
Transforming Strategy into Sustainable Business Models for Consortia in Emerging Industries: A Study of Cakra Donya Consortium

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Abstract

The Cakra Donya Consortium is a collaborative platform for brands interested in Misel, presenting a novel framework for participating brands that necessitates a suitable business model for sustained operation. This research presents a customized business model tailored to the consortium's unique requirements. The proposed model emphasizes two core activities within the Cakra Donya Consortium: Collaborative Sustainable Product Research and Development (R&D), and Collaborative Marketing. These activities are strategically crafted to capitalize on the tangible and intangible resources shared among consortium members. Moreover, the proposed organizational structure advocates for a flat hierarchy, ensuring unrestricted membership and empowering members to contribute to program formulation under a legally binding agreement. These initiatives are geared towards achieving desired outcomes, including accelerating co-product innovation and fostering sustainability-oriented brand knowledge across consortium members and affiliated entities, thereby reaching a broader consumer base.

Keywords: *Business Model; Co-branding; Consortium Model; Sustainable; Sustainable Products.*

INTRODUCTION

In the early 21st century, a notable trend emerged within the fashion industry, characterized by collaborations between renowned fashion retailers and high-end designers to unveil exclusive and limited co-products. This collaborative approach gained significant traction around the year 2000, highlighted by the partnership between Adidas, a prominent sports merchandising brand from Germany, and the world-renowned fashion designer Yoji Yamamoto, creating the casual clothing brand Y3 (Jang, 2006). This trend has since expanded beyond the realm of fashion, with collaborations often extending to companies from non-fashion sectors such as automotive, technology, and even home appliances. Bell Society, a pioneering waste-to-material start-up, is keen to adopt this strategy. Their innovative bio-cellulose-based fabric, derived from the fermentation of coffee cherries and named Misel, presents a unique opportunity for collaboration. In 2021, Bell Society introduced a novel model of collaboration by establishing the Cakra Donya Consortium, intended as a platform for brands sharing an interest in delivering Misel-based finished goods to end-user customers. Alongside several firms, primarily from the fashion industry but also including non-fashion entities such as Uma Design (interior design) and Java Preanger Gunung Tilu (a coffee farmer's cooperative), Bell Society formed this consortium (refer to Table I). While some member candidates have expressed verbal agreement, formal written agreements are pending at the time of this research.

The consortium operates under bilateral Collaboration Guidelines, confidential agreements between Bell Society and each member, outlining core activities including Co-product Prototyping, Co-product Media Publication, and Co-product Exhibition. However,

the transition from bilateral collaborations to a consortium structure introduces complexities necessitating further regulation. Establishing a comprehensive consortium system involves defining organizational structure, common goals, and resource-sharing commitments that align with the interests and aspirations of all participating firms. Drawing from literature and case studies, four key aspects emerge as pivotal in consortium establishment: Common Goal & Commitment, Organization Model, Activities/Programs, and Expected Outcome. Additionally, incorporating risk anticipation into the consortium model is crucial [2-5]. These aspects serve as a guiding framework for determining member commitment, interests, and aspirations within the Cakra Donya Consortium. By analyzing these components and leveraging existing research, an appropriate business model tailored to the consortium's needs can be proposed, facilitating sustainable collaboration and mutual benefit among all stakeholders.



Figure 1. Cakra Donya Consortium Logo



Figure 2. Misel and Coffee Cherry

Previous research has extensively examined the strategic issues faced by the creative industry, but there are still some unresolved gaps. Several past studies have highlighted the importance of competitive advantage for companies in this sector but they have provided less comprehensive understanding of the strategic dynamics required to compete in a disruptive environment. A number of studies have adopted market-based, resource-based, and competitive dynamics perspectives in analyzing the creative industry. However, the integration of these various theories to produce a more holistic framework for understanding strategic issues in this sector is still limited.

Furthermore, most previous studies have focused on the context of developed countries, while research related to the creative industry in developing countries like Indonesia is still relatively scarce. Meanwhile, Indonesia is one of the countries with a significant contribution of the creative industry to the national economy, so it deserves greater attention from the academic community.

This study aims to fill this gap by providing a critical analysis that integrates various strategic theories, such as Penrose's theory, Schumpeter's theory, and the Action-Reaction Model, to understand the strategic dynamics required by companies in the Indonesian creative industry in the face of a disruptive environment. The findings of this research are expected to provide significant theoretical and practical contributions to the development of the creative industry in Indonesia. This research aims to contribute to the existing literature by providing a critical analysis of current phenomena and emphasizing the integration of Penrose's theory, Schumpeter's theory, and the Action-Reaction Model to explain the dynamics of strategies in the creative industry.

RESEARCH METHODS

The qualitative methodology, deemed most suitable for this research, unfolds in three sequential steps, meticulously designed to elicit comprehensive insights and facilitate rigorous analysis. Initially, qualitative in-depth interviews serve as the primary data collection method, meticulously probing the perspectives of stakeholders involved in the collaboration project. The research embarks on qualitative in-depth interviews, engaging stakeholders directly to glean nuanced perspectives and firsthand experiences. Subsequently, employing a descriptive coding methodology, the research navigates a blended approach that integrates deductive and inductive reasoning. This analytical framework ensures a holistic exploration of the data, allowing for both structured categorization and emergent themes to inform the analysis. Finally, drawing from the insights garnered through the preceding phases, the research undertakes the task of determining the constituent components of the business model. This involves a meticulous examination of the data to identify key elements and patterns, culminating in the formulation of a proposed model tailored to the unique context of the study.

