Improving West Kalimantan's Tourism Information Center Using Value Co-Creation for E-Tourism Experience

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ABSTRACT *: This study explores the optimization of West Kalimantan's Tourism Information Center (ETIC) through value co-creation to enhance the e-tourism experience. West Kalimantan, with its unique geographical and cultural attributes, has substantial untapped tourism potential. The current ETIC system is government-operated and lacks active tourist participation, resulting in a one-sided approach that fails to fully engage and attract visitors. This study employs a value co-creation framework, emphasizing collaboration between tourists, local stakeholders, and the tourism industry to create personalized and meaningful tourism experiences. Primary needs and challenges in West Kalimantan's tourism sector identified through semi-structured interviews, focus group discussions, and open questionnaires with key stakeholders. The findings highlight the necessity for improved information management, technological infrastructure, feedback mechanisms, stakeholder engagement, and capacity building. Proposed initiatives include developing a centralized digital platform, continuous feedback loops, and training programs for local service providers. In conclusion, active tourist involvement and stakeholder collaboration are crucial for tourism success, offering a model for other regions to optimize their tourism information systems through value co-creation.*

KEYWORDS – *Value Co-Creation, Stakeholder Engagement, ETIC, Tourism Development, E-Tourism*

I.   INTRODUCTION

Tourism is crucial to the global economy, promoting cultural exchange, economic growth, and environmental awareness. According to the World Travel and Tourism Council (WTTC), the travel and tourism sector contributed US$11 billion to the Asia-Pacific economy and created 8.7 million new jobs in the region in 2022. According to BPS, in Indonesia tourism's contribution to the Gross Domestic Product (GDP) consistently increased yearly since 2013, until the Covid-19 pandemic caused a decline in 2020-2021. However, post-pandemic recovery has seen a resurgence, with tourism contributing 3.6% to GDP in 2022 and rising to 3.83% by September 2023.
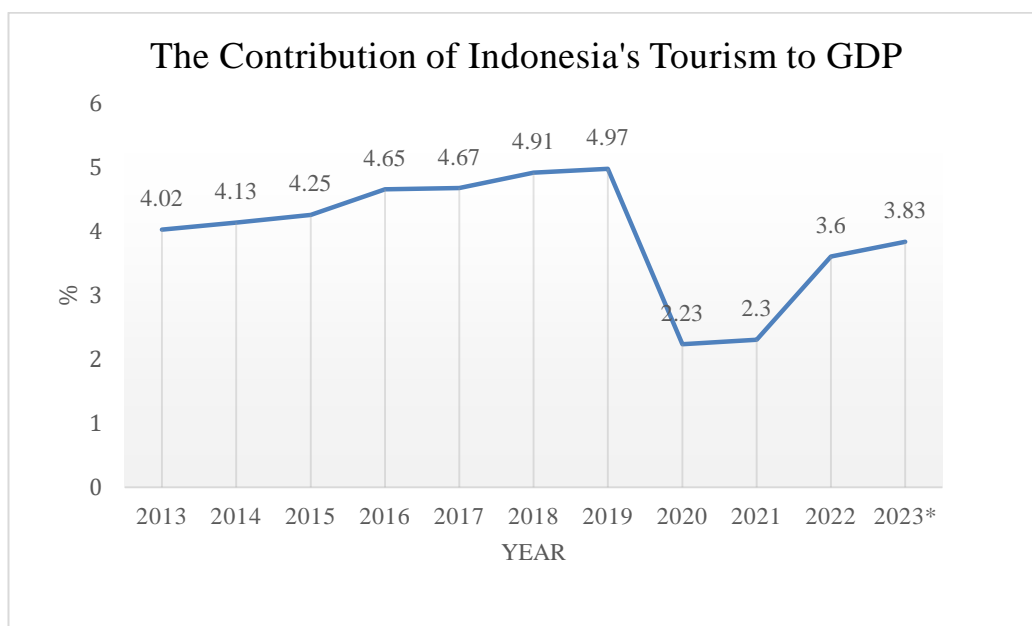

Figure I. 1 The Contribution of Tourism to Indonesia GDP

Understanding the need to use this potential, the Indonesian government started the *Bangga Berwisata di Indonesia campaign*. This campaign aims to improve domestic tourism and show the country's attractions to both local and international visitors. However, the success of this campaign depends not only on the central government but also on the active involvement and creative ideas of local governments and tourism industry stakeholders (Pandjaitan, 2022). Working together is necessary to promote and keep the real character of local places, making them attractive and easy for tourists to visit.

