

Penerapan Proses Value Co-Creation Untuk Pengembangan Bisnis Marketplace Lintas Negara di Indonesia

Improving Indonesia's Cross-Border Marketplace Business Through The Value Co-Creation Process

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Abstrak

Servis sains telah menjadi perbincangan menarik dalam dunia bisnis akhir-akhir ini. Sebagai nilai dasar dari servis sains, paradigma value co-creation berfokus pada kolaborasi antar pelaku ekosistem untuk menghasilkan nilai baru yang menyempurnakan sistem saat ini. Dengan menerapkan servis sains, penyedia jasa dapat memperoleh pemahaman yang lebih baik tentang kebutuhan dan harapan pelanggan, serta nilai yang dihasilkan oleh layanan. Penelitian ini bertujuan untuk meninjau sistem bisnis marketplace lintas negara yang baru diterapkan di Indonesia dengan menggunakan konsep value co-creation. Ekosistem bisnis sistem marketplace yang baru terdiri dari penjual, pembeli/pelanggan, perusahaan marketplace, perusahaan jasa kurir, bank nasional, dan bea cukai. Sistem baru ini memperluas konsep istilah delivery duty paid (DDP) dari International Chamber of Commerce (ICC) untuk memungut bea masuk dan pajak atas pembelian barang di luar negeri. Untuk mendapatkan pengetahuan yang komprehensif tentang sistem ini, seorang informan kunci dari bea cukai diwawancarai. Studi ini memberikan pemahaman yang kaya tentang penerapan proses value co-creation dalam pelayanan public dan menawarkan model yang baru yang menguntungkan semua actor dalam ekosistem. Hasilnya terbukti bermanfaat bagi semua pelaku dalam ekosistem. Studi ini membuat rekomendasi strategi berkelanjutan kepada pembuat kebijakan dan penyedia layanan untuk meningkatkan nilai guna meningkatkan pengalaman penggunaan sistem baru, serta sebagai pendukung bagi alternatif pengambilan keputusan bagi pemerintah dan penyedia layanan untuk meningkatkan sistem marketplace lintas negara yang baru. Kajian ini baru karena menghubungkan e-commerce dengan tubuh pengetahuan di bidang servis sains, kombinasi yang jarang dibahas, terutama di Indonesia.

Kata kunci: marketplace; service innovation; service science; value co-creation

Abstract

Service science has become a significant talking point in business nowadays. As a value-based service science, the value co-creation paradigm focuses on collaborating between ecosystem actors to generate a new value that enhances the current system. By implementing value co-creation, providers can gain a better understanding of customer needs and expectations, as well as the value generated by the service. This study aims to review the newly implemented system of cross-border marketplace business in Indonesia using the value co-creation concept. The business ecosystem of the new marketplace system comprises sellers, buyers/customers, marketplace companies, courier service companies, national banks, and customs. The new system extends the concept of delivery duty paid (DDP) term from the International Chamber of Commerce (ICC) to collect import duties and taxes on the purchase of goods abroad. To gain comprehensive knowledge about the system, a key informant from customs was interviewed. This study gives a thorough understanding of how value co-creation may be applied in public service and proposes a new model that benefits all actors in the ecosystem. This study makes a

sustainable strategy recommendation to policymakers and service providers for increasing value in order to improve the new system's engagement experience, as well as an alternative decision support method for government and service providers to improve the new cross-border marketplace system. The study is novel in that it connects e-commerce to the body of knowledge in the field of service science, a combination that is rarely discussed, especially in Indonesia.

Keywords: e-commerce; marketplace; service innovation; service science; value co-creation.

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1. Introduction

International trade can be simply defined as the exchange of goods or services between two entities across a country's border. Numerous factors influence one's propensity towards importing goods and services from other countries. One of the most frequent reasons is that imported goods are often less expensive or of higher quality than domestically manufactured goods. Also, imports may be more accessible or desirable than locally produced goods, as there are frequently no viable local alternatives, necessitating importation.

People have long been practicing international trade since the era of Mercantilism in the 1600 and 1700 centuries. Mercantilism is concerned that countries should simultaneously promote exports and restrict imports to accumulate money capital, usually in the gold-style (UKEssays, 2018). Trade growth implied an improvement in Europeans' welfare, a dramatic increase in urbanization, and the injection of a new group of economic actors with novel and varied sources of income. It has also paved the way for new opportunities for governments (Unger, 2015). European mercantilists then exemplified the use of non-competitive policies as an instrument to generate revenue. Import barriers, protectionist tariffs, and artificial monopolies were omnipresently created to increase the incomes of domestic producers (Queralt, 2015).