Representatives from each brand participating in the consortium, encompassing both confirmed members and prospective candidates (as delineated in Table I), are engaged in these interviews. The selection of in-depth interviews stems from their efficacy in delving into stakeholders' insights and perceptions (Boyce & Neale, 2006). The majority of participating firms expressed willingness to partake in interviews. In sum, the qualitative methodology of this research would be conducted in three steps:

1. Qualitative In-depth Interview
2. Descriptive Coding (Deductive-Inductive Blended Approach)
3. Business Model Components Determination and Proposed Model Formulation

A. Qualitative In-depth Interview

In the qualitative phase, qualitative in-depth interviews serve as the primary method of data collection, meticulously designed to delve into the perspectives and experiences of stakeholders engaged in the collaboration project. These interviews are conducted with representatives from each participating brand, encompassing both confirmed members and potential candidates as delineated in Table I. The decision to employ in-depth interviews stems from their efficacy in facilitating a comprehensive exploration of stakeholders' views and insights about the collaboration initiative (Boyce & Neale, 2006). The majority of involved firms expressed willingness to participate in the interviews as shown in Table 1.

Table 1. Representative Of Cakra Donya Members And Member Candidates For In-Depth Interview

Company/Brand	Representative for Interview	Position
PT Kurva Lonceng Khatulistiwa (Bell Society)	Arka Irfani	Founder & CEO
UMA Design	Aurora Rintya	Designer & Owner
PT Biru Laksana Utama (Bluesville)	Respati Hafidz Budi	Co-founder
Koperasi Produsen Kopi Margamulya (Java Preanger Gunung Tilu)	Mochamad Aleh Setia Permana	Chairman
PT Nandhi Raja Nusantara (Revolt Industry)	Faiz Auda	Director of Product Design

Company/Brand	Representative for Interview	Position
CV Ginding Leather (Ginding Leather)	Diana Indriani	Owner
PT Brodo Ganesha Indonesia (Brodo)	Hamzah Pramana	Head of Product Department
PT Pijak Bumi International (Pijakbumi)	(no representative)	-

Table 1 presents the comprehensive list of mandatory questions utilized during the in-depth interview process. These questions are meticulously derived from the Key Aspects of Consortium Establishment elucidated in the preceding chapter. Structured as open-ended inquiries, they are intentionally crafted to afford interviewees the freedom to elaborate on their perspectives without constraint (Boyce & Neale, 2006). Nevertheless, the interview protocol allows for the incorporation of select close-ended follow-up questions, to be administered as needed during the interview session. These follow-up inquiries are deemed necessary in instances where responses to specific mandatory questions appear ambiguous, deviate significantly from the intended direction, or lack the requisite specificity for the deductive coding framework. Crucially, these follow-up questions are designed to align with the Deducted Coding Frame established before the interview, as outlined in Table III.

Table 2 List Of Mandatory Questions For Cakra Donya Members And Member Candidates In-Depth Interview

Key Aspect	Mandatory Questions
Common Goals	What is the purpose of your company to be involved in Cakra Donya Consortium? (Sinkovics et al., 2018)
Commitment (Resource Sharing)	What are the tangible resources that your company committed to share in the consortium's program? (Sinkovics et al., 2018) What are the intangible resources that your company committed to share in the consortium's program? (Antoldi et al., 2013)
Activities	What are the collaboration activities that your company desired for Cakra Donya Consortium? (Antoldi et al., 2013)
Expected Outcomes	What are the outcomes that your company expected by joining this consortium? (Sinkovics et al., 2018)
Organization Model	What kind of organization scheme does your company expect for Cakra Donya Consortium? (Antoldi et al., 2013)
Risk Consideration	What are the risks that your company considered when joining this consortium? (Tschorhart et al., 2005)

B. Descriptive Coding (Deductive-Inductive Blended Approach)

In this research, descriptive coding embraces both deductive and inductive methodologies, combining the two for a comprehensive analysis (Linneberg & Korsgaard, 2019). The deductive aspect of descriptive coding involves the establishment of a

predefined set of "codes" within a coding framework prior to the collection of data from the in-depth interviews (Linneberg & Korsgaard, 2019). These codes originate from the Key Aspects for a Consortium's Establishment and are augmented through extensive literature review to ensure a thorough coding framework (refer to Table III). Subsequently, this coding framework informs the creation of a structured list of mandatory and follow-up questions for the in-depth interviews. The inductive phase of descriptive coding occurs post-interview, following the analysis of interview results against the predetermined coding framework. If any data emerge that are not adequately captured by the predefined components within the coding framework, they may be categorized under new codes, thereby introducing additional components. Furthermore, a deeper analysis may be conducted to reassess the validity of the predetermined codes, potentially discarding them or substituting them with codes that better reflect the insights gleaned from the in-depth interviews.

