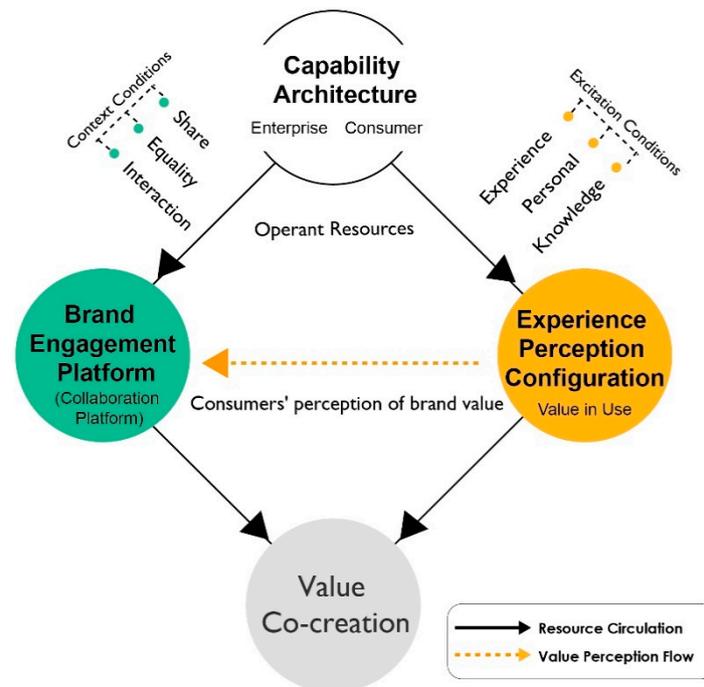
The relation between co-production platform and value in use in the entire sustainable value creation model is shown in Figure 2.

Under the binary relation between enterprise and consumers, co-production and value in use collectively constitute the complete value co-creation mechanism. Both parties provide all necessary operand and operant resources for the activities.

In response to the upgrade in market demand, marketing strategies shift from product orientation to service orientation. Service-oriented marketing strategy leads to multiple relations, and hence brand value creation can satisfy all stakeholders. As a result, the brand value co-creation process is expanded to three essential parts:

1. A brand engagement platform, which is based on the collaboration platform;
2. An experience perception configuration, which is extended from the value in use;

3. A capability architecture defines the ability of resource management and the partnership between the enterprise and stakeholders.



**Figure 2.** Three Elements of Value Co-Creation. (Resource: offer from this study).

### 2.2.2. Brand Engagement Platform

A brand engagement platform is created explicitly for innovation engagement, which is defined as the combination of any software and hardware, including personnel (such as consumers, company employees, partners, and other stakeholders), generation (including data), and interface and process [24]. The brand engagement platform is the context where brands undergo value co-creation, consistent with the role in co-production. The platform serves as a context between activities and conversation. It must be equipped with the three elements, knowledge sharing, equality, and interaction, so that all stakeholders can engage and interact to create a meaningful experience. Brand engagement platforms must develop flexibility and lead the nature and direction of brand experience [25]. Enterprises provide two types of brand engagement platforms, namely, service-oriented and product-oriented.

#### The Service-Oriented Brand Engagement Platform

Such a platform aims to connect the relations, and enterprises must build a sense of trust and develop a more effective mechanism. All stakeholders will voluntarily engage on the platform to provide a fair, accessible, and interactive environment for engaging stakeholders to co-create value with enterprises. As the platform's creator, enterprises need to constantly give feedback and deem themselves part of the architecture. To some extent, enterprises may even have to upgrade corporate's value propositions to improve the platform.

In the example of MyStarbucksIdea proposed by Starbucks in 2008, the online platform releases product or event information. It allows consumers to submit farsighted experience suggestions, constantly contacting and talking with Starbucks. Consequently, MyStarbucksIdea has formed a community where the most popular ideas are presented, and the enterprise gives quick feedback. Meanwhile, it is a multi-purpose platform and a complete architecture focusing on services, followed by-products. The services are enhanced with unobstructed system flow. Starbucks created the MyStarbucksIdea platform, contributes ideas for the community and earth, from purchasing coffee to reducing carbon footprints

and engagement in local communities. Starbucks collaborates with other stakeholders on the platform and co-creates an excellent brand experience with engaging stakeholders in the entire value chain system [26].

#### The Product-Oriented Brand Engagement Platform

Building a platform with products requires powerful technology and a free and good retail environment, which deliberately designs a product-oriented platform for a grand [25]. In the Apple retail shop, the experience shop under Apple allows consumers to connect with reality, where all components in the shop play their role and content to express. The sophisticated arrangement appeals to layout coordination and aims to describe the aesthetic value advocated by the corporate value. The invisible command triggers the physical and psychological engagement from customers. Consumers can interact with products intensely, and they will produce value in use from the interaction with the products before making any purchase. Consumers receive criticism and product specifications from scanning the product barcodes in the shop. Overview: Apple itself is one giant service system, where all nodes' configuration aims to provide an excellent mechanism in the co-creation of value. For consumers, the design made by Apple constitutes an engagement system, which implements the various innovative, personal, and co-created brand experiences through the retail shops, products (including books, music, and video), and multiple connections with integrated app engagement platforms.

#### 2.2.3. Experience Perception Configuration

In the theory of value co-creation, customers perceive brand value through the value in use. Experience perception configuration extends value in use to all stakeholders to generate consumption behaviors and build the engagement process. Observation and conversation are necessary to understand the experience of all stakeholders. In contrast, the integration of the experience and skills of stakeholders will encourage them and thereby discover the meaning for stakeholders [24].

A transparent interactive process allows consumers to give feedback through the platform to see the experience of consumers and gain knowledge from the feedback given by others. Transparency, interview, conversation, and reflection are established mutually in the shared configuration of joint experience creation [27], which responds to the brand through personal experience and relation. Experience perception configuration is deployed in brand engagement platform, collecting common perception, experience, and background of stakeholders, where resource allocation can arouse the value perception with resonance.

#### 2.2.4. Capability Architecture

The capacity architecture, brand engagement platform, and experience perception configuration of brands are interconnected, which implements better co-creation of brand value through the organization of various operand resources and operant resources. The resource organizing capability includes controlling and utilizing connectivity, tolerance, generativity, and evolution. Enterprise is the leader in the relationship between enterprise and customers. There is also a leader in the relationship between enterprise and collaborating brands. The leader usually owns more resources and hence is responsible for more investment of resources in value co-creation. The capability of organization support often determines the effectiveness of value co-creation. The most explicit resources are funds, technology, and market share, while the invisible resources are user demand and creativity. Nonetheless, the most powerful influence on the future competitiveness of enterprises is the operant resource. Consequently, the leader brand usually provides most of the operant resources, and the other engaging stakeholders contribute their operant resources so both parties can co-create the value [24].