The world is changing rapidly. The shift from the physical to the digital era has also changed the way people purchase goods and services, from conventional (face-to-face) shopping to online shopping. E-commerce is defined as the purchase, sale, and trading of goods, services, and online information using electronic and communications technology (Sergi et al., 2019). The origins of e-commerce may be traced all the way back to the first online transaction. On August 11, 1994, a man sold a "Sting" CD to his friend (Vice, 2019). This is the first instance of a consumer making a purchase from a business over the internet. Between 2000 to 2015, the importance of e-commerce grew significantly, resulting in rapid growth and worldwide recognition; e-commerce has grown to make it easier to search and purchase goods through online stores and marketplaces (Sergi et al., 2019).

Indonesia has the highest e-commerce usage rate in any country globally, with 90% of the country's internet users aged 16 to 64 claiming they are now buying online goods and services, as reported by GlobalWebIndex (Datareportal, 2019). Also, in 2018, Indonesians spent \$20.3 billion online, a rise of \$3.3 billion – or 20% – over 2017. Within the overall figure, US\$ 9.5 billion went to online purchases of consumer products such as clothes, electronics, and grocery stores, a rise of US\$ 1.8 billion from 2017 (Statista, 2018).

For international marketplaces, Indonesia has always become a favored country for investing. According to App Annie's rating, the international marketplaces, Shopee, Lazada, JD.ID, Zalora, and Aliexpress are the top 5 most visited mobile shopping applications in Indonesia. As for the most visited foreign marketplace websites, SimilarWeb ranked Shopee, OLX,

Lazada, Samsung, and Traveloka as the top 5 most visited online shopping websites in Indonesia (Datareportal, 2019).

The Indonesian customs reported that 90% of the international packages entered Indonesia in 2018 are purchased from marketplaces. In 2018, the Indonesian customs also recorded a 21.89% / month increase in the value of e-commerce goods and a 10.49% / month increase in e-commerce documents submitted through The Indonesian customs' system. To keep up with the growth of cross-border online purchasing via marketplaces, Indonesian customs launched a new system in March 2020 that incorporates the Delivery duty paid (DDP) scheme. This new system will accelerate delivery and improve the accuracy of import duty and tax valuations.

This paper will delve more into the new cross-border customs system that incorporates DDP. Additionally, this paper discusses ways in which this new system might be improved. Because online shopping is growing in popularity and internet users come from all age groups, socioeconomic backgrounds, and levels of technological competence, we propose using the value co-creation approach to improve the new system, as e-commerce provides an interesting context for studying the value co-creation process (Barrutia et al., 2016). Additionally, value co-creation entails interaction between actors, which occurs in e-commerce and is particularly notable and innovative due to the absence of physical contact (Grönroos & Gummerus, 2014). However, work on value co-creation in e-commerce from service perspectives is rare (Gummerus, 2010).

2. Literature Review

2.1. Taxation on e-commerce

E-commerce offers marketplaces and supporting services so that sellers can promote and sell relatively low-value goods and services in overseas markets. E-commerce has also proved effective in enhancing export opportunities by reducing trade costs caused by distance and cross-border transaction risks, language differences, and the need for local presence (Freund et al., 2016). Stimulated by economic globalization, e-commerce growth, and the advancement of internet technology, cross-border online service has grown rapidly. The demand for overseas goods continues to rise as cross-border online services become one of society's primary consumption methods (Yue et al., 2019).

An essential component of e-commerce transactions is subject to taxes because almost all taxable purchases through traditional channels are also taxable when purchased online (Agrawal & Fox, 2017). Taxes such as import duties are usually one of the sources of tax revenue arising from all goods delivered to the jurisdiction of a government, including e-commerce (Akhmadeev et al., 2019; James, 2019). However, the clarity on taxation for e-commerce is one of the challenges faced by e-commerce (Sergi et al., 2019). Customers often find the amount of taxes they have to pay for the goods purchased overseas does not represent the optimal value. It could be either over-valuated or under-valuated. Therefore, a new automated tax system is needed to facilitate cross-border e-commerce, initiated by customs involving various stakeholders at all stages of service design (Kreos et al., 2019).