As the third-largest province in Indonesia, West Kalimantan has a unique position for tourism development. It is famously known as the Equator City because it is located on the equator (0° latitude). The province is also home to Indonesia's longest river, the Kapuas River. Besides its rich diversity of tourist attractions that draw foreign visitors, West Kalimantan has numerous entry points for international tourists. There are two official land border crossings between Indonesia and Malaysia in this province. These are in the Entikong Regency, which borders Sarawak, and the Sambas Regency, which borders Lundu Biawak. These routes connect Kuching, the capital of Sarawak, with Pontianak, the capital of West Kalimantan.

In 2022, West Kalimantan introduced the e-TIC platform, an Electronic Tourist Information Center aimed at providing information to travellers. However, the current system does not fully achieve its potential. The platform's limitations are clear as it is exclusively operated by the government, making it one-sided and not tourist-centric. Tourists are not actively involved in shaping their own experiences. Furthermore, Kalimantan has not yet become a primary destination for both international and domestic tourists. From the available data until September 2023, it is evident that the primary travel destination for domestic tourist is still predominantly dominated by Java Island, commanding a share of 75.50% of the total national share. Meanwhile, Kalimantan Island contributes to a smaller extent, accounting for only 2.32% of the national share.

When looking closely at the provincial level within Kalimantan Island, it is seen that West Kalimantan gets 19.2% of tourist visits. While this is a good contribution at the provincial level, it is quite small compared to the national share, which is only 0.44%. This data shows that Java Island is still the main destination for domestic tourists, and Kalimantan Island's overall contribution is still limited.
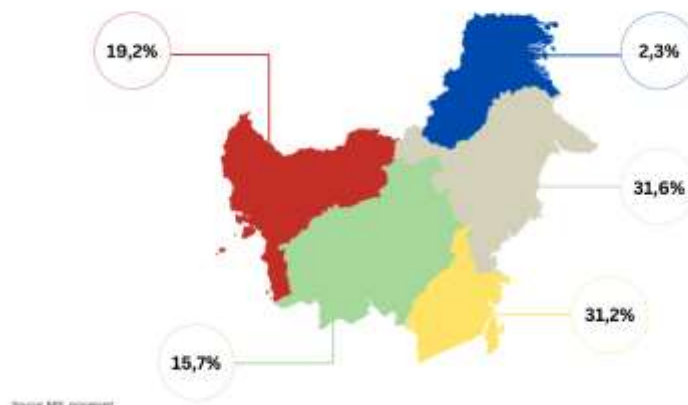

Figure I. 2 Domestic Tourist Share of West Kalimantan

These disparities underscore the potential for further development in introducing and promoting tourist destinations on West Kalimantan, to attract more interest from domestic tourist. Improving the current system, E-TIC, is important for several reasons. Local governments, tour operators, and communities can collaboratively generate value and enhance the value of their network relationships by engaging in interactions and mutual exchanges with tourists during tourism activities. This, in turn, contributes to a continuous cycle of top-tier tourism experiences.

II.   THEORITICAL FOUNDATION

1.1   Tourism

According to Tourism World Organization, Tourism is defined as the actions of individuals travelling to and staying in locations outside their usual environment for duration of up to one consecutive year. This travel is undertaken for purposes such as leisure, business and other purposes unrelated to engaging in a paid activity within the visited destination.

