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PLATFORM DEVELOPMENT TO SUPPORT TOURISM IN SOLO: SERVICE SCIENCE PERSPECTIVE

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ABSTRACT

As one of the tourism city in Indonesia, Solo tourism was not optimized at all, for example if compared to the nearest city, Yogyakarta. Service science perspective of value co-creation can be used to improve the tourism in Solo. The purpose of this research is to build a platform using information technology which will be used to accommodate the expectations of potential tourists who wants to visit Solo. This paper use service science perspective to build a model of the value orchestration platform. The result of the study is a platform that can accommodate the expectations of potential tourists who wants to visit Solo. In the future, it is expected can be adapted by the other city in Indonesia to accommodate potential tourists to come to their city.

Keyword: Solo tourism, value co-creation, value orchestration platform.

INTRODUCTION

Solo is one of the tourism cities in Indonesia which located in Java Island. It is located in the Central Java region with Karanganyar, Boyolali and Sukoharjo around Solo city. Solo has a beautiful river, namely Bengawan Solo in the eastern part of the city which is very famous and even have a song created for it. Solo with Yogyakarta is the successor of Mataram Kingdom that was divided in 1755. 16th June 1946 was a birthday of Solo which celebrate Solo as a City and mark it as the end of Kasunanan and Mangkunegaran kingdom. Solo is known as one of the tourism city in Indonesia. It has many tourism object to attract tourist to come to the city. The main tourism object in Solo is Keraton Surakarta, Keraton Mangkunegara, Kauman and Laweyan Batik village and the traditional market in the city. With some many kinds of tourism object that exist in the city, it should not be hard for Solo to attract potential tourists to come to their city. Unfortunately in the reality, so many people still confused to get the information about Solo tourism. The information is given throughout the media but it is still not enough for customers. Some potential customers who want to visit Solo still struggling to get the information. For example, customers from Bandung still struggling to get information about hotel and travel agent in Solo. "I want to go to Solo with my wife and child using train, can someone give recommendation about travel agent and hotel (ramlannarie.wordpress.com, 2010)." This is one proof that information about Solo is not completely yet to help potential customers. "I have a plan to go to Solo's Karanganyar but still confused about the tourism place I am about to visit (anasuciana.blogspot.com, 2013)." That quote means that from many information exist still cannot help the potential customers. Another example of quotes, "I want to go to Solo for writing a journal but I do not know how to get there and the recommended place. I also do not have any friends there. Which place is good for writing a journal? (anasuciana.blogspot.com, 2013)." This quote shows that there still a lack of recommendation given to the tourists like recommendation for nature

tourism object, education tourism object, culinary tourism, etc. The other problem seen from the quotes was that potential customers cannot interact with provider to ask about the information. The information given mostly in one way where the provider posted the information and the potential customers can access the information and even leave a comment but no further feedback about their needs. This quote also proves that there is lack of recommendation and feedback to get potential customers to come to Solo, "A Lot of tourism places which is very good and interesting in Central Java, but I am confused where to go with my MGMP friends, is there any suggestions? (tempatwisatamu.com, 2013). As one of the tourism city in Indonesia, Solo tourism was not optimized at all for example if compared to the nearest city, Yogyakarta. Therefore, the aim of this research is to build a platform using information technology which will be used to accommodate the expectations of potential tourists who wants to visit Solo. They can participate in the platform since there are interaction among customers and also providers as well.

Tourism in Solo

As one of the tourism city in Indonesia, Solo has so many tourism objects. There are so many types of tourism object from nature tourism, historical and educational tourism, culinary and also batik tourism. Solo has a nature tourism object. There is Tawangmangu tourism, Kemuning tea plantation, Jumog waterfall, Parang Ijo waterfall, Segoro Waterfall, Grojogan Sewu, Lawu Mountain, etc. As Yogyakarta has a tourism temple to visit like Prambanan Temple and Ratu Boko temple, Solo have a tourism temple in their city which is used by Hindu-Buddha back in time such as Sukuh temple, Cetho temple, the monkey temple, etc. Solo also has Festival and celebration to look after. We call it Kirab Pusaka 1 Suro, Sekaten, etc. Solo also held event about Batik as Batik is their city identity. Solo Batik Carnival and Solo Batik Fashion was the event that the government created to promote Solo Batik to tourists and also local civilization.