Table 3 Deduced Coding Frame For Data Collection Framework

Key Aspects	Component Groups	Deducted Consortium Model Components
Resource Sharing Commitment	Purpose	- Sustainable Fashion as Brand Guideline
	Tangible Resources	Financial Capital (Sinkovics et al., 2018)
		Human Resource (Sinkovics et al., 2018)
		Fixed Asset Usage (Sinkovics et al., 2018)
	Intangible Resources	Technical Knowledge (Sinkovics et al., 2018); (Antoldi et al., 2013)
		Marketing Insight (Antoldi et al., 2013)
Organization Model		Business Relations (Antoldi et al., 2013)
		Legally Binding or Non-legally Binding Contract/Memorandum of Understanding (Demiryol, 2019); [9]
		Organization Structure (Ivanovic et al., 2014) (Petersen, 2022)
		Membership Duration (Consortium, 2020)
Risk Consideration		Member Involvement in Program Formulation (Muluk et al., 2019)
		Brand Identity Alteration (Tscherhart et al., 2005)
		Intellectual Rights Violations (Tóth-Czifra et al., 2024)
Activities	Collaborative Marketing	Collaborative Social Media Campaign (Garner et al., 2017)
		Joint-Selling of Co-creation Products (He & Yin, 2015)
		Collaborative Offline/Online Event
	Collaborative Research & Development	Co-creation Product Innovation Project
		Platform for Joint-Research & Development Project (Majewski, 2004); (Trott, 2017)
Third-party Manufacturing		Platform for Knowledge Exchange (Crupi et al., 2021)
		Use Fellow Members as Third-party Manufacturers
		Become Third-party Manufacturers for Fellow Members
		Gain Product Sales (Cavusgil & Zou, 1994)

Key Aspects	Component Groups	Deducted Consortium Model Components
Expected Outcomes	Marketing Outcomes	Increase Profitability in Sales (Cavusgil & Zou, 1994)
		Increase in Number of Customers (Cavusgil & Zou, 1994)
		Increase of Market Share (Trott, 2017)
Performance Improvement		Improvement in R&D Competencies (Trott, 2017)
		Improvement in Manufacturing Competencies (Sinkovics et al., 2018)
		Improvement in Marketing Competencies (Sinkovics et al., 2018)
Product Innovation		Acceleration of Product Innovation.
		Cost Efficiency and Risk Reduction in R&D (Trott, 2017)

Upon completion of the in-depth interview encoding process, a novel coding framework emerges, encapsulating the insights gleaned from the interviews. This deductive-inductive coding framework serves as the foundation for delineating Business Model Components and formulating the Proposed Consortium Model.

C. Business Model Components Determination and Proposed Consortium Model Formulation

Following the encoding of the in-depth interview results into the new coding framework, the determination of business model components ensues through a comparative analysis with existing literature and case studies. Subsequently, these components undergo rearrangement in accordance with the IPO (Input-Process-Output) Consortium Model format, adapted from the "Inputs, Process, and Output Model of Team Effectiveness" utilized in (Soklaridis, 2008) for assessing inter-professional collaboration within the health sector. This adapted model comprises three distinct segments, each encompassing specific sub-segments derived from the Key Aspects and Component Groups outlined in Table III. Once the business model components are systematically categorized within the appropriate segments and sub-segments, the completed IPO (Input-Process-Output) Consortium Model is proposed as the "Proposed Consortium Model" for the Cakra Donya Consortium.

RESULTS AND DISCUSSION

A. Purpose of Consortium Establishment

The in-depth interviews revealed three primary motivations driving the majority of consortium members and member candidates to join the Cakra Donya Consortium: (1) Collaboration Opportunity, (2) Participation in Marketing and Promotion, and (3) Production of More Eco-friendly Products. These three objectives were consistently cited by an equal number of representatives from both members and member candidates during the interviews (refer to Table IV).

Table 4 Hybrid Coding Frame For Interview Results: Purpose

Key Aspects	Key Points of In-depth Interview Responses	Number of Mentioning Members
Purpose	In-line with Company Values	3
	Collaboration Opportunity	5
	Part of Marketing/Promotion	5
	Business Development	1
	Produce More Eco-friendly Products	5
	Create Sense of Belonging of Downstream-based Brands to Misel	1

Therefore, the objectives of establishing the Cakra Donya Consortium should be outlined as follows: (1) Serving as a Collaboration Platform for Enterprises Interested in Eco-friendly & Sustainable Products, primarily in the Fashion Sector. (2) Encouraging Collaborative Innovation of Eco-friendly & Sustainable Products, Particularly Derived from Misel. (3) Collaboratively Promoting the Eco-friendly & Sustainable Products for Local and International Market Introduction. These objectives not only serve to fulfill the aspirations of the consortium members but are also crafted to embody the characteristics of a robust vision statement, as delineated in (Burke, 2011); (Kirkpatrick, 2017). When combined, these objectives form a concise two-sentence vision statement: "Cakra Donya Consortium aims to serve as a collaboration platform for enterprises to innovatively and collectively promote eco-friendly & sustainable products, fostering their recognition in both local and international markets."

B. Resource Sharing Commitment

Analysis of the in-depth interview findings reveals a cautious approach among consortium members and member candidates towards tangible resource sharing. Nearly all interviewed consortium members expressed a preference for conditional sharing of financial resources, contingent upon factors such as investor willingness, the company's financial standing during program execution, and anticipated benefits and responsibilities. Furthermore, a majority of consortium members/member candidates indicated a preference for sending company representatives to participate in consortium activities rather than committing specialized human resources. Conversely, less than half of the consortium members expressed a willingness to share other tangible resources for consortium purposes. In contrast, the majority of members/member candidates demonstrated readiness to contribute intangible resources such as business relationships, digital content, marketing expertise, and technical knowledge (refer to Table 5).