2.2. Service science and Service-dominant logic

Grönroos (2000) defines service as "processes consisting of a series of activities where several different types of resources are used in direct interaction with a customer so that a solution is found to a customer's problem." Instead of using the plural form of "services" to explain the service-dominant logic (SDL), Lusch and Vargo (2006) use the singular form of "service," indicating a process of someone doing something. SDL which was first introduced by Vargo & Lusch (2004) advocated a paradigm shift in marketing from goods-dominant logic (GDL) to service-dominant logic, emphasizing intangibility, exchange processes, and relationships.

SDL sees all actors, and more specifically, customers and firms, as doing the same thing: leveraging resources to enhance their situations or their well-being (Vargo & Lusch, 2011). In brief, "S-D logic represents a dynamic, continuing narrative of value co-creation through resource integration and service exchange that has been constructed by an increasingly large number of academics from various disciplines and subdisciplines" (Vargo & Lusch, 2017). SDL claims that value can only be produced and decided by the consumer in the 'consumption' phase and by usage or what is referred to as value-in-use (Lusch & Vargo, 2006).

Service Science has been understood to be the foundation of S-D Logic (Maglio & Spohrer, 2008; Spohrer et al., 2008). Vargo and Lusch (2008) described service science as a study that centers on the interaction of entities to co-create value in the service system. Service science aims to create a body of knowledge that accounts for the co-creation of value between entities as they associate to achieve mutual benefit (Spohrer & Maglio, 2008, 2009). Service science can help create a sustainable collaboration between the entities so that more value can be produced in an innovative service (Novani et al., 2019).

2.3. Value co-creation and service innovation

Value co-creation has become the value grounded of service science. Ballantyne and Varey (2006) defined value co-creation as "a construct that focuses on the evolution of interaction among producers and customers." Nowadays, the nature of the customer is changing from pure passive recipients of value to an active source of value (Spohrer & Kwan, 2008). The customer is the unique value maker, and the business is the value facilitator; as companies engage with customers, they can co-create value (Grönroos & Gummerus, 2014). Isolated entities are thus unable to create value. When integrated with other entities, they represent the potential value (Lusch et al., 2008).

The value orchestration platform will support and orchestrate the value co-creation process between clients and providers (Kijima et al., 2014). Value orchestration platform is "a business model that entirely emphasizes value orchestration and allows customers and providers to interact with each other and co-create new values, often using information and communication technology (ICT)" (Kijima & Arai, 2016). Novani and Kijima (2010) describe the value co-creation process in four phases: co-experience phase, co-definition phase, co-elevation phase, and co-development phase.

Digital service innovation is a major challenge for a couple of different reasons. First, companies frequently struggle to keep up with the demand for complex digital device technologies as they will expand beyond their current capacity base (Sjödén et al., 2018). Second, in digital service innovation, innovation does not occur in internal R&D laboratories; it takes place at the point of customer contact, where value is achieved through co-creation (Grönroos, 2011). If e-commerce companies are not prepared to innovate creatively, they will struggle to generate real consumer value, thereby struggling to make a profit (Kastalli & Van Looy, 2013; Suarez et al., 2013).

3. Research Methodology

To perceive a complete picture of this new system of Indonesia's cross-border marketplace, we employ an exploratory study with the qualitative approach. Due to the covid-19 pandemic, an in-depth interview was conducted by telephone with a key informant from Indonesian customs, who is considered as one of the architects of this new system. Our key informant has been there since this new system was still only a concept until it was fully running in March 2020. In-depth interviews provide an opportunity for interviewees to respond and explain thoroughly (Saunders et al., 2007).

We could not gain access to customer interviews since the marketplace company protects the identity of their customers. As with the marketplace company interview, it was not feasible to have a telephone interview because we have not built a rapport to interview them indirectly. Considering that only one person in the population possesses the qualities to become our informant, we use the judgmental sampling technique to decide that our key informant is our only interviewee (Bryman, 2012; Neuman, 2014). A key informant is defined as a person with knowledge of the phenomenon under investigation, has recent experience of first hand in the field, and is able and willing to provide the information requested (Krause et al., 2018). When researching the adoption of e-commerce by Small Medium Enterprises (SMEs), Shemi & Procter (2018) interviewed only one informant to determine how a SME in a developing country integrated Social Media Networks (SMN) into the e-commerce adoption and entrepreneurship processes in order to increase sales through its niche market.