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For the culinary, Solo have their own culinary to be enjoyed. There are Nasi liwet, nasi gudeg, cabuk rambak, bestik solo, selat solo, tengkleng and sate buntel for example. For the beverages Solo have wedang asle, wedang dawet, etc. Historical value in Solo can be felt because of the famous historical tourism object. There are the famous Keraton Surakarta which is built in 1675, Keraton Mangkunagaran, build in 1757, the famous Great wall from the Netherlands era, Vastenburg and also a place that now used as where the Solo government lives, Loji Gandrung. Another historical tourism can be visited in Solo is Batik tourism in Laweyan and Kauman. Laweyan Batik first introduced in the era of Pajang in the beginning of the 16th century by Kyai Ageng Henis. The other Batik tourism in Solo is Kauman. Kauman is the heritage of the Kasunanan Surakarta Hadiningrat. Kauman was used to be living place of the people of Keraton Surakarta before.
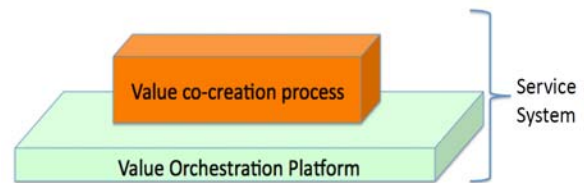
Value Co-creation

Value co-creation is identified as an active, creative and social process based on collaboration between the entities in the service system. There are four phases in service that describe the complexity of the service innovation process based on service dominant logic which is co-experience, co-definition, co-elevation and co-development. In order to create the new service value, first, both customer and provider co-experience the services process and co-define it to share an internal model through mutual understanding between them. In order to improve and/or to innovate service value, co-elevation and co-development is needed. Co-elevation is a zig-zag shape spiral up process of expectation of the customers and abilities of the providers. Co-development pays attention to co-innovate generated by simultaneous collaboration among the various entities. (Novani, Putro and Hermawan, 2014)
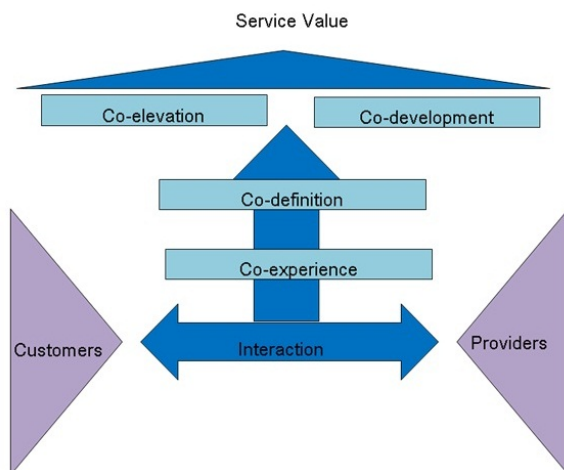
Figure-1. Value orchestration platform and value co-creation (Kijima and Mitronen, 2013).
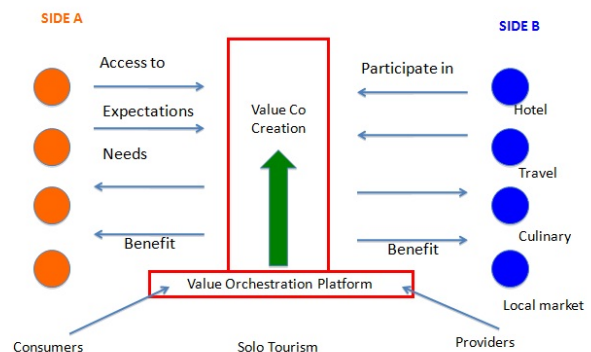
Value orchestration platform

In the value co-creation process, customers and providers interact with each other and co-create new values. The value orchestration platform invites customers and providers to get on board. It facilitates and orchestrates new value co-creation with customers and providers, but leaves the control of the process entirely in the hands of providers and sometimes customers as well (Nakamura and Kijima, 2013).