Table 5 Hybrid Coding Frame For Interview Results: Resource Sharing Commitment

Component Groups	Key Points of In-depth Interview Responses	Number of Mentioning Members
Tangible Resources	Conditional Financial Sharing	6
	Firm Commitment of Financial Sharing	1
	High-Ranking Representatives	4
	Specialized Human Resources	3

Component Groups	Key Points of Interview Responses	In-depth	Number of Mentioning Members
	Fixed Asset: Physical Store		2
	Fixed Asset: Production Site		2
	Other Current Assets: Products		2
	Conditional Physical Asset Sharing		2
Intangible Resources	Technical Knowledge		6
	Business Relations		7
	Marketing Knowledge		6
	Digital Contents		6
	Other Brand Equity Sharing		1

Based on this analysis, the consortium is recommended to stand on resources shared by its members as follows:

1. Tangible Resources

a) Flexible Budgeting-based Financial Resource Sharing

According to (Pidgeon, 2010), flexible budgeting is a budgeting method “designed to be changed in line with variations of the level of activity”. Since most of the involved brands requested that financial resource sharing should be made conditional, a flexible budgeting method could be used for Cakra Donya Consortium. This flexible budgeting method would be adjusted based on members’ actual financial situations when certain programs are executed. As the consequence, the benefits sharing of the program would also include the difference in the amount of shared financial resources as consideration.

b) Company Representatives

Following the analysis in Chapter III, the consortium members are only required to send their representatives for strategic decision-making-related activities instead of specialized human resources to be consortium program operators. Furthermore, it would be best to let brands choose their company representatives in Cakra Donya Consortium due to the relatively divisive aspirations on human resource sharing commitment. Some brands might choose to send their company stakeholders such as founders in the consortium and others might send certain company officials with specific assignments for collaboration.

2. Intangible Resources

a) Digital Content for Social Media Campaign

By definition, digital content is any digital data available for download or distribution through an electronic platform. It could be in the form of text, audio, video, graphic (logo, etc.), animation, or image (Muñoz & Puerta, 2020). Since no specialized human resources inside the consortium to conduct digital content creation, digital content sharing could be an alternative to harmonizing and standardizing the distributed content between members. However, further aspects needed to be discussed further for this digital asset sharing such as mechanism (shared cloud storage, etc.) and regulation.

b) Business Relations

Business relations data sharing is important to build a strong “relational capital” for Cakra Donya Consortium. A strong relational capital could help Cakra Donya Consortium achieve its objectives by providing more external problem-solving options, alternatives for financial resource acquisition, and different access to both local and international markets (Antoldi et al., 2013). Based on the statements from the interviewed representatives, there are certain business relations that they are already willing to share such as benefactors, vendors & manufacturers related to fashion goods, and creators &

designers. However, there could be more business relations to be shared for consortium purposes such as public/government institutions and international business partners (Antoldi et al., 2013).

c) Marketing Knowledge

Marketing knowledge is another intangible resource that almost all interviewed members are willing to share. The shared marketing knowledge could be in the form of a Marketing Concept, Structural Framework, or Strategic Principle (Rossiter, 2001). Marketing knowledge could be shared with digital platform utilization (cloud storage, e-mails, etc.), formal & informal meetings/discussions, or through certain focused training activities like on-the-job training as mentioned by (Antoldi et al., 2013). Sharing marketing knowledge would be useful to produce one of the expected outcomes of collaboration in the Cakra Donya Consortium, which is improvement sustainable products marketing capabilities.

d) Technical Knowledge

Technical knowledge mentioned in Cakra Donya Consortium context is related to Research and Development activities. Since Cakra Donya Consortium was established based on the agreement to create Misel-based product prototypes, the technical knowledge sharing would be based on Misel and its utilization. Similar to marketing knowledge, technical knowledge could be shared with digital platform utilization, formal & informal meetings/discussions, or through certain focused training activities like on-the-job training as mentioned by (Antoldi et al., 2013).

3. Desired Organization Model

For some component groups in the Organization Model aspect, the opinion of consortium members and member candidates regarding this matter is relatively diverse. For example, a legally-binding contract/consortium agreement is the option mentioned by most of the consortium members & member candidates as the establishment document for this consortium. However, it is only mentioned by three brands (Bro. do, Revolt Industry, and Java Preanger) out of seven. Moreover, it is only one mention difference between brands that are willing to be involved in consortium's programs formulation compared to the ones preferring Bell Society who formulate them al

Table 6 Hybrid Coding Frame For Interview Results: Desired Organization Model

Component Groups	Key Points of In-depth Interview Responses		Number of Mentioning Members
Agreement for Consortium Establishment	Legally Contract/Agreement	Binding	3
	Non-legally Memorandum of Understanding	Binding	2
	No Binding Agreement		1
	Undecided		1
Organization Structure	Rigid Structure	Organization	1
	No Fixed Hierarchical Organization Structure	and	4
	Campaign-based Organization Structure		1
	No Preference		1
Member Involvement	Member Involvement in Program Formulation		4

Component Groups	Key Points of In-depth Interview Responses	Number of Mentioning Members
Program Formulation	Top-down from Bell Society	3
Membership Duration	Long-Term Membership Duration	5
	Short-Term Membership Duration/Uncertain	2