### 2.3. Brand Dynamic Value Chain

Value creation of a brand can no longer guarantee the sustainable management of an enterprise. Brand value co-creation today enters the alliance era of brands, as brands seek to establish relations with other brands to carry out value co-creation more effectively [28]. This section discusses the diverse link of value co-creation between brands and draws more specific discourse from the three topics: brand value chain and brand ecology, dominator and niche market, and perception from the brand value chain.

#### 2.3.1. Brand Value and Brand Ecology

Participants in brand value creation include enterprises, consumers, and other stakeholders. Multiple brands also exist in a healthy ecology. The “commercial ecology system” adopts the concepts of ecology system from ecology. Brand development has become an active socialization process today. At the same time, the factors of development also vary, including the roles played by the brand, conflict of interest, and impact of the social environment [29,30].

The brand value chain is included in the brand ecology that focuses on the relationship between brands. Porter [28] proposed the value chain concept for identifying the means of consumer value creation. A series of activity chains are adopted to gather services such as logistics, design, production, sales, delivery, and other supports, collectively known as the brand value chain. Enterprises need to engage in brand design and promotional activities for the operation and human resource development, technological development, purchase, and services. This series of activities form the brand value chain. Such value creation activities are not simple activity gathering but the value system constituted by the mutually dependent value creation activity chain. The previous discourse helps us understand that the existing corporate brand activities must combine with other external value chains apart from the value chain operated inside the enterprises before expanding effectively.

#### 2.3.2. Relation between Dominator and Niche

The participants of a business ecosystem are divided into two categories: most participants are not leaders but the so-called “niche.” In contrast, only a few participants with leading roles are the “dominators.” Dominators establish the platform in a business ecosystem, providing various resources needed by niches and room and many opportunities for niches to create value and maintain the best interest of niches. Both roles are the stakeholders in brand value co-creation. In the brand ecosystem, brands create value according to their means and attract other brands due to resource compatibility, forming a healthy organization system that produces value chains [29].

#### 2.3.3. Means of Dynamic Value Creation

The core of value co-creation in the brand value chain is based on consumers and stakeholders rather than the enterprises [29]. The brand value chain emphasizes more on value co-creation in the relations. In this value chain, the dominator and niche combine their strengths to create new value for each other. The paper proposes a tandem-based and branch-based partnership, analyzed in Chapter 4 for the cooperating factors behind it.

### 2.4. Integral Sustainable Design Theory

#### 2.4.1. Sustainable Development (SD)

Sustainable development (SD) refers to the proposal of a farsighted development model that satisfies people’s demands today, under the circumstances of environmental protection and without compromising the needs of future generations [31]. In 2005, the United Nations proposed 17 goals and 169 targets related to life, economic development, natural ecology, and sustainable philosophy, which have become the international trends that draw significant attention from governments and people worldwide. Environmental Protection Administration, Executive Yuan of Taiwan gives two definitions to the terminology of sustainability: The first one is to improve and create the welfare of modern

people and make peace without compromising the development of future generations. The second one is to utilize all of the natural resources from the ecosystem without degrading the essential inventories of the environment. In other words, it is necessary to maintain permanent sustainability in the use of biological and ecological systems [31].

#### 2.4.2. Integral Sustainable Design (ISD)

The integral theory proposed by Wilber (2000) is a philosophical framework that generalizes various methodology relevant to human knowledge and the complexity of products and methods [32]. Wilber employs two dimensions in integral theory to divide all realities: The first dimension refers to the internal and external subjective while the second dimension includes individual and collective. The external side is the observable and measurable dimension, while the internal side cannot be observed and measured but requires communication and conversation. These two dimensions constitute the four quadrants, including (1) Internal Individual Quadrant includes emotion, aesthetics, consciousness, attitude, experience, vision, value, and motivation; also known as the psychological quadrant. (2) Internal Collective Quadrant includes collective value, collective vision, customs, morals, and communication, also known as the cultural quadrant. (3) External Individual Quadrant, which includes the behavior and appearance of a person or object, also known as the behavioral quadrant. (4) External Collective Quadrant offers a multi-individual, multi-structural, and interactive system such as the political system, economic system, organizational structure, ecology, natural environment, and natural resource management as the system quadrant [33].

These four quadrants could be ascribed to three perspectives. The Truth (It and Its) perspective includes the two external quadrants, half on the right side, which discusses science. The perspective of Goodness, We, is the lower-left cultural quadrant, discussing morals. The view of beauty, I, is the upper-left psychological quadrant discussing arts [32,33].

Based on the integral theory proposed by Wilber (2000), DeKay and Bennett (2011) further introduced sustainable issue into the integral theory to form the integral sustainable design (ISD) theory, which aims to provide a more comprehensive architecture for the sustainable evaluation in a construction environment [33,34]. DeKay believes that people focus too much on measuring sustainability in this day. He emphasizes that sustainable design cannot just concentrate on performance-driven design. He introduced four main quadrants: the perspective of system (arrangement of ecological and social relations form patterns such as Ecosystem Buildings); behavior perspective (individual parts or members and their performance, activities, and functions, such as energy, water, and materials efficiency); experience perspective (with various forms of perception, feeling and consciousness, such as green design aesthetics); and cultural perspectives (shared meanings and understandings of varying degrees of complexity due to individual members interacting with each other, such as myths and rituals). DeKay introduces the “Integrated Theory of Sustainable Design,” which increases the subjective perspective missing in sustainable design by considering the multi-level development complexity of the intersecting fields of self, culture, and nature. To incorporate the relationship between self (I) and nature, DeKay considered aesthetics, culture (the meaning of design and the story it tells), and design. She also explores culture and identity in-depth, further expanding the theoretical perspective of overall sustainable design [33].

### 3. Research Method

This study explores sustainable partnerships through brand value co-creation models and dynamic brand value chains. As shown in Figure 1, the research structure is first analyzed and constructed through literature, which contains three pillars, such as brand participation platform, experience perception configuration, and capability architecture. It then develops two dynamic brand value chain models, tandem and branch, using literature discussion, case analysis, and in-depth interviews. Finally, the sustainability of the dynamic brand value chain model is deduced through the integrated sustainable design theory.

This section will describe the four case studies and in-depth interviews with experts to prepare subsequent analysis.