Figure-2. Value orchestration platform and value co-creation (Kijima and Mitronen, 2013).

In the value orchestration, there are three management strategies of value orchestration platform for orchestrating the value co-creation process, involvement, curation, and empowerment strategies. Involvement strategies focused on how to attract customers and providers to the platform. Curation can be defined as a proactive and selective approach that collects, select analyzes, edits, and reexamines content and meaning of existing information for both customers and providers to provide new meaning for them. Empowerment refers to how a platform empowers customers and providers so that, both sides are motivated to interact each other.

Figure-3. Model of two sided platform for Solo Tourism.

Developing value orchestration platform in solo tourism

By using service science concept in value co-creation, both of providers and customers interact each other and co-create a new value. Both providers and customers will be the resource knowledge where they can interact, share and exchange information that will benefit

both of providers and customers. To facilitate the interaction for both providers and customers, need a platform which can be accessed easily by both of providers and customers.

There is some platform already provided to give information about Solo to the customers but it is still not enough for them. For example in Solo Destination, there is no recommendation about tourism places to visit when customers come to Solo. In the existing platform, the information is given in one way, from providers to customers so that the customers cannot interact with the providers and the other customers in a discussion forum. The existing platform also not yet integrated into the transportation and accommodation services which will make it easier for customers to book transportation and hotel services if they want to come to Solo.

To see customers perception and expectation about current platform, a survey was made using a Likert Scale involving 30 random respondents. From the survey, we knew that most respondents have no interest to search information about Solo by using existing platform. They said that the existing platform didn't give them a complete information about Solo.
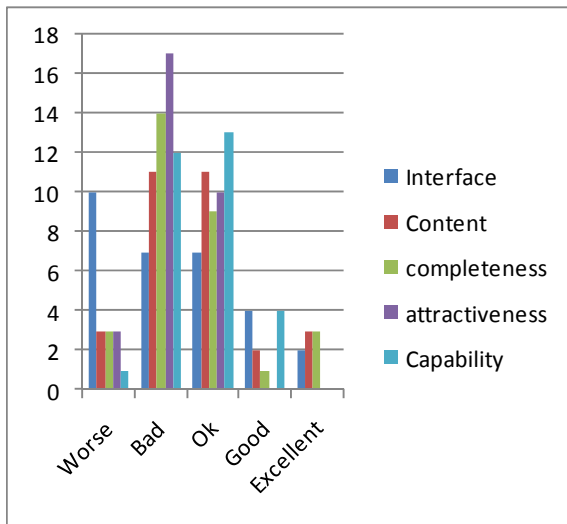

Figure-4. Customers' perception about existing website.

Their first impression is not good and they said it is because the picture that take most of the space. The main interface of the platform is not well designed because of the picture is too big and not interesting at all. Most of respondents said that they prefer a simple and interesting interface rather than the existing one. They also said that it is better classifying the tourism information like tourism place, event and also culinary and provided by its location from the heart of the city. Respondents also expect that there is some kind of recommendation for tourism like nature tourism, educational tourism, etc. They also expect some kind of tourism package that provide them with information about hotels and transportation in the platform

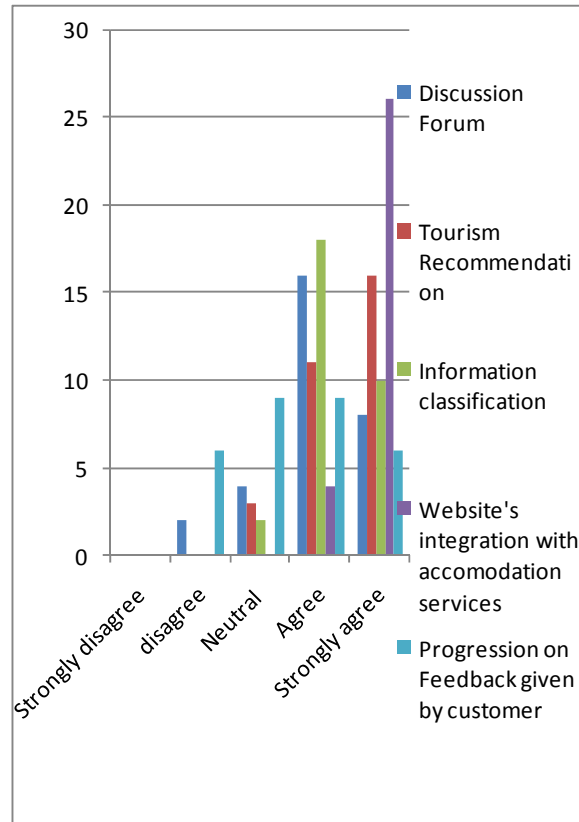so they do not need to look around again to book for accommodation.