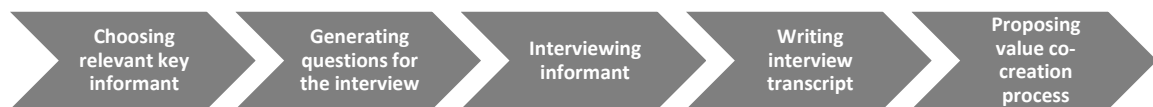


Figure 1. Research design

The proposed service innovation on the system will be built using the value co-creation paradigm of service science. The two-layered service system that consists of the value co-creation process and value orchestration platform (Kijima et al., 2014) will be combined with the three management strategies of value orchestration (Kijima & Arai, 2016) to orchestrate the value co-creation in the cross-border marketplace business in Indonesia.

4. Data Analysis and Results

4.1. Comparison between the conventional system and the new system with DDP scheme

The previous customs system had no link between the marketplace and the customs systems for the marketplaces imported goods. Customs did not know how much the transaction price for the customers' products on the market was. When the goods have arrived in Indonesia, customers have to pay for import duty and taxes based on the transaction price and the freight (delivery fee). Since customs could not access the transaction details until the taxpayers declared and handed in the invoices, customs will email the customers about the price. If customs do not receive the confirmation email for a certain period, then the import duty and taxes will be valued based on the identical goods found on the internet; this can result in a less accurate valuation. Moreover, this process also will delay the delivery process to the customers.

"Before 2015, cross-border e-commerce business was still at the normal stage. It's all started when e-commerce was rising and reached a peak in the year 2018. Most of the goods sent by courier service were purchased from the marketplaces."

Delivery duty paid (DDP) is one of the terms in the incoterms, the world's essential terms of trade for the sale of goods published by the International Chamber of Commerce (ICC). The term in DDP requested the customs formalities for export and import, as well as all customs duties, taxes, and other charges payable on export and import of the goods, and the cost of their transportation, paid prior to delivery.

"This new system has been running since March 2020, and so far, only one marketplace collaborates with us. This marketplace collaborates with us voluntarily, since there is still no mandatory rules require them to collaborate in this new system."

The marketplace system will link up with the Indonesian customs system in the new system. The marketplace will provide information regarding the type of goods, the quantity of the goods, transaction price, as well as the delivery fee paid by a customer. The marketplace will accurately calculate the import duty and the taxes and collect it from the customer. Thus, the

customer not only will pay for the price and the delivery fee of the goods, but they also will pay for the import duty and the taxes. Once the customer has paid all the fees, the marketplace will notify the Indonesian customs system and automatically send the electronic invoice (e-invoice). With e-invoice, access for sellers or buyers to invoice editing is limited, and the customs authorities may directly obtain a computed result and enforce correct taxation, which would result in an improvement and efficiency of the taxation process (Chu et al., 2014). When the goods arrive in Indonesia, the process of customs valuation can be shortened. Later, the duty and the taxes collected from the customers will be transferred by the marketplace company to the courier service who will transfer to the bank.

"Due to the legal aspect of the marketplaces, they still can not make the payment to the bank for the import duty and the taxes they collected. It is still unclear the status of marketplaces. They are not the importer; they are not the owner who possess the goods either. They simply provide the platform for e-commerce. The courier services or Indonesian Postal Service still holds the responsibility for the payment to the national bank."