### 3.1. Case Study

The types of case studies include exploration, description, and interpretation. This study uses descriptive case studies to describe the three structures of the “preliminary model of brand value co-creation” in the literature study section. It validates the model to form a more accurate model. The case selection is based on the rapidly emerging successful e-commerce brands “live will” and “mi” in China, as well as their partnership brands “Wuu” and “QiCycle,” in response to changes in consumption patterns in recent years.

#### 3.1.1. Live-Well Mobile App

“Case A1” Live-Well—Home Living Mobile app. The Live-Well Company was established in 2015 and was initially a public account for sharing home information on the Weibo and WeChat platforms. After the account has accumulated some followers, the account’s owner started creating a mobile application and renamed its Weibo and WeChat accounts into Live-Well, operating as the new home media. Live-Well stands out from other apps, offering professional information on home furnishing. It captures more active users than other apps under similar categories with more diverse functions, services, and superior resources. A specific larger community implies a new internal meaning for Live-Well, where consumers have opened up a gap in the normal cognition of such an app. The app not only optimizes the performance but voluntarily conveys new ideas and visions to consumers.

#### 3.1.2. Wuu Company Home Supplies

“Case a2” Wuu Company was established in 2014 and is a home supplies brand. Initially, the Wuu Company has gained media exposure due to the art-related theme and material research, which is well-known in the design industry. The Wuu Company has developed into a complete online/offline sales system for product types and product line expansion. Supported by stable products, consumers with a certain level of loyalty and followers, the Wuu Company starts to find the brand’s outlet in a home environment, namely, to borrow the platform of some service-oriented brand and co-create value for that brand.

#### 3.1.3. Mi Technology

“Case B1” Mi was founded in 2020 and started in the field of MIUI online application, which is a forum for software download and discussion for fans of android-based mobile phones. Users can exchange and interact online. The app initially started with 100 experienced users communicating and giving feedback to mi engineers, which also became the earliest value co-creation activity of mi. The collective knowledge and skills of users co-create value with the mi’s development team in an open environment of mi, and the forum continues. Later, MIUI has been bringing its value into full play after becoming the operation system of mi mobile phones. After successfully launching mobile phones, mi started building a three-circle eco chain enterprise and ultimately formed IoT using the intelligent hardware products within the circle. Mi eventually started to plan and control the design for its IoT by launching the mi shop, following the expansion of product dimension, the actual implementation of IoT, and the mi online mobile procedures for online boutique shopping. The development process of the mi brand has followed the product-major services.

#### 3.1.4. QiCycle—Biking Services

“Case b2” QiCycle Company was established in Xiamen in 2012, and it is an internet technology company focusing on sports and the health field. The company was re-invested by mi in 2014 and became a member of mi’s eco chain brands. Initially, QiCycle started

as the mobile application software for fans' community, activities, and records in cyclists' services. The app is equivalent to a biking community, where cyclists can exchange, communicate, and organize a series of offline activities. Later, QiCycle developed its series of bike products with financial support from mi and embedding IoT into bike and bike-addons. Other brands of bikes can link with QiCycle bikes via mobile phones to querying the riding status and relevant data records all the time. The app forms a professional and intelligent riding service architecture in one product and service.

### 3.2. In-Depth Interview

Because this study explores brand value creation-related topics, the invited respondents should be 'the industry's brand-related content operators.' For brand strategy, brand planning has some experience, and the case selected in this study has a certain degree of understanding different degrees of contact. It was, therefore, the focus of interviews for a total of five; engaging in equal interaction with respondents and communicating in both directions. The researchers themselves need to have open interviews and flexibility to express their views and feelings on the topic thoroughly. Through literature discussion, this study will explore the 'building dynamic brand value chain,' including how to maintain brand structure and relationship, reflect the internal operation of brand value, and promote the value of co-creation factors. The interview outline is shown in Figure 3. (each key factor is designed with three topics, nine questions in total):

Interview outline	Question
To maintain Brand structure and relationship 	1. What do you think constitutes the structure and relationship of the brand, what are the elements and environment? 2. For the brand development today, what's the influence or relationship of the brand's connection with other stakeholders? 3. How do you think brands should construct the relationship structure between brands
Internal operation that reflects brand value 	1. What do you think of the relationship between goods and services in the brand value co-creation activities? 2. What do you think is the boundary for companies to provide services to consumers? 3. What do you think of the company's resources and distribution?
Facilitate the co-creation of brand value and value chain factors 	1. What do you think is the behavior that really constitutes the co-creation of brand value? 2. What do you think caused the stakeholders to reach an agreement? 3. How do you think the brand should maintain a dynamic chain status?

**Figure 3.** Interview Outline and Questions. Resource: offer from this study.

The study takes the verbatim script of the in-depth interview content as the raw data of foundational theory. Stage 1 undergoes open coding analysis on the content of the interview to conceptualize the data. Stage 2 undergoes the classification of open coding, observation of the association of open coding, and thereby analyzing the axial coding. Finally, the core axial concept can be concluded from the review of axial coding. Eventually, the study proposes research-related theory through data and literature. The identification codes for the five interview respondents are shown in Figure 4:

Coding	ID	Professional Background	Years
PW1	Founder of Home Furnishing	Brand Branding Manager Product Designer	5yrs
PW2	Home brand planner	Advertising Marketing	4yrs
PW3	Brand Column Operator	Marketing	5yrs
PN4	Mi Brand Investigator	Brand Strategy and Management	10yrs
PN5	Brand Column Operator	Sports Brand Planner	5yrs

**Figure 4.** Interviewee description and identification code. Resource: offer from this study.

In the example of code B1-A1-PW2-4, “B1-A1-PW2-4 Users provide the foundation for brand operation model,” the B1 represents the establishment between brand structure and relation and is the primary category coding. A1 represents the cause of relationships established between brands and is the sub-category coding. “Users profit foundation for brand operation model” is the open coding.

#### 4. Analysis

In the early chapter, we compiled the “rudimentary model of brand value co-creation.” We found the three core elements of this rudimentary model: “brand engagement platform, perception experience configuration, and capability architecture.” This section will group the four cases mentioned above into groups of two, forming two brand value chains, and validate these three core elements.

Group Case A forms a tandem brand value chain, including Case A1 “Live-Well app—Home Sharing Platform,” is the dominator in the brand value chain. Live-Well is a content and service provider without any physical products. Case a2 “Wuu Company Home Supply Design Brand” is a niche that mainly makes physical products and holds arts-related activities.

Group Case B forms the branch brand value chain, including Case B1 “mi eco chain” is the dominator of the brand value chain, whereas b2 “QiCycle” is the niche.