1.2   Value Co-Creation

Co-creation stimulates innovation through fostering collaboration and the exchange of ideas between service providers and customers [1]. Value co-creation is described as an active, imaginative, and social process where a

company and its stakeholders collaboratively engage, producing advantages and value for everyone participating [2]. This idea is based on the concept of value in use, where the roles of producers and consumers are mixed, and value is created together and shared. [3].

In the process of value co-creation, customers and providers engage in interaction to jointly generate new values. Thus, it is a dynamic interaction process in which customers and providers are mutually learning and collaborating by co-experience [4]. There are four co-phase model of the value co-creation process Novani & Kijima (2010). The initial two phase, co-experience, and co-definition, pertain to short-term concepts in describing service appreciation, whereas the last two phase, co-elevation, and co-development, involve the long-term activities essential for service innovation.

1.3   Value Co-Creation in Tourism

In tourism, the idea of value co-creation means that value is not just decided by the service provider but is also shaped by tourists' actions [6]. Tourists today are seen as active participants who create and take on roles, rather than just being receivers or observers [7]. They influence different parts of the tourism experience [8]. From a tourist's view, participating in creating ideas means shaping the travel experience before the trip, engaging during the visit, and sharing memories online after the journey [9]

Tourists' active involvement is key for effective value co-creation in tourism. When tourists participate in co-creation activities, they help design and customize their travel experiences, increasing their influence [1]. This involvement allows for valuable feedback on their expectations, preferences, and recommendations, helping tourism providers improve their services and increase customer satisfaction [6]

1.4   E-Tourism

E-Tourism is a natural step forward from traditional tourism. The term 'e-tourism system' has developed rapidly over the past years to indicate the widespread adoption and reliance on industries and services related to tourists through ICT (Gretzel et al., 2015). E-tourism, also termed electronic or digital tourism, encompasses the integration of Information and Communication Technologies (ICTs) within the tourism industry. It includes utilizing the internet and various digital technologies to advertise, market, and sell tourism products and services, along with improving the overall tourism experience [10].

E-Tourism encompasses various elements, all of which are sustained by information and communication technologies (ICT). The digital sphere of e-tourism is fundamentally driven by websites, serving as the core technology. This encompasses both the pre-travel and post-travel phases, ensuring that travelers are well-informed throughout their journey. Information acts as the lifeblood of this digital domain, with interactivity being the key paradigm. The structure of e-tourism is built around a value chain, facilitating various types of exchanges including Business-to-Business (B2B), Business-to-Consumer (B2C), and Consumer-to-Consumer (C2C). [11].

1.5   Technological Foundation on E-Tourism

Information and Communication Technology (ICT) plays a crucial role in the advancement of E-Tourism. Smart ICT is designed to comprehend and utilize experiences, acquire, and retain knowledge, and respond efficiently to new situations. In the context of E-Tourism, this technology is integral to information systems that aim to deliver better information, enhanced decision support, improved mobility, and more enjoyable experiences for tourists and service providers.

With tourists as the primary users, the objective is to assist them by predicting their needs based on various factors and offering activity recommendations, such as places to visit. It also aims to improve experiences by providing detailed, location-specific, and personalized interactive services. Furthermore, it allows tourists to share their travel experiences, which aids other tourists in making decisions, reinforces their own travel memories, and enhances their self-image and status on social networks [11]

III.   RESEARCH METHODOLOGY

3.1 Data Collection Method

The research was carried out in several cities in West Kalimantan, including Pontianak, Singkawang, Sanggau, and Bengkayang. These cities were chosen because they are the main tourist attractions in West Kalimantan. The research also took place at the Youth, Sports, and Tourism Agency of West Kalimantan and was scheduled from December 16, 2023, to April 15, 2024.

The main data for the research was collected through a series of semi-structured interviews lasting 60-150 minutes with key stakeholders, including the West Kalimantan Tourism Department and the local community. Additionally, a focus group discussion with tour operators was used to gain deeper insights for the study [12]. To make data collection more convenient, the researcher also used an open questionnaire for tourists. A judgmental sampling approach was used to select participants for the focus group discussions (FGDs) and interviews. This method allowed the researcher to choose participants based on their potential to contribute to tourism in West Kalimantan while meeting the research objectives. All interviews and FGDs were recorded,

transcribed verbatim, and thoroughly analyzed by the researcher. The interviews and FGDs were conducted and transcribed in Indonesian, the native language of the participants.