On the other hand, most of the interviewed representatives inquire about the consortium having no fixed, hierarchical organization structure (Table VI). They preferred this consortium to have an organization where all of the brands are equally positioned. On the membership aspect, most of the brands do not wish to have a membership term restriction. Most of them are willing to stay in Cakra Donya Consortium as long as there are opportunities to collaborate. With such analysis, the recommendation for consortium business model components related to the organization model is as follows:

a) Legally-binding Consortium Agreement

This Consortium Agreement is recommended to replace the position of the previously made Collaboration Guideline legally-binding agreement ratified together by all members. However, this agreement should provide room for an amendment to accommodate the aspirations of consortium members that prefer this consortium to use a less rigid agreement mentioned in Chapter III. Legally-binding consortium agreement would legitimize and regulate several aspects needed for the consortium establishment, such as resource sharing commitment, organization model, rights & obligations, and even the membership termination, and organization disbandment. As for consortium activities and expected outcomes, it would be best to add them in a separate document such as the consortium's strategic plan or program document (Ivanovic et al., 2014).

b) Horizontal (Flat) Organization Structure

Based on the in-depth interview analysis, more consortium members preferred to have an organization model with less hierarchy and a flexible organization structure. Therefore, a horizontal or flat organizational structure is preferable for such purpose as shown in Figure 3. However, Bell Society must be placed as the coordinator of this consortium. This is also meant to accommodate the aspiration of Java Preanger that wanted this organization to have a structure that could “clear up the rights and responsibilities of all parties involved”.

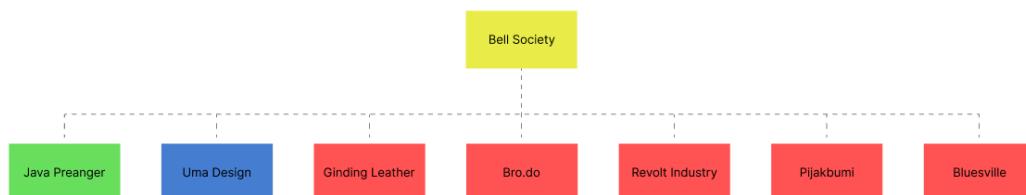


Figure 3. Proposed Organization Structure of Cakra Donya Consortium

c) Open Participation in Consortium Program Formulation

Open participation means that consortium members could be free to choose how they participate in consortium program formulation, either following the whole process or even limited to revising and ratifying only. This method is chosen to accommodate the

analysis in Chapter III where consortium members are almost relatively divided between willing to be involved and leaving the consortium program formulation to Bell Society, though there are more members who were willing to participate. However, all members must follow the audience and ratification process of consortium program documents to legitimize the programs to be executed further and make sure that all of the programs are acceptable by all parties.

d) Non-limited Membership Term

Non-limited membership means that there would be no limitation on membership term, either short-term or long-term. All Cakra Donya Consortium members would have a permanent status of membership once they got accepted. This policy would accommodate most of the members' aspirations and would collaborate inside the Cakra Donya Consortium as long as there are opportunities to do so. On the other hand, there also should be certain conditions and regulations mentioned in the consortium agreement for members to lose/remove their membership such as agreement violations or resignation.

4. Desired Consortium Activities

From the Collaborative Marketing component group, almost all interviewed members would like to conduct collaborative social media campaigns compared to other collaborative marketing activities in a deductive coding scheme (Table VII). Therefore, the consortium's priorities on marketing activities should be stressed in collaborative social media campaigns by all parties involved. On the other hand, the in-depth interview also shows certain aspirations that the deductive coding frame did not predict. For example, the in-depth interview shows that majority of consortium members are preferred to be participants in national or international events to promote their collaboration outcomes (especially the co-created products).

Table 7 Hybrid Coding Frame For Interview Results: Desired Consortium Activities

Component Groups	Key Points of In-depth Interview Responses	Number of Mentioning Members
Collaborative Marketing	Collaborative social media campaign	6
	Joint-selling of co-creation products	4
	Collaborative online/offline event	2
	Collaborative Local and International Event Participation	5
Collaborative Research & Development	Co-creation product innovation projects	6
	Platform for joint-research & development projects	5
	Platform for knowledge exchange	5
Third-party Manufacturing	Use Fellow Members as Third-party Manufacturers	2
	Become Third-party Manufacturers for Fellow Members	5
Holistic Ecosystem Formation	Integrated Ecosystem for Misel-Based Upstream & Downstream Products, From Coffee Cherry & Other Raw Material Collection to Finished Goods Showcase and/or Store.	1

In addition, there are also interview results that contradicted each other. As portrayed in Table 7, there are only two members who are willing to hand over their product

manufacturing activities to other consortium members. This is contrary to the willingness of most members to become third-party manufacturers for other members inside the consortium. On the other hand, all Collaborative Research and Development activities mentioned in the deductive coding frame are preferable for most consortium members. Therefore, there are two main activity groups that the consortium members desire: (1) Collaborative Research and Development and (2) Collaborative Marketing. Therefore, it could be said that Cakra Donya Consortium is conducting a co-branding collaboration based on the definition by (Jang, 2006).

a) Collaborative Research and Development

(1) Co-product Creation and Development Project

Co-product creation is the core of Cakra Donya Consortium activities. Whether creating a whole new item or redeveloping existing co-products created before consortium establishment, It was the main motivation of consortium members to establish Cakra Donya Consortium.