##### 4.1. Tandem Dynamic Value Chain Model

Group Case A is an example of a tandem brand value chain. The dominator of this value chain is Case A1—Live-Well and the niche of this value chain is Case a1 Wuu Company. In a tandem brand value chain, the niche play and dominator of the brand connect through the brand engagement platform and conduct indirect resource flow through this platform, where they share one experience perception configuration. Under the exact mechanism that activates consumers and stakeholders with the same experience and background, the value perception of niche and the dominator perceive value for their brands through the shared experience configuration while conducting value perception on the entire tandem brand value chain shown in Figure 5.

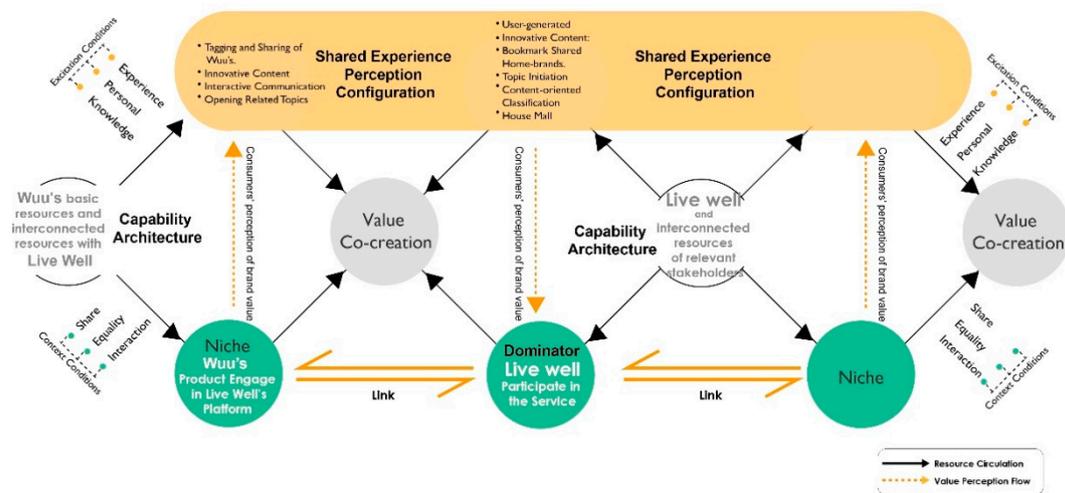


Figure 5. Tandem Brand-Value-Chain Model in Group Case A (resource: offer from this study).

#### 4.1.1. Analysis of Value Proposition Capability Architecture Impact

1. The free flow of operant resources determines the relationship between the tandem brand-value-chain model and the brand. In Case A, Good-living Co. holds the knowledge and skills of platform users. The autonomous content generated by the brand and designer, and the contact between these three parties, drive the resources to flow freely among the three co-create value in them. Hence, Good-living Co. remains a parallel relationship at the same level with the Wuu Company Co. and other stakeholders. The platform constantly delivers resources between stakeholders for a mutually tandem relation;
2. The relation of value proposition between the dominator and niche forms a centripetal active development model. Live-Well promises to build beautiful homes for Chinese people and provide references to a better living environment. Live-Well gathers home brands, designers, and users in one service system to co-create value for the idea. In the tandem brand value chain, more niches cannot make the value chain more solid. The solid relationship relies on more prosperous links and more strengthen communication between the dominator and niches.

#### 4.1.2. Characteristics and Function of Brand Engagement Platform

1. Brand engagement platform of the tandem brand value chain is the resource junction between brands Live-Well is the common engagement platform in a tandem brand value chain. The Wuu Company engages in a value co-creation effect in the platform. Due to the indirect and accessible path of resource flow in the value chain, the brand engagement platform co-creates the venue with the same value and becomes the connection point between the brands in the value chain. The resource flow between the brand engagement platform and niche then shifts to value co-creation activity;
2. The engagement platform forms a supplementary relation for dominator brand and niche among the tandem brand value chain.

#### 4.1.3. Common Experience Perception Configuration Analysis

The users of the A1 service category-Live-Well in Group Case A include the general consumers, brand, and designers. Users of Live-Well can generate original content freely, tag and share content, and initiate topics and update the content through instant generation. Users can shop products from the images published by users. Case a1 Wuu Company connects with Live-Well through a brand engagement platform, sharing the same experience perception configuration. Consumers of Wuu Company are also users of Live-Well, which generates value perception on the Wuu Company while the value perception for Live-Well also overlaps. Strategic decisions such as supply chain integration and enterprise

value creation were critical to the performance of SMEs [35]. There is a highly positive relationship between the innovation ability of supply chain integration and the company’s performance [36,37]. Enterprise should plan in-house value creation activities to promote creativity, innovation, and profitability [38]. Therefore, the multi-interaction in the series value chain will positively affect the brand and then innovate the brand value.

4.2. Branch Dynamic Value Chain Model

In the brand value chain of mi and QiCycle, mi is the dominator. At the same time, QiCycle is the niche that receives technical and financial support from mi and pandering to mi through value proposition. This value chain shows the brand structure relation between mi and QiCycle. The majority of mi’s brand engagement platform consists of physical products, but QiCycle is a service-oriented company. The purpose of mi providing technical support to QiCycle is to expand its product chain. An enterprise has mature service applications without a series of product is the best choice for mi. Both companies own independent service processes and do not share the same value chain configuration, which maintains certain independence to some extent.

We define the model as a branch brand value chain, and its capability architecture is the connection point between dominator and niche. Resources, coming from the capability architecture of the dominator, flow to the niche directly. The external resources of the niche are integrated into their brand, as shown in Figure 6.