III.2   Data Analysis Method

The collected data from in-depth interviews, FGDs, and open questionnaires will be analyzed using the Thematic Analysis Method. Thematic analysis is a way to find patterns or themes in qualitative data [13] The goal is to identify important or interesting patterns, called themes, to better understand the research topic or issue.

This method goes beyond just summarizing the data; it involves interpreting and understanding it [14] According to Braun & Clarke, there are six phases in Thematic Analysis. The first step is getting familiar with the data, which means reading and re-reading it, and listening to any audio recordings. The second step is coding, which involves giving short labels to important parts of the data related to the main research question. This step is not just about reducing the data but also about understanding it. Every piece of data is labelled, and these labels are organized together.

The third step is finding themes, which are significant patterns in the data related to the main question. This involves organizing the codes to see what is similar in the data. After this, researchers gather all the coded data relevant to each theme. The fourth step is checking the themes to ensure they fit well with both the coded parts and the whole dataset.

The fifth step is defining and naming the themes. Researchers analyze each theme in detail. The last step is writing up, which is crucial in thematic analysis and most qualitative research. This involves combining the analytical story with vivid data examples to present a clear and convincing account of the data to the reader and placing the findings within the context of existing literature.

This study used an inductive method to find themes, meaning that the themes were discovered and refined based only on the data, without using any existing theories or coding systems.

IV.   RESULTS

In the case of West Kalimantan, various stakeholders have identified specific needs. These needs have been gleaned from interviews and discussions with stakeholders and are vital for understanding the challenges and opportunities.

The findings from the content analysis of FGD and interview data are presented in Table IV.1. According to Table IV.1, the conceptual framework of tourism needs and challenges consists of twelve sub-themes with six main themes. The first main theme is information management. The sub-themes of information management are information dissemination and personalization. The sub-themes of technological infrastructure, the second main theme, is integrated platform. Under the main theme of feedback and improvement mechanism are review collection and recommendations. The fourth main theme is stakeholder engagement and collaboration and the sub-themes are collaboration and community involvement. Under the main theme of capacity building and development, there are training programs and budget allocation. Last main theme is governance and policy framework, with the sub-themes written rules and regulations.

Table IV. 1 Main and Sub-themes of Stakeholder Needs in West Kalimantan Tourism

Information Management	Technological Infrastructure	Feedback & Improvement	Stakeholder engagement	Capacity Building & Development	Governance & Policy Framework
Information dissemination	Integrated Platform	Review Collection	Collaboration	Training Programs	Writen rules & Regulations
Personalization		Recommendation	Community involvement	Budget Allocation	

Source: Author, 2024

To improve the tourism ecosystem in West Kalimantan, it is important to understand the current situation and find areas that need improvement. By looking at the As-Is model and comparing it with the Should-Be model, we can plan for development. The table below shows an analysis of the West Kalimantan tourism ecosystem. It focuses on key areas based on the stakeholders need such as Information Management, Technological Infrastructure, Feedback & Improvement, Stakeholder Engagement, and Capacity Building. This analysis points out the current problems and gives suggestions for making the tourism sector stronger and more efficient.