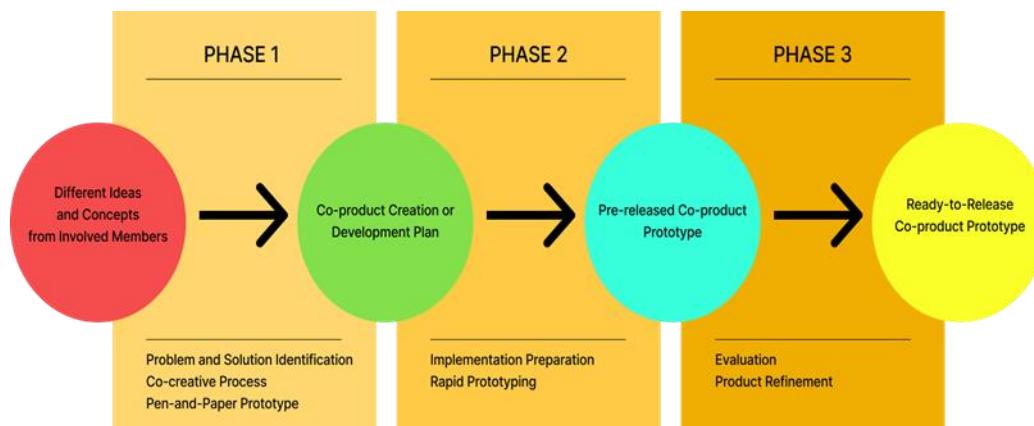


Figure 4. Co-creation Process of Co-product Creation / Development (adapted from (Göschlberger et al., 2019))

Figure 4 portrays the proposed product co-creation process based on the paper by (Göschlberger et al., 2019) with further adjustment. Some activities are directly conducted inside the consortium organization and activities are conducted by the involved consortium members outside the consortium using their resources. The activities that would be conducted inside Cakra Donya Consortium with company representatives are Phase 1 and Phase 3. This stage could be conducted since they do not need executor-type human resources, though some sub-activities might need to be conducted outside consortium (e.g.: pen & paper prototypes by the firm's designer). Phase 2, which is converting ideas to product prototypes is conducted by the involved firms with their resources and outside the consortium.

(2) Platform for Knowledge Exchange for Product Development

Cakra Donya Consortium could be a medium of knowledge exchange between brands with knowledge and experience related to Misel and other sustainable goods. Most of the interviewed members & member candidates are also open to doing so because their existing co-product creation and development with Misel might need information from other members related to their experience with Misel and other sustainable goods. Moreover, most of the interviewed members and member candidates have already agreed

to share their technical knowledge especially related to Misel and its utilization. Therefore, this proposed activity is highly possible to be accepted by members and member candidates.

(3) Platform for Joint-Research & Development Project

Becoming a platform for Joint-Research & Development (R&D) means that this consortium would be a platform for members to have joint-R&D projects on a broader scope. There are research topics outside co-product development projects such as product scalability, Misel dyeing, and Misel translucent properties that consortium members & member candidates are interested in. Furthermore, the joint-research projects might expand to non-product-related topics (e.g.: sustainable products market research) in the future if this kind of activity is proven to be successful.

b) Collaborative Marketing

(1) Collaborative Social Media Campaign

According to the in-depth interview analysis of activities desired for the Cakra Donya Consortium, members & member candidates are willing to do collaborative marketing using social media. Such commitment is also supported by the commitment of members to share useful resources for this activity (e.g.: digital content, marketing knowledge).

However, consortium members & member candidates are only willing to send their representatives instead of specialized human resources as the consortium's day-to-day program executor. To deal with this constraint, Cakra Donya Consortium could be the platform to organize the consortium's campaign on social media through the creation of social media strategic plan (Figure 5). The social media strategic plan would contain all social media campaigns that would be conducted by Cakra Donya Consortium in a given period along with their elements. As for the campaign material creation part, it would be conducted by consortium members using the resources available (either owned or the ones shared by other members) and distributed through their social media as well.

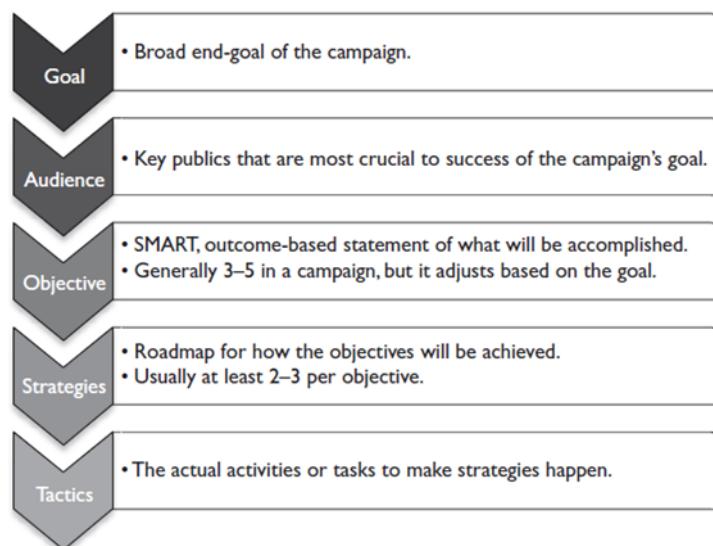


Figure 5. Social Media Campaign Elements (Kim, 2020)

(2) Collaborative Local or International Promotion Event Participation

Local and international events, especially for sustainable fashion promotion would be an effective and efficient offline marketing option for Cakra Donya Consortium. Events such as trade fairs, exhibitions, and fashion shows (for fashion goods) have been proven as resource-efficient yet convenient ways for promotion to a more specified, potential, yet wider audience. This is due to the nature of such events to attract potential customers/buyers and media exposure to the event (Gopalakrishna & Lilien, 2012); (Kellezi, 2014); (Kautish & Sharma, 2018). By collaboratively participating in such events, this activity would serve one of the consortium's purposes to "collaboratively promoting the eco-friendly & sustainable products for local and international market introduction".