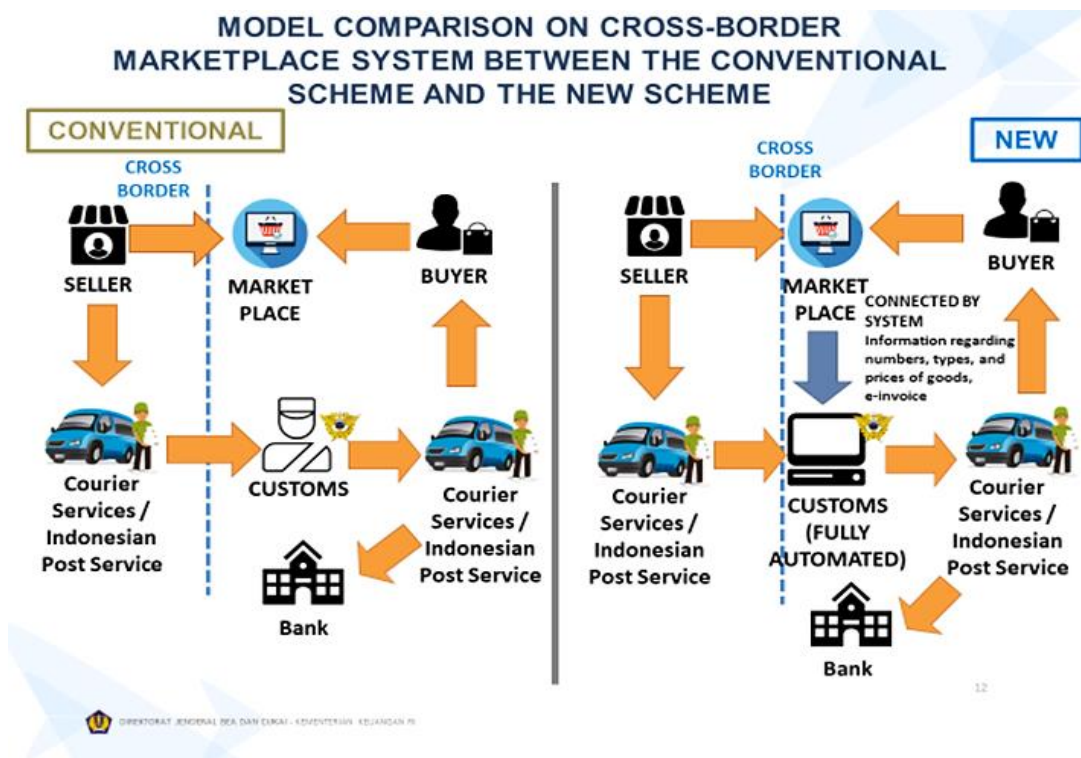


Figure 2. Comparison between the old system and the new system
 (Source: Indonesian Customs)

The service innovation carried out by Indonesian Customs has gained recognition from The World Customs Organization (WCO), printed in the WCO Guidelines for the Immediate Release of Consignments by Customs. The innovation has also set an example to follow for other countries.

"We have received recognition from the WCO for the data sharing with the marketplace... The idea was not coming from WCO or other countries. We developed the system after reviewing that 90% of the cross-border e-commerce goods were purchased from marketplaces."

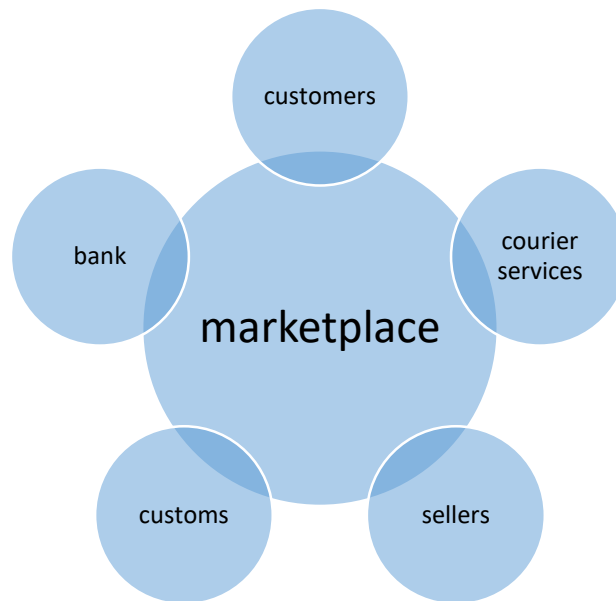


Figure 3. Business ecosystem of cross-border marketplace in Indonesia

As seen in figure 3, the new cross-border marketplace system's business ecosystem is comprised of sellers, customers, banks, courier services, and customs. A business ecosystem can be described as an economic environment supported by interaction and a strong foundation for achieving specific goals (Moore, 1996). Vargo and Lusch (2004) claimed when service is combined with the business ecosystem concept, it can establish a robust understanding of the underlying phenomena in the business. However, as our informant revealed, there is still a lack of collaboration from Indonesian marketplaces, as there is only one marketplace that participates in the new cross-border marketplace system. This has been one of the most difficult aspects of improving this new system. Whereas, according to Hartigh et al. (2006) and Moore (2006), in the business ecosystem, each ecosystem's member needs to depend on each other to co-evolve and be successful. Apparently Chen et al. (2018) also discovered a lack of value co-creation in China's e-commerce services while doing their research.