Table IV. 2 As-Is and Should Be Model of West Kalimantan Tourism

Components	As is	Should be
Information Management	Limited awareness among West	Tourism Agency could launch

	Kalimantan residents and potential tourists about the existence and benefits of ETIC (Electronic Tourism Information Center). Current systems offer limited personalized recommendations for tourists. Information is generally generic, lacking tailored suggestions based on tourist preferences and interests.	comprehensive digital marketing and co-branding campaigns to increase awareness of ETIC among local tourists and potential domestic tourists, and ensure the information is updated regularly and verified for accuracy and completeness
Technological Infrastructure	The current online platforms (E-TIC Mbak Kepo) are fragmented and do not offer a unified experience for users.	Develop a centralized platform, ETIC (Electronic Tourism Information Center), that serves as a comprehensive, one-stop portal for all tourism-related information and services in West Kalimantan. Develop user profiles on the ETIC platform where tourists can input their interests, past travel experiences, and preferences
Feedback & Improvement	There is no approach to collect and utilize tourist reviews and recommendations. Existing platforms do not provide potential visitors with reviews. Tourists have limited interaction with official customer service platforms like Tourism Information Centers (TICs) for feedback and advice.	Tourism Agency could implement a structured and user-friendly interface for submitting reviews, including ratings, written feedback, and multimedia content (photos, videos).
Stakeholder Engagement	Local stakeholders feel excluded from promotional activities and event organizing, leading to a perception of insufficient support for local travel services, and there is a positive sentiment among stakeholders regarding participation in local activities and engagement with residents and vendors.	Engage local stakeholders, including tour operators, in promotional activities and event organizing to support and showcase local offerings, organize, and promote a wide range of local activities and experiences, including visits to traditional markets, cultural events, and community-based tourism initiatives
Capacity Building	Limited training and development opportunities for local communities such as Tourism awareness group. There are also skills gaps in areas such as customer service and digital literacy. Stakeholders express a need for more structured and relevant capacity-building programs.	Develop and implement comprehensive training programs tailored to the needs of local communities and tourism professionals. Focus on key areas such as customer service, technology use

Source: Author, 2024

The Four-phase Model of Value Co-creation, developed by Galbrun and Kijima in 2009, provides a comprehensive framework for understanding how service value is co-created through the active collaboration between customers and providers. This model highlights the dynamic and interactive processes that contribute to

enhanced service experiences and outcomes, supported by the principles of SMAC—Social, Mobile, Analytics, Cloud, and Security.

Co-definition is the initial phase where the TIC collaborates with tourists and local stakeholders to identify and define the unique value propositions of West Kalimantan. This involves gathering real-time feedback through the TIC's website and mobile app, promoting these platforms through QR codes distributed at key locations like airports, taxis, restaurants, and social media. By actively engaging with tourists, the TIC can pinpoint their preferences and expectations, setting a solid foundation for creating meaningful and authentic tourism experiences. During this phase, the TIC can conduct surveys and encourage user-generated content on its platforms. This participatory approach ensures that a diverse range of voices are heard and considered in shaping the tourism offerings. By leveraging analytics, the TIC can analyze trends and preferences, providing data-driven insights to guide the development of services that truly resonate with tourists.

The co-experience phase focuses on creating and sharing immersive tourism experiences through continuous interaction between tourists and local service providers. The TIC develops interactive content on its website and social media platforms, aiming to engage tourists with the rich culture and attractions of West Kalimantan. This phase emphasizes the importance of collaboration in curating personalized and memorable experiences that resonate with tourists and promote local heritage. Interactive features such as virtual tours and live streaming of cultural events, can be integrated into the TIC's digital platforms. These technologies allow tourists to preview and participate in activities before their visit, creating anticipation and deeper engagement. Additionally, the TIC can facilitate connections between tourists and local hosts through curated itineraries and personalized recommendations based on user profiles and preferences. The TIC can also foster partnerships with local businesses to create bundled experiences that offer a taste of local cuisine, crafts, and traditions. These partnerships improve tourist experience, support local entrepreneurs, and promote economic sustainability. By documenting and sharing these experiences through blogs in TIC or social media, the TIC amplifies the reach of West Kalimantan's tourism appeal.