5. Risk Considerations

There are different kinds of risks considered by consortium members, and all of them are different from the previously deducted coding frame. Therefore, the inductive step on this Key Aspect would change all of the codes on the Risk Consideration coding frame. The risk worried by the greatest number of consortium members & member candidates is the fear of consortium mismanagement due to inexperience in conducting this kind of collaboration (Table VIII). This consideration came up from the fact that these firms either have no experience in consortium-based collaboration or are inexperienced sustainably.

Table VIII Hybrid Coding Frame For Interview Results: Risk Considerations

Component Groups	Key Points of In-depth Interview Responses	Number of Mentioning Members
	Benefit & Responsibility-related	3
	Fear of Inexperience	4
-	Failed to Accomplish Objectives of Sustainability	3
	Suitability of Product Prototypes with Market	3

Minimize and mitigate these risks, Cakra Donya Consortium should routinely evaluate how the consortium progress toward its objectives and make continuous improvement from them (Batocchio et al., 2016). There would be two major aspects that would need to be evaluated: (1) Consortium Condition and (2) Program Results. The process begins with data collection for both aspects, followed by the Existing Condition Analysis and Performance Indicator Calculation/Scoring. The results would then be compared with the Expected Condition and Expected Performance Indicator. This comparison would determine if further action plans are needed to close the gap between existing and expected conditions/results or keep going with the existing plan (Batocchio et al., 2016).

D. Expected Outcomes

From the conducted in-depth interview, there are some findings that could help determine the consortium's parameter of success. On the expected marketing outcomes, the most frequently mentioned one is about new market segment introduction (Table IX). This result shows that these brands' priority is to have their foothold on wider market reach. On a more specific note, there are two most requested directions of this market introduction: (1) the international market and (2) their consortium peers' market segment. As for the expected member's performance improvement, there are two key points mentioned by more than half of the consortium members in the interview: (1) Improvement

in Sustainable Products R&D (Research and Development Competencies, and (2) Improvement in Marketing Competencies (Table IX).

This result is consistent with the result of the Desired Activities aspect of the consortium mentioning that the two main activity groups that the consortium members desire are Collaborative Research and Development and Collaborative Marketing. The intention on improving the brand's capability of eco-friendly products R&D is also in-line with the next expected outcome of this consortium, which is the acceleration of co-product innovation made by Misel. With the term acceleration used, the majority of the involved firms hope that Cakra Donya Consortium could hopefully help them release more sustainable products with efficiency in time and resources.

Table IX Hybrid Coding Frame For Interview Results: Expected Outcomes

Component Groups	Key Points of In-depth Interview Responses	Number of Mentioning Members
Marketing Outcomes	Gain Product Sales	4
	Gain Profitability	2
	Increase in Number of Customers	2
	New Market Segment Introduction	6
	Increase Market Share	2
	Changing Market Trend	1
Performance Improvement	Improvement in Sustainable Product R&D Competencies	6
	Improvement in Manufacturing Competencies	4
	Improvement in Sustainable Product Marketing Competencies	5
	Gain business connection	1
Product Innovation	Acceleration of Product Innovation	7
	Cost Efficiency and Risk Reduction in R&D	3

The expected outcomes suited to this in-depth interview result analysis are as follows:

A. Develop Brand Knowledge and Expand Sustainable Products Consumer Base

Brand awareness is the ability of a brand to be recognized and recalled by customers in different situations and within specific product categories in which the brand engages. On the other hand, brand image talks about customers' perception of the brand itself. Both of them are two aspects that build brand knowledge, one of the key elements in brand equity (Kotler & Keller, 2011); (Pandjaitan, 2019). As for the consumer base, it could be defined as a group of consumers within a larger consumer market to which you are attempting to sell goods or services, including current and former customers. Three of them are suitable for the in-depth interview results analysis and correlated with other consortium aspects. The desire to expand the customer base could be derived from in-depth interview results analysis which mentions that the collaborated brands want to "have their foothold on wider market reach". Developing brand awareness and image should also be included together with market expansion. It is because they are direct consequences of co-branding (Li & Wang, 2019), which is the summary of whole Cakra Donya Consortium activities.

B. Acceleration of Product Innovation

Product innovation is the direct outcome of product research and development, which is one of the proposed activities of the Cakra Donya Consortium. Indeed, these brands have already their R&D (Research and Development) projects in sustainable products before collaboration in Cakra Donya Consortium either in an independent or collaborative manner. With collaboration in product R&D and knowledge exchange in the consortium, Cakra Donya Consortium could hopefully help brands to release more sustainable products with efficiency in time and resources.