4.2. The two-layered service system

With the rapid growth of e-commerce in Indonesia and the rise of information and communication technology (ICT), new service businesses have grown in importance. World's new service businesses such as Amazon, iTunes, and Rakuten all share a fundamental characteristic: they serve as a platform for orchestrating and facilitating value co-creation between customers and suppliers, in which customers and providers interact and co-create new values. This platform is called "the value orchestration platform" (Kijima & Arai, 2016).

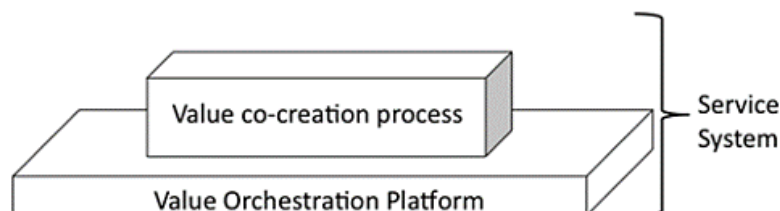


Figure 4. Two-layered Service-system Model (Kijima & Arai, 2016)

As illustrated in figure 4, Kijima & Arai (2016) developed a "two-layered service-system model" in which the first layer represents the process of value co-creation between the service system's actors and the second layer represents the value orchestration platform that facilitates the value co-creation process. The new cross-border marketplace system will serve as a value orchestration platform, as it connects customers and providers inside the business ecosystem. The platform invites customers and providers to experience the service system and facilitates and orchestrates the co-creation of new value between providers and customers.

There are four phases in the value co-creation process to co-create a new service value. The first two phases, co-experience, and co-definition are relatively short-range terms for defining service appreciation, while the final two phases, co-elevation, and co-development, relate to the long-range activities needed for service innovation (Kijima & Arai, 2016).

In co-experience, customers and providers may still have not found what each other needs. As customers, they might expect a certain degree of service they will receive from the providers. As providers, they still have no idea what kind of service the customers expect. Each of them still keeps the information in their internal model away from each other. The second phase is co-definition, whereas, at this phase, they already shared their internal model by co-experiencing the service system to define a new value of the service. The next phase is co-elevation. In this phase, driven by the customers' needs, both sides' new greater definition of value will elevate the service system to the next level. The last phase is co-development, which focuses on the co-innovation created by the cooperation between the different actors (Novani et al., 2019).

4.3. The value co-creation process and the three management strategies

Throughout the process of value co-creation, customers and providers collaborate and co-create new values. Value co-creation interaction is an active, innovative, and social process centered on the collaboration between the provider and the customer, which the providers initiate to create value for the customers (Kijima & Arai, 2016). Appropriate management strategies are needed to support the value co-creation process. Involvement, curation, and empowerment are the three management strategies needed by the platform to support the value co-creation process, as shown in figure 5.

The co-experience phase occurred when customers and providers were experiencing the conventional marketplace system. The inaccurate customs duties and tax valuation and the delay in the delivery process due to the customs process are some of the difficulties they experienced.

Based on the difficulties that customers and providers experienced, then they define the need for a faster way to deliver the goods and the more accurate valuation for the customs duties and tax. Thus, this process leads to the co-definition phase.

"The collaboration in this new system will ensure the goods will arrive faster to the customers. Another benefit is the more accurate tax valuation. Those will become the new selling points for the marketplace companies."