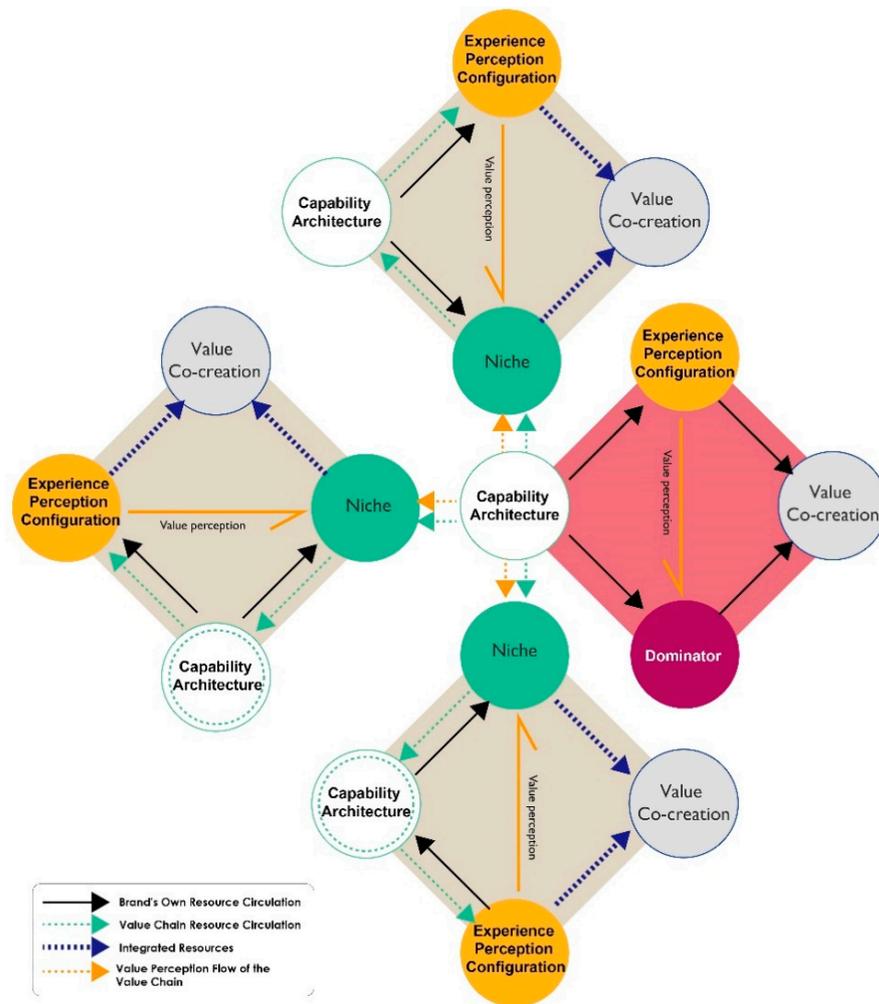


Figure 6. Branch Brand Value Chain Model (resource: offer from this study).

#### 4.2.1. Analysis of Value Proposition Capability Architecture Impact

1. The relation of value proposition between the dominator and niche forms a diffusion active development model. According to the discourse from the previous section, the dominator is positioned at the absolute leading status in a branch brand value chain. In contrast, the niche is placed at the subordinate status. In the example of Group Case B, mi and QiCycle share the same value proposition and maintains a high level of unity. As the center of value proposition, mi imposes rigorous control over the value proposition of other brands. The brand meaning of each brand is the integration of subjectivity, objective, and relation. The meaning of value in a value chain is the collective meaning of brands in the chain. Due to the absolute leading position for the dominator in the branch brand value chain, with a high level of control and unity in the value proposition, the form of value proposition differentiates highly from the tandem value proposition;
2. Direct operand resources with planning distribution determine the branch type of the brand value chain model and the relationship between the brands. In the example of Group Case B, mi owns operand and operant resources. In particular, the operand resource is the primary resource that connects with its niche under the ecology, giving operand resources directly to its niche. In this case, QiCycle takes the investment, technology, factory, and design from mi on. The two brands conduct the joint supplement in resources under the unified intention and apply it to improve their respective brands' value co-creation activities. The direct operand resource flow decides the branch value chain model. The capability architecture of the dominator is the joint point of all the brands.

#### 4.2.2. Characteristics and Function of Brand Engagement Platform

1. The brand engagement platform is the splitting node for resource flows among the brands. Brand connection in a branch brand value chain is a direct operand resource flow known as connecting the dominator's capability architectures and the niche. In the value co-creation of dominator's brand, the example of mi in Group Case B shows that the value co-creation activities of mi aim to expand its brand scope and influence. The connection with its niche is intended to build its independent brand engagement platform, thereby establishing a complete value co-creation structure. The brand engagement platform is no longer the connecting point between brands in a branch brand value chain but the splitting node because of the absolute advantage resource owned by the dominator in the branch brand engagement platform. The services and products of the engagement platform are relatively abundant. When the operand resource flows to the brand engagement platform, it is necessary to screen and control the plan to directly pour the resources into the capability architecture of the niche;
2. The niches in the tandem brand value chain complements the value propositions of the dominator.

#### 4.2.3. Common Experience Perception Configuration Analysis

1. The branch brand value chain does not offer a shared experience perception configuration due to the different industries. In the example of Group Case B, mi's experience perception configuration mainly applies to a smart home. All mi's core products can implement intelligent control and personalized structure through this application procedure in this application. Hence, mi owns an independent experience perception configuration to perceive value on its products and services. The experience perception configuration of QiCycle lies in the application procedure focusing on riding records. Users of this application procedure can conduct experience and perception on the products of QiCycle through the personal experience, the relation between users, and other participants;

2. The value proposition of branch brand value chain replaces the function of common experience perception configuration. The value perception of the branch value chain differs from the tandem value chain by relying on the experience perception configuration. However, the brands of branch value chain still share the same value perception because of the high unity control for brand value proposition in the value chain. The unified value proposition is reflected in the product style, styling language, and visuals. Consumers shift the value perception and product identification of the dominator's brand to the niche's brand in a branch value chain.

#### 4.3. In-Depth Interview Analysis

The "Dimension of Building Brand Dynamic value China" includes maintaining brand structure and relation, implementing the internal operation of brand value, and promote factors of value co-creation. The analysis on grounded theory is drawn after conducting an in-depth interview, as shown below:

##### 4.3.1. Brand Structure and Relation Establishment

1. User overlay is the key to brand building and connection generation. In Group Case A, brand curator PW2 of the "Wuu Company" believes that the property of overlay users is the key to the process of brand connection. He mentioned: "For Live-Well, I think it is the user property as the user property is overlaid (B1-A1-PW2-1)." In the content of the case analysis, Live-Well is representative of the tandem brand value chain. In this value chain, the value co-creation activities between users and brands are complex and multi-dimensional, connecting all brands. Live-Well and other brands will generate a robust standard value perception and maintain the brand relation accordingly (B1-A3-PW2-2; B1-A1PW2-3);
2. Convergence of brand value proposition and resource integration generates a connection between the brands. Before forming stable value chains between brands, the brand's value proposition significantly impacts the connection generated between brands. Meanwhile, the means of flow for resources between brands in the value chain determines the mode of the brand value chain. There is a strong value recognition between the brand and consumers in a value chain, which is also the mandatory standard for brand connection. Permanent consensus can be reached based on mutual recognition, and the resources of all parties can maintain a long-term relationship based on agreement (B1-A1-PM3-3; B1-A1-PM3-4);
3. The support of networks and a mature startup environment bring new opportunities for brand development. The marketing battlefield for brands has shifted from the offline venue and propagation of TV and printed media to online platforms. The changes brought by internet marketing aim to generate more consumption behaviors and distinct identification, bring consumers closer to the brand, and constantly develop more enriched paths. Brands can create more value co-creation activities with consumers. The internet brought a new opening to build a brand, and the better startup environment also provides an excellent guarantee for the development of the brand (B1-A2-PN4-35).