C. Improvement of Brands in Sustainable Product Research & Development and Marketing Capabilities

As previously discussed, the main theme of the proposed Cakra Donya consortium activities is collaboration, innovation of products, and promotion. By interacting between parties inside Cakra Donya Consortium to conduct these three main activities, it is expected that consortium members' capabilities could improve in marketing and R&D aspects, especially for sustainable products. The improvement of marketing capabilities and market knowledge, especially in foreign markets are two essential achievements for consortiums engaging in global market penetration activities [4]. Moreover, certain product R&D-based competencies such as time-to-market and technological competencies could also improve as the result of open innovation (for consortium members only), distributed collaboration, and knowledge-sharing strategies (Mathrani & Edwards, 2020).

Proposed Consortium Model

Figure 9 shows the Proposed Consortium Model for Cakra Donya Consortium after all of the consortium model components were rearranged according to the component groups according to IPO Consortium Model. Aside from the component group-based rearrangements, the consortium model components are also tagged in different colors. The color tagging portrays the connectivity of consortium components specified for the Cakra Donya Consortium case. The color tagging would provide a connecting view of consortium model components from the Input to Output section based on the two main activities of the Cakra Donya Consortium: product innovation and marketing. As for the General Consortium Model Components, it is meant for the components that could support both marketing and product innovation. This connecting view could provide wider insight into how the consortium programs should be run based on the resource shared and the expected outcome. Furthermore, the Proposed Consortium Model has no third-party manufacturing

sub-segment which was present on the Deducted Coding Frame. This is due to the in-depth interview results analysis indicating that most consortium members are not keen in handing over manufacturing orders to other members (Chapter III). Therefore, it would be concluded that collaboration inside Cakra Donya Consortium would focus on product R&D and marketing (especially promotion of co-created products from collaborative product R&D activities). Further activities such as co-product small-scale/large-scale production or co-product selling would be left to the involved brands with separate agreements outside Cakra Donya Consortium.

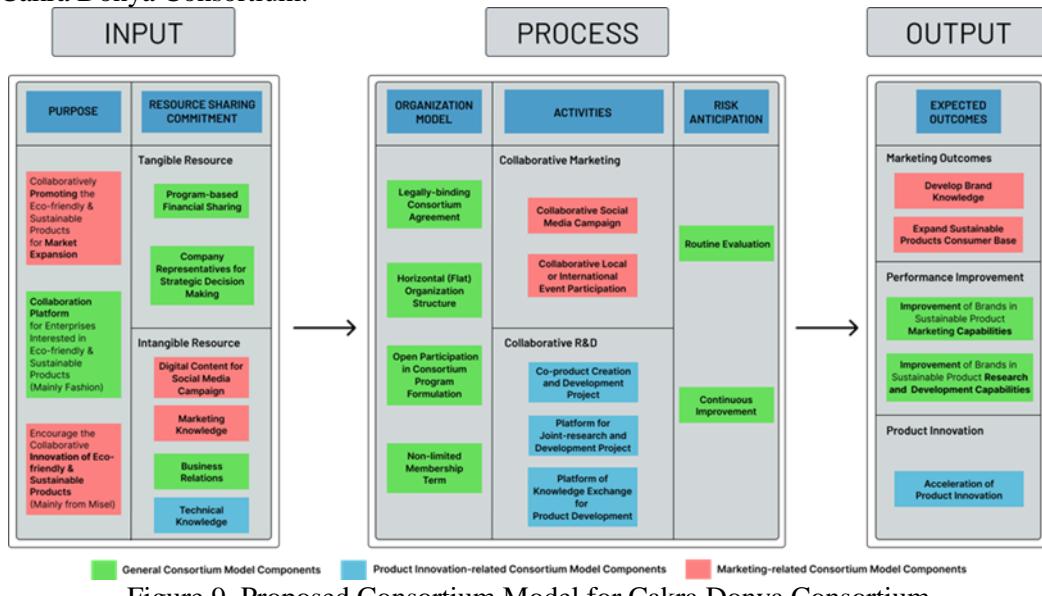


Figure 9. Proposed Consortium Model for Cakra Donya Consortium

Furthermore, organizational changes within the Cakra Donya Consortium are recommended. It is advised to replace the existing non-legally binding Collaboration Guideline with a legally-binding Consortium Agreement. Additionally, establishing a horizontal organizational structure with Bell Society assuming leadership is recommended, fostering a less hierarchical yet well-controlled collaboration environment. Consortium members should be actively involved in formulating consortium programs to ensure their meaningful contribution. Moreover, to steer the consortium towards these outcomes, it is advisable to conduct routine evaluations and implement continuous improvements. All of these measures are essential to adhere to the Key Aspects of Consortium Establishment (Ivanovic et al., 2014); (Sinkovics et al., 2018); (Antoldi et al., 2013); (Tschorhart et al., 2005).

CONCLUSION

Based on the findings of this research, it is recommended that the Cakra Donya Consortium focus on two main activity groups: (1) Collaborative Research and Development and (2) Collaborative Marketing. The Collaborative Research and Development efforts should prioritize sustainable co-product creation and development projects, supported by various activities. Conversely, the Collaborative Marketing activity group should concentrate on market introduction, particularly to promote the sustainable products previously developed through Collaborative Research and Development. These activities should be facilitated by resources shared by members, encompassing both tangible and intangible assets. Ultimately, these endeavors are all geared towards achieving

the desired outcomes, namely the acceleration of co-product innovation and the cultivation of sustainability-oriented brand awareness among a broader consumer base.

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