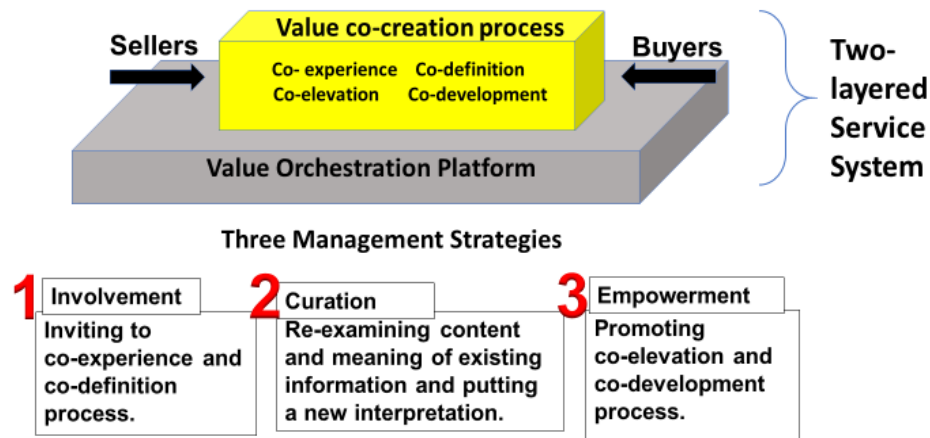


Figure 5. Value Orchestration Business Model (Kijima & Arai, 2016)

Fast delivery of the goods and accurate taxation will attract more customers to join “on board” to the value orchestration platform, in this case, is the marketplace. As more customers are aboard, more sellers will join as the platform can bring fortune. This involvement strategy subsequently will attract other marketplaces which not have to collaborate in this new system to employ this new system.

Kijima & Arai (2016) explained curation as a highly proactive and selective value orchestration approach that collects, selects, analyzes, edits, and reviews the content and meaning of existing products, services, and customer and provider information to provide them with a new interpretation and meaning. The curation strategy to promote the new system of the cross-border marketplace is by changing the unpopular opinion from the community on how they deal with customs. They might think it will take longer to have the goods they purchased from abroad in front of their door. Not to mention the amount of money they have to spend on miscounted taxation. The new system will remove all those worries behind and will encourage to participate in the platform.

As for the empowerment strategy, the emphasis will be on how a platform empowers customers and providers to find each other desirable and inspire both to engage with each other. Since the new system has just recently launched, and they have not yet studied the perception of the customers, the co-elevation and the co-development phase are yet to be defined. Therefore, the empowerment strategy will be focusing on the co-elevation phase.

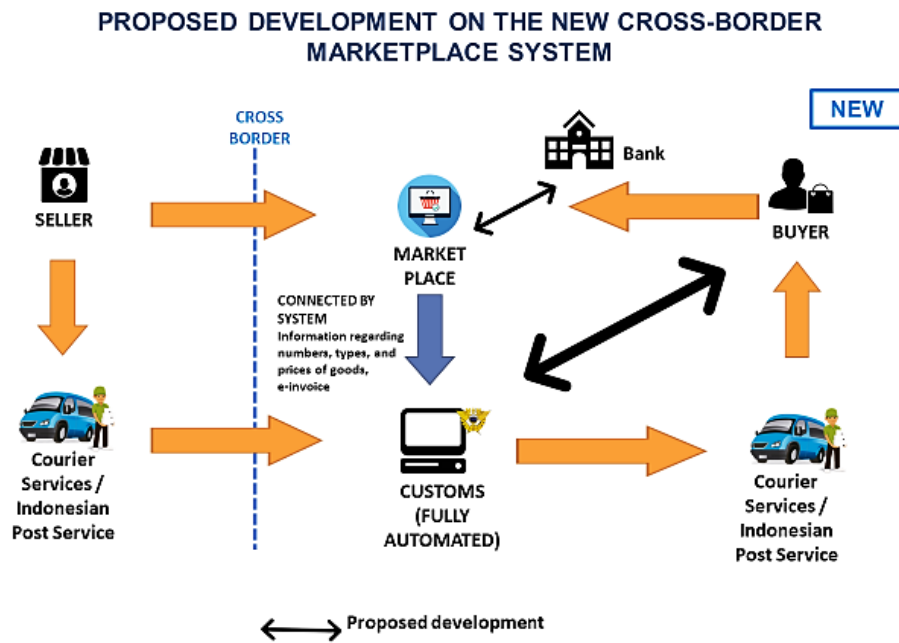


Figure 6. The new proposed model

In figure 6, we propose opening the system’s link between customs and the customers/buyers to enable them to interact with customs regarding the delivery process. Currently, customers still dial “Bravo Bea Cukai 1500225” to get the information concerning their shipment. The new network will open the channel for the value co-creation between customers and Indonesian Customs; this aligns with the research from Vargo et al. (2010), as they viewed that potential networks can also become a significant source of creativity and competitive advantage. Rather than handle the taxation paid to the courier service, we think it is better that taxation payment collected by the marketplace from the transaction made can be directly transferred to the bank. This will make the system more efficient. Surely, the legal status of the marketplace should be settled first.