Figure-5. Potential improvement on platform.

To fulfill the customer's expectation, the improvement of the existing platform is needed. The idea is to create a one stop web-based platform using service science value co-creation and value orchestration to meet customer's expectation. The following table and graph explain the difference between the existing platform and the proposed. The graph will explain customers' perception about proposed platform.

Table-1. The difference of existing and proposed platform.

Component	Existing platform	Proposed platform
Recommendation about tourism place to visit	No	Yes
Flow of information	One way	Two ways
Integrated to transportation and accomodation	No	Yes
Forum discussion	No	Yes
Improvement of platform	No	Yes

In the proposed platform, there are three management strategies of value orchestration platform for orchestrating the value co-creation process. First,

involvement strategy, will include all information about Solo. Tourism place, events, and culinary information will be provided. It aims to attract both of customers and providers to the platform. Second, curation strategy, will be providing an integrated tourism program. The platform will integrate with accommodation facilities such as plane, train and hotel. So the customers will give a direct link to the accommodation facilities. The last strategy is an empowerment strategy, it will be the development program of potential domestic and international tourism market through the Internet. Also there will be the developing facilities for customers who come to Solo such as transportation and accommodation.

As a service science value co-creation purpose to create a new value, we proposed an improved platform to meet customer's expectation and create a new value in services in Solo tourism. The platform will provide information that customers need about Solo. The history about Solo will give customers information about Solo such as the moving history of Solo city, the transition of government from the kingdom to the city and also there will be a fact about Solo. The differences with history will includ information about border, the number of people who live in Solo, etc. There will also tourism information including tourism place, events and culinary. Tourism page will give recommendations about the best tourist place in Solo, historical tourism like Keraton, nature tourism like Sukuh Temple, batik tourism like Kampung Batik Laweyan and Kampung Batik Kauman. Events page will give information about the events that already held in Solo and its review. Also there will be information about upcoming events that will be held in Solo. Culinary page will give information about the best culinary that can be found in Solo for example like wedang dongo, tengkleng, serabi solo,etc. The proposed platform also will provide forum page that will be a media for providers and customers to get along together. Customers can give comment, recommendation, feedback, and discuss everything about Solo. Providers will let customers know if they respond to their feedback. The customers will get to know all their feedback, critics progression. For example if customers report about there is a hole in the street, he/she will get to know their report still at admin or already in progress to the government. This platform also will integrate with accommodation facilities such as plane, train, and hotel. This proposed platform aim to give easy access for customers who want to look for information about Solo and visit the city.

ANALYSIS

By seeing the trend of the Internet user nowadays, website is the best option for both providers and customers. It can be easily accessed from any media like Android, Apple, and PC. Website will give potential customers easy access to get the information given about Solo. This website will give a travel recommendation and tourism places recommendation for customers. Previously, there is no place for interaction for customers and providers, but now, therefore in this website will provide a

discussion forum. It can be used to discuss all topics about Solo and a use for the interaction of providers and customers. Customers also can receive the feedback about their critics and suggestion progress to the providers. After giving information about tourism in Solo, customers who want to visit Solo can booked the transportation and hotel through the link given which does not yet exist in the current platform. Also the customers can decide with what kind of transportation they want to go to Solo, by using a plane or train. There will be option for hotel booking also where the customers can choose where they want to stay and the providers should also give recommendations about the hotel. The idea is to create an integrated website which is connected to facility service that can facilitate customers when they decided to come to visit Solo, such as transportation and hotel services. The website will also provide information about Solo, its tourism object, history and facts, culinary and also a forum discussion.
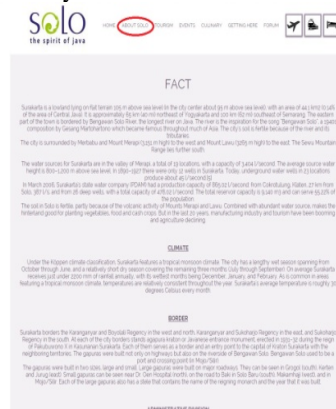

Figure-6. Prototype of Solo tourism platform: Solo pages.