##### 4.3.2. Internal Operation Reflecting the Brand Value

1. The free value proposition for the brand value chain provides more autonomy in the brand value co-creation means. According to the research deviation on the brand value chain model, the active mode of the brand value chain is subject to the influence of brand value proposition in the value chain. The value proposition of the Wuu Company in Live-Well is not affected by Live-Well, as both parties own a high level of autonomy in cooperation. The value proposition may be a factor of brand connection, but it is not the determinant or criteria for maintaining the relation. Brand selectively conducts value co-creation activities according to their conditions, and hence the rich value proposition in this brand value chain can bring different styles of the brand.

- More diversity can be added in this internal value co-creation activity, following more users injecting new content into the open environment's brand value chain. More possibilities are brought to the brand value co-creation activities (B2-A4-PW2-19);
2. The building of a brand engagement platform aims to provide a unified venue of value co-creation for stakeholders. The study matches the joint production in brand engagement platform, value co-creation theory, and collaborative production requires knowledge sharing in a fair and interactive environment. The dominator and niche jointly build the setting and content of the brand's engagement platform. Live-Well has established a platform, and regardless of whose users, they can all come to the platform (B2-A5-PW2-8);
  3. Enterprises within the same industry can better allocate resources and reach a win-win situation for the brands. The mutual connection for brands within the same industry can carry out better resource combinations, attract the same consumer groups, and better share tandem resources. The brands may work in the relevant industry but do not conflict with each other since the different types of brands allow resources to match each other with the help of stakeholders and thereby maximize all parties (B2-A6-PW2-7);
  4. The brand value co-creation process between enterprise and consumers is the extension of resources. PW3 believes that consumers and users wearing the brand as value co-creation activity, from the initial structure establishment of the brand, establish mutual connection relation between the brands, to the brand value co-creation, are all vital operant resources. Only the fundamental function changes but the consumers and users act as the orientation of the brand establishment process, which is regarded as essential resources and the basis of value co-creation activities.

#### 4.3.3. Factors Promoting Brand Value Co-Creation and Value Chain

1. Resource convergence flow adds efficiency to value co-creation activities of the brand value chain. The implementation of Live-Well brand value is the high adaptation between the stakeholders and brand while receiving resources that satisfy both parties. A high level of transformation suggests the dominator's capability in the value chain to allocate resource distribution and flow so that participants can conduct practical value co-creation activities that satisfy personal needs. Hence, resource convergence flow allows the dominator to perform resource optimization combinations in the brand value chain. Adopting such behavior will generate more effective value co-creation activity, thereby generating brand value (B3-A7-PW2-31);
2. Stakeholders of the brand value chain need more compatible resources and suitable allocation. Mutually compatible resources in the brand value chain coordinate all stakeholders' relations more, as the more compatible resources are the key to collaboration among all stakeholders. Live-Well represents the brand value chain. A brand deviates towards community services so that appropriate resources will match each other more widely and freely among stakeholders, which comes with the criteria for resource matching (B3-A8-PW2-27);
3. A brand value chain is built on the integrity of brand value co-creation of details in the value chain. In the brand value chain of Live-Well, the dominator's brand needs to strengthen its brand engagement platform and experience to build the foundation for value co-creation activities and establish practical relations and excellent contact with all stakeholders. Both parties protect the active expansion of the brand value chain. In other words, the constructing means of the value chain are crucial (B3-A9-PW2-32);
4. The brand value chain forms a complete closed-loop experience. Consumers and stakeholders may interact with more than one brand of the value chain in a brand value chain and interact with multiple at once or concurrency. Hence, the value chain needs to create various connections of value co-creation activity for each brand value co-creation. The coordination between the dominator and stakeholders in the brand

value chain will form a more competitive process and suitable action procedures in favor of the integrity of the brand value chain (B3-A9-PW2-34).

#### 4.4. Integral Sustainable Design Analysis

##### 4.4.1. ISD Deduction of Tandem Brand Value Chain

1. In the analysis of home subjects through integral sustainable design, as can be seen in Figure 7, we discover that individual subjective experience (I), individual behavior (It), and overall system (Its) to the whole culture (We) forms a spiral cycle.



**Figure 7.** ISD Deduction with Tandem Brand Value Chain in Group Case A. Resource: offer from this study.

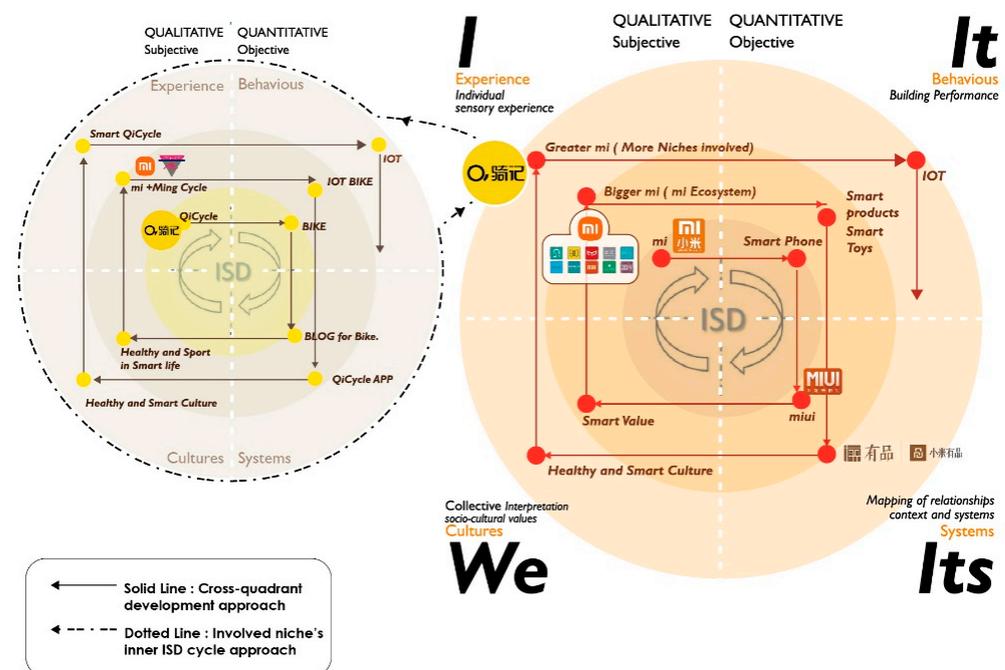
We can infer the following after introducing the Group Case A of the tandem brand value chain with ISD theory:

- Level-1 Cycle: Personal demand for a comfortable home (I) initiates the cycle and draws to furnishing behavior and actions (It). Case A1 Live-Well established the blog to compose articles on purchasing good furniture and recommend the furniture manufacturers and interior designers conforming to the concept (Its). The engagement in social groups has eventually increased for living culture and value (We);
- Level-2 Cycle: Personal pursuit for aesthetics boosts eventually following the rise in value (I). Case a2 Wuu Company provides many choices in home products and artworks (It). To the transformation of social pattern, Case A1 Live-Well (dominator) and Case a2 Wuu Company (niche) collaborate in one e-commerce platform (Its), using one experience configuration to share resources and interacting with participants to present a social group with the increasing pursuit of living quality (We). In other words, they have co-created an innovative value that is committed to pursuing a better and more comfortable environment;
- Level-3 Cycle: Case A1 Live-Well (dominator) pursues the innovation in brand value so that Case A1 can promote new home ideas or respond to human pursuit for clever and aesthetic living style (I). The Wuu Company will then develop new products (such as intelligent furniture) in response. If the Wuu Company cannot supply new

products coping with market demands, it would need to develop a new brand for recommendation (Its).

#### 4.4.2. ISD Deduction of Branch Dynamic Value Chain

Farcane, Deli, and Bureană proposed treating enterprises as humans to be considered vital systems. In this system, enterprises must value the implementation of sustainability value and social responsibility (CSR) when executing managerial decisions. Based on the viewpoint of the corporate establishment, sustainability should be considered healthy dynamism rather than the pursuit to maintain balance [3]. We can consider a brand as a human being and put Case B1 mi on the upper-left quadrant (I) in the ISD development of branch brand value chain so that the products or service lines will correspond to individual behaviors (external, objects, It). The overall system (Its) corresponds to the app or e-commerce. The culture (we) on the lower-left quadrant will be the virtual social group culture formed by customers or fans. The branch brand value chain creates a nested spiral cycle (cycle within a cycle) in the development of the ISD map, as shown in Figure 8.



**Figure 8.** ISD Deduction with Branch Brand Value Chain in Group Case B (resource: offer from this study).

#### Outer Loop (Constituted by mi)

- Level-1 Cycle: Case B1, brand mi developed an Android-based operation system and started with mobile phone components (I). Smartphones are the earliest products made by mi (It). Following the brand concept of “Enthusiasm for mi,” MIUI online social group was established accordingly (Its), so that other fans of Android developers may discuss online with engineers from mi. The platform eventually forms a visual social group with enthusiasm for the Android-based operation system (We). The users help each other and solve bugs, in addition to proposing creative solutions;
- Level-2 Cycle: The value proposition of mi climbs and expands towards intelligent services. Mi then invests in various brands that can meet the value proposition and reach the realm of bigger I (I). The bigger I forming a mi ecology loop and providing more intelligent products in response to the diverse ecology development of mi. For example, intelligent electronic appliances or smart toys (It), following the establishment of youpin mobile app and xiaomiyopin e-commerce (Its), specifically

supply the brilliant products and services under mi. Then, mi's value and technology will expand to a higher pursuit of AI culture (We);

- Level-3 Cycle: Case b2 QiCycle appears as a niche. QiCycle owns its ISD cycle (see Figure 8), while mi's ability upgrade to the IoT technology. By investing QiCycle and providing mobile phones and IoT technology, mi has absorbed and expands the value proposition of QiCycle through access to intelligent IoT market and reach the realm of greater I (I). Apart from offering innovative products, mi also assists MingCycle to collaborate with QiCycle in developing intelligent bikes (It). Mi has built the mi shop while the QiCycle app has been expanded to location-based services (Its). The cultural context of mi has approached the innovative IoT society (We).

Inner Cycle constituted by QiCycle. In the outer cycle, mi acts as the dominator while QiCycle acts as the niche. However, QiCycle can complete the brilliant biking and fitness value independently by cooperating with other brands and developing a sustainable cycle relation within the inner cycle;

- Level-1 Cycle: QiCycle started by providing health and sports information (I) and develops its activities related to bicycles (It). QiCycle composes blog articles about bicycles, including the riding techniques, routes, and recommended spare parts (Its). QiCycle brand searches for more diverse brand development through brand upgrade and formation (We);
- Level-2 Cycle: QiCycle co-developed the physical products of smart bikes through the funds and IoT support from mi. In addition, QiCycle collaborates with MingCycle in the co-development of physical products. QiCycle further designs the riding route, establishes riding activity promotion social group, and holding competition (Its). Thus, a virtual social group for cyclists on IoT can rescue and encourage each other, review the process after riding, understand their condition and maintain sustainable development in better health and sports value creation (We).

## 5. Results

The study's primary purpose aims to understand how brands construct sustainable partnerships (sustainable brand value chain) through value co-creation. Due to the brands of different properties conduct essential criteria of value. Therefore, the construction of the brand ecology structure is analyzed. In a brand ecology system, resources must be integrated and implemented for value co-creation between the brand engagement platform and experience configuration. The relation between the products and services for the brand engagement platform determines how the brand ecology system mops to implement a better brand ecology system.

Finally, some of the operant condition analysis for brand value co-creation from a sustainable partnership is summarized.

### 5.1. Critical Factors for Enterprises to Co-Create and Construct Brand Value Chain through Values

#### 5.1.1. Essential Criteria for Brand Value Co-Creation

1. Users are the key to brand construction and connection generation (users orient the connection between brands);
2. The convergence of brand value proposition connects the brands to generate long-term cooperation (a high level of value proposition between brands to be established with more long-term partnership);
3. Networks and mature startup environments provide favorable factors for the brand construction of enterprises' maturity of networks. The startup environment offers a new formality of brand value co-creation activity;
4. Market demand under consumption upgrade promotes the development of brand structure (the market demand under consumption upgrade pushes the brand to generate connection meeting the need while creating new directions);

5. Consumers' profound and solid brand recognition is favorable in establishing brand relations (enterprises should provide consumers with more profound and reliable brand recognition, promising in developing brand connectivity).