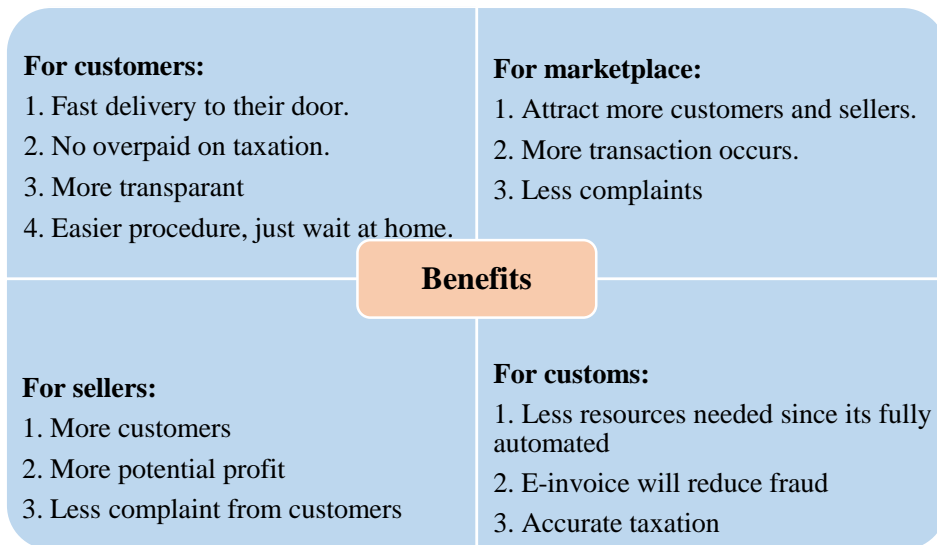


Figure 7. The Benefits of the new system

Ideally this new system will benefit all the actors in the cross-border marketplace business ecosystem like depicted in figure 7. For customers, the procedure will be simplified and quickened because they would no longer be required to email the invoice to customs. They just buy, pay, and wait for their purchases to be delivered to their door. Additionally, they are exempt from overpayment of import duties and taxes. In perspective of customs, the e-invoice will improve the accuracy of import duties and taxes valuation by reducing the risk of consumers declaring the incorrect transaction price, a practice commonly referred to as under invoicing.

5. Conclusions and Recommendations

Facing the massive growth of e-commerce business, Indonesian Customs just recently introduced a new system in the cross-border e-commerce business in Indonesia that has proven beneficial to all actors in the business ecosystem. This new system gained recognition from WCO, the International Customs Body, as it was viewed as a breakthrough in the cross-border e-commerce business. Yet, one major challenge to keep this new system sustainable is how to invite the other cross-border marketplaces on board to integrate their system with the customs'. Regulations are needed to make this new exchanging data system becomes mandatory for the cross-border marketplaces.

Value co-creation is achievable if each stakeholder is motivated to collaborate. Motivation can be developed by interaction and communication on the platform, such as motivation to acquire new knowledge, communicate with other stakeholders, and form a partnership, or motivation to feel like an integral part of developing the new system of cross-border marketplaces. The platform can act as a medium for effective communication and collaboration, enabling co-creation to occur. Based on the service science perspective, the new system needs an empowerment strategy to make better interaction between actors.

This study contributes by proposing a sustainable strategy to policymakers and service providers for increasing value in order to enhance the new system's engagement experience, as well as an alternative decision support method for government and service providers to improve the new cross-border marketplace system. The study is novel in that it relates e-commerce to the body of knowledge in the subject of service science, a rarely explored combination, particularly in Indonesia. Due to the fact that this system was released in March 2020, the perceptions of the platform's actors have not been captured. This also became a study limitation. Once perception is identified, a quantitative approach may be taken, as well as the use of system dynamics simulations to gain a thorough understanding of the new cross-border marketplace system and to develop the appropriate enhancement scenarios. These will become the future research direction.

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