Co-elevation involves both tourists and local service providers striving to elevate their contributions and improve the overall tourism experience. The TIC implements a continuous feedback loop via social media and its website, ensuring that the feedback received is promptly addressed. This phase is about fostering a culture of continuous improvement, where each interaction contributes to the enhancement of services and tourist satisfaction. Training programs for local guides, tour operators, and Tourism awareness group are essential in this phase, equipping them with the skills and knowledge to deliver exceptional service. The TIC can introduce a rating and review system on its platforms, encouraging tourists to share their experiences and suggestions. This transparency builds trust and allows for real-time improvements. Additionally, the TIC can organize regular training sessions and certification programs for local service providers, focusing on customer service excellence, language skills, and cultural sensitivity. Engaging tourists in feedback sessions or digital forums where they can share their stories and suggestions for improvement also contributes to co-elevation. By recognizing and rewarding outstanding service providers based on tourist feedback, the TIC can motivate continuous improvement and celebrate excellence within the community.

In the co-development phase, the TIC collaborates with tour operators and content creators to co-create new tourism products and services. This collaborative effort results in innovative offerings that enrich the tourist experience and support the local economy. By integrating the insights gained from previous phases, the TIC can introduce unique and sustainable tourism products that reflect the authentic of West Kalimantan. Additionally, the TIC can support the marketing and distribution of locally-made products through its digital platforms, creating a marketplace for tourists to purchase authentic souvenirs and crafts.

Table IV. 3 Co-Experience and Co-Definition

Activities	Objectives	Indicator	Initiatives
Developing a TIC website for tourist feedback	To gather real-time feedback on tourist experiences	Usage rate	Develop and promote the website; integrate feedback mechanisms
Promoting TIC website through QR codes at airports, taxis, restaurants, and social media	To provide easy access to TIC resources and gather visitor preferences and feedback	Number of QR code scans and website feedback submissions	Develop a QR code linked to the TIC website; distribute QR codes at key locations and online

Creating interactive content on the TIC website and social media	To engage tourists with local culture and attractions	Number of interactions and shares	Develop interactive and engaging content on the TIC website and social media

Table IV. 4 Co-Elevation and Co-Development

Activities	Objectives	Indicator	Initiatives
Implementing a continuous feedback loop via social media and the TIC website	To continuously improve tourism services and experiences	Number of feedback received and addressed	Active social media engagement, regular feedback review meetings, monitor website feedback
Training programs for local guides, tour operators, and Tourism awareness group	To enhance service quality and tourist satisfaction	Number of trained individuals	Develop and conduct training programs on service excellence for guides, tour operators, and Tourism awareness group
Collaborating with local content creators to develop promotional materials	To attract more tourists and showcase unique local experiences	Number of promotional materials created	Partner with local content creators for videos, blogs, and social media campaigns
Co-creating new tourism products with local content creator and tour operators	To introduce new and unique tourism offerings	Number of new products developed	Collaboration projects with local content creator and tour operators; marketing new products

Source: Author, 2024

V. CONCLUSION

In conclusion, optimizing West Kalimantan's Tourism Information Center (ETIC) through value co-creation presents significant opportunities for enhancing the e-tourism experience in the region. By integrating collaborative efforts between tourists, tourism agency, tour operator, and local community, the ETIC can become a dynamic platform that addresses the current limitations of one-sided, government-operated systems. The implementation of a co-creation framework, as detailed in this study, emphasizes the importance of active engagement and feedback from tourists, ensuring that their experiences and preferences shape the offerings of West Kalimantan's tourism sector.

The key advantages of this approach include the potential for personalized and immersive tourism experiences, improved information dissemination, and enhanced stakeholder collaboration. The study's findings underscore the necessity of a centralized digital platform that unifies various tourism-related services, offering a user-centric experience that aligns with the principles of e-tourism. Furthermore, the proposed initiatives for continuous feedback loops, training programs, and co-developed tourism products aim to foster a culture of continuous improvement and innovation within the local tourism ecosystem.

However, the study also highlights certain limitations, such as the initial resistance to change from stakeholders accustomed to traditional methods and the challenge of ensuring consistent and high-quality data input from various sources. Addressing these limitations will require sustained effort and commitment from all involved parties. Future research could explore the long-term impacts of these initiatives and further refine the co-creation model to address emerging challenges in the tourism industry.

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