Figure-6 show about the history and fact of Solo pages. It gives customers all information they wanted to know about Solo. On History page, customers will find historical information about Solo. For example about Pakubuwono, 1998 riot, etc. History gives customers information about historical events that already happened in Solo with a brief explanation about the event itself. Fact page gives customers general information they need to know about Solo like demography of Solo, Solo border, Solo government, etc.

Figure-7. Prototype of Solo tourism platform:Tourism pages.

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Figure-7 shows us about a page in the proposed platform which will give customers travel recommendation. Customers will be shown the recommended places to visit to from nature tourism, historical place, etc. There will we a brief explanation about the places for example, Surakarta Place, information about the location, when it was built are in given to provide customers with the information about the recommended place itself.
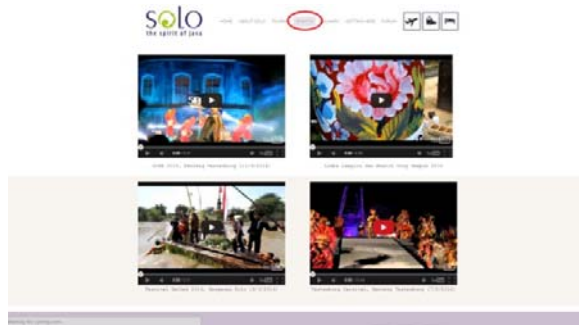

Figure-8. Prototype of Solo tourism platform:Event pages.

Figure-8 show about these events that held in Solo. As Solo has so many cultural events, these pages aim to give customers information about the events in Solo. The events itself will be provided in video form. It will make customers feel like they are watching the real event and make the event itself more interesting and providing more information to the customers. Hopefully, this will make the customers interested and attract them to come and visit Solo to watch the real events.

Figure-9. Prototype of Solo tourism platform:Forum page.

Figure-9 shows us the forum page. This page aims to facilitate both of provider and customer to interact each other. This page also facilitates customer to interact with other customer to discuss anything about Solo.

Figure-10. Integrated accomodation and transportation icon.

To get to Solo, customers given an easy access to booked for transportation and hotel using the icon showed in the upper right corner on every page like showing in Figure-10. The icon already integrated with the facility services which can be used directly by customers to book their transportation and accommodation when they decide to visit Solo. As a proposed platform is an improvement of the current platform, there will be risks and benefit of designing the platform as shown in the Table-2 below.

Table-2. Risk and Benefit of the proposed platform.

Risk	Benefit
Server's capacity is not big enough. So if that is too many user it will lead to full tracking or server busy	Customers and providers can communicate each other through discussion forum
Need a lot of database including transportation and hotel services, event and tourism place.	Travel recommendation make it easier for customers to choose tourism place they want to visit
Feedback feature which given a feedback process need an excellent synergy within admin of the platform and the departement in charge.	Classification of the information make it easier for customers to get the information they need
	Feedback feature which giving customers information progress about their feedback will make customers feel they opinion is appreciated
	Platform integration with accomodation services like transportation and hotels will make it easier for customers to arrange their travel plan
	The platform will be one stop service for customers who have interest about Solo where they can get the information and directly plan to go to Solo

CONCLUSIONS

This paper provided the concept of value orchestration platform for Solo tourism. We used website as the platform that facilitates both of customers and providers to interact each other. Figure 2 shows the protopye of the platform for Solo tourism. It will contain all information about Solo and linked to accommodation and transportation services to give customers easier access to accommodation and transportation services. They also provided with forum discussion for both parties to share feedback and information. We expect that the website will be a good platform for customers and providers to interact

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and also it will help to attract more customers to come and visit Solo in the future.

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