#### 5.1.2. Enterprises Conduct a Basic Model for Brand Value Co-Creation

1. Enterprises require a brand engagement platform, capability architecture, and experience perception configuration. Enterprises should bring the brand engagement platform as connecting point into full play;
2. The difference in value proposition forms in the brand value chain affects the value co-creation means. The more improved the brand engagement platform for enterprises is, the more complete the value co-creation activity becomes;
3. Brand engagement platform for a tandem brand value chain and branch brand value chain is the key to resource flow. According to their resource types, enterprises' brand engagement platform and capability architecture must be consistent and form the product-service relation;
4. Enterprises shall follow the types of own resources to organize the services and products in the brand engagement platform (experience perception configuration and brand engagement platform can split the resources in capability architecture);
5. Brands within the same industry can autonomously allocate resources to reach a win-win situation among brands. Enterprise within the same sector can add harmony to the brand co-creation activities.

#### 5.2. Promotion of Sustainable Partnership in Brand Value Chain Model

The people-oriented brand promotion concept conforms to social development and implements the social practice in sustainable partnership as shared objectives. The cultural quadrant development of the tandem brand value chain is the primary motivation for boosting the sustainable relation, which also drives the pursuit of brand innovation value to grow higher. The sustainable association of brand and activities will intensify while the sustainable partnership remains closer. The primary motivation for the branch brand value chain is the growth in the system quadrant, and as the development system expands more, the more participating brand niches diversify. Their level of common pursuit in value creation also elevates. Dominators of brands can orient the new value proposition and request brand niche to upgrade or search for another new niche. Naturally, niches can propose unique value propositions and orient dominator to upgrade. After all, this is a win-win combination, and both parties could quickly match and co-create value. Hence the innovation value proposition can be modified to meet the purpose of sustainable partnership to advance further.

## 6. Discussion

### 6.1. Main Findings

The study analyzes sustainable partnership through brand value co-creation and dynamic brand value chain. A co-production platform supports this model, experience perception configuration and capability architecture, which then develops the dynamic brand value chain model. is divided into a tandem and branch types, which are described by characteristics and findings after the case and in-depth interview:

1. The resource sharing type determines brands' relationships through indirect free flow under the same level of connection between the dominator and niche in a tandem brand value chain model. The dominator is positioned in the absolute leading status in a branch brand value chain while resources are directly distributed to determine brands' interaction;
2. The brand engagement platform in the tandem brand value chain is the resource connecting point for brands, while the brand engagement platform in the branch brand value chain is the splitting node for resource flow between brands;

3. In the branch brand value chain, the brand engagement platform of the niche is the composition of the brand engagement platform for the dominator and works as an independent engagement platform;
4. Brands in the tandem brand value chain share the same experience perception configuration but do not share the same experience perception configuration in the branch brand value chain due to the difference in the brand industry;
5. In the tandem brand value chain, experience perception configuration is the shared value perception between the niches and dominator, which forms the venue for brewing brand value creation. The more activities are circulating in brands, the faster the growth for value innovation and change becomes;
6. The unified value proposition in the branch brand value chain replaces the common experience perception configuration, and more niches are joining to strengthen the expansion of the value proposition;
7. In the spiral cycle of ISD, the left quadrant (quadrant I, We) triggers the tandem brand value chain upgrade. When people's inner desires and beliefs rise, it is bound to start a new level of demand and then drive brands to create new products, services, and new systems (right quadrant It, Its). Brand value in the tandem brand value chain is complementary, and the virtual integration of critical brands provides consumers the latest knowledge and the ideal supply channels. The relationship between brands is based on the common idea of an equal relationship;
8. In the spiral cycle of ISD, the upgrade of the branch brand value chain is initiated through the anthropomorphization of key brands and the left quadrant. However, the relationship between its value chains is expanded. Key brands can find several different types of niche brands to develop in other areas. Therefore, the critical brand upgrades by its technology and culture. The niche brand upgrades in its market and is drove by its customers' internal and cultural needs.

#### 6.2. Contribution and Novelty

Most studies regarding brand co-creation emphasize the green cycle or the consumer-oriented B2C relation. The study validates the dynamism of the brand value chain through sustainable integral design theory to analyze the sustainable partnership between brands (B2B) in depth.

1. When validating the tandem band value chain through ISD, the studying findings show that the brand of dominator and orient the new value proposition while requiring niche brand to upgrade or search or new niche alternatively. Naturally, niche can propose a new value proposition to lead the dominator to upgrade to sustainable value creation;
2. After validating the tandem brand value chain through ISD theory, the results show positive growth in each quadrant when the brand value chain is on a roll. The lower-left cultural quadrant is the most critical dynamic twist. In other words, when the tandem brand value chain pursues a higher level of brand innovation value, the sustainable relationships and activities of the brand will increase intensity while the sustainable partnership stays closer;
3. When validating the branch brand value chain with ISD theory, we see the case mi as a human being and place it in the quadrant UL (I) for verification. When the dominator brand (mi) constantly expands (from I to Bigger I and then Greater I), the case mi on the outer circle grows. The QiCycle on the inner cycle can jointly present the sustainable partnership and continue the innovation. The partnership is an independent and common-good chain cycle. The lower right quadrant "Systems" is the most crucial dynamic twist. In other words, with the expansion of the branch brand value chain, the more diversified and systematic platforms can inspire more niches to join, who also pursue a higher level of value innovation, so the more robust the relationship of sustainable partnerships will be;

4. Enterprises' execution of managerial decisions must consider the sustainable value and implementation of social responsibility (CSR). For example, Live-Well fulfills the pursuit of corporate social responsibility, which substantially improves brand image and adhesion and saves costs due to the supplier sharing of upstream/downstream resources;
5. Whether it is the tandem brand value chain's intrinsic meaning and cultural identity or the branch brand value chain, it is the driving force to start the next wave of industrial upgrading. Brands can discover or guide their customers' internal needs through more dialogue and participatory observation to respond to market changes earlier and gain an advanced advantage.

### 6.3. Limitation and Future Research Orientation

1. The establishment and sustainability of brand partnerships must be premised on the assumption that each brand is willing and able to make changes and innovate in response to market changes. If this assumption does not hold, then backward brands will disappear from the market, and the relationship between brands will automatically disappear;
2. We analyzed four brands (divided into two sets) intensely, limited by time and scope of research. This limit may affect the development of ISD's cycle type. More case studies will find more dynamic brand value chain models in future works and improve the operational analysis for brand value co-creation in sustainable partnership;
3. Through ISD cycle analysis, we discovered that a sustainable partnership requires an increasingly healthy development ecology. Enterprises must invest in more resources to cope with the social growth trend of pursuing value creation. Hence, the Society 5 super-intelligent society development proposed by Japanese scholars will maintain more fields for the criteria of the sustainable partnership and will conduct more search in more areas.

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