Experience Modularization for New Value of Evanescent Cultural Communities: Developing Creative Tourism Services in Bangkok

Wuttigrai Ngamsirijit

Abstract—Creative tourism is an ongoing development in many countries as an attempt to moving away from serial reproduction of culture and reviving the culture. Despite, in the destinations with diverse and potential cultural resources, creating new tourism services can be vague. This paper presents how tourism experiences are modularized and consolidated in order to form new creative tourism service offerings in evanescent cultural communities of Bangkok, Thailand. The benefits from data mining in accommodating value co-creation are discussed, and implication of experience modularization to national creative tourism policy is addressed.

Keywords—Co-creation, Creative tourism, New Service Design.

I. INTRODUCTION

COMMUNITY tourism has been existed in Bangkok as an attempt to benefit local communities and preserve community's culture and indigenous knowledge. However, it has been maintained locally and organized informally by not many travel agencies and tourism providers. Together with the fact that some of cultural communities in Bangkok are evanescent, Department of Tourism and Culture Sports and Tourism Department (unit in Bangkok Metropolitan Administration) have been interested in leveraging Bangkok's community tourism and enhancing its value by means of "creative tourism". As creative tourism is new concept in Thailand tourism industry, the focal situation is that they must be clear about which tourism value Bangkok communities should offer so that it can be regarded creative tourism destination and satisfied by tourists of creative tourism. Based on number of previous research works, value creation system is literally focused on the business contexts to which it can offer customers and employee's productivity and profitability [1]. Recently, social contexts tend to require a systematic value creation process to deliver the same results [2], [3]. As such, not only do administrators design the system for tangible consumption like products and services, they also have to be able to perform value creation process for intangible ones, i.e. culture. By using knowledge discovery method of data mining technique on Bangkok' cultural communities and needs of creative tourism from tourists, new value can be obtained through modularization and consolidation of their values and experiences. This paper presents value creation process for

Wuttigrai Ngamsirijit is with the National Institute of Development Administration, Bangkrapi, Bangkok Thailand (phone: +66 (0) 2375-3976 ext. 3349; fax: +66 (0) 2378-0016; e-mail: nwuttigrai@gmail.com).

cultural and tourism offerings through data mining technique and service design tool of experience journey map. The implications of the use of data mining and experience journey map for Bangkok' new creative tourism service offerings are discussed. Finally, the awareness of challenges in phase of implementation and launch of new creative tourism services in national creative tourism policy are also addressed.

II. LITERATURE REVIEW

A. Creative Tourism: Role of Experience Modularization

Serial reproduction of culture is a situation in which many tourist destinations have been made to create their tourism. It is very important to move away from this conventional value creation approach, especially when creative tourism is looking for. Mostly, traditional tourism value is given by means of core tourism activities such as accommodation, dining, traveling, and leisure activities in accordance with value chain structure of the destinations [4], [5]. It is known that this approach is suitable for cultural tourism in which cultural places are mainly of interest and sight-seeing is key roles of tourists. In post-modernism, there is tendency that the tourists need to learn and have more understanding about both traditional and modern culture in specific places they visit [6]. This leads to an emphasis on "tourism experiences" in addition to tourism structure when to create new tourism destinations.

Creative tourism must be developed by relying on how network of producers and consumers is understood and exploited [7], [8]. The established networks are also formed in order to provide creativity outcomes consequently evaluated from the aspects of service offerings and tourists. Experiential or emotional value, multisensory stimulation/involvement of senses, varieties of heritage or related activities, and kind of activity can be used to examine the creativity outcomes of service offerings. Meanwhile, tourists look at processes and post-experiential transformations including revision and learning, socialization and community, existential/experiential authenticity, i.e. individual and personal revision of activities and experiences commodified, and degree of participation in creative activities [9].

It reflects that creative tourism value must be analyzed in terms of experiential level in which value created by producers and consumers is interacted and transferred in forms of network, not chain or stream. Regarding to this, value creation must specifically analyze the experiences of tourists and ones

from service offerings to the tourists. In the field of service innovation, experiences are modularized so that it can be identified for which selective value can be delivered from which experiences [10], [11]. By using experience modularization, visibility in the tourism value network can be achieved. Fig. 1 shows an example of experience modularization from cultural assets.
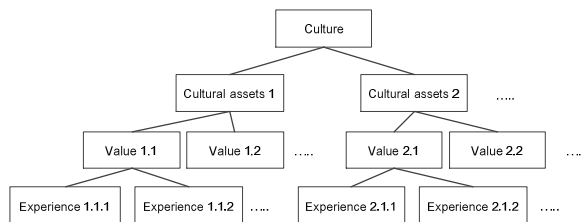


Fig. 1 Experience modularization from cultural assets

However, there might be challenges taking place for experience modularization approach to well-capture such complex effects in the network. Next section will describe how experience modularization can be exploited to capture the value of tourism and facilitate the service design of creative tourism.

B. Value Co-Creation and New Service Design

It is clearly that an identification of desired value cannot profoundly be made through techniques employed in conventional new service development (NSD) approach. Commonly, when developing new tourism products and services, product and service requirements are investigated and gathered by conducting focused groups, interviews, and consumer reports. Such methods only allow bringing a group of sample into the design process. Nowadays, inputs from consumers are preferred in forms of data and information, not opinions and ideas [12]. Based on NSD and new product development literatures, there are various attempts for exploiting the data and information in developing new value to products and services such as basket analysis, database marketing, merchandise planning, product production, and customer loyalty. Such methods have been found that they are difficult to cope with experiential aspects when performing value creation as only individual experience for each service offering can be captured [13]. There is no interrelationship among various experiences might be possible to map out for more complex value contributing to elaborated tourism experiences. Having known the features of desired creative tourism services from tourists in a deliberate manner, traditional NSD approach such as focused groups and interviews with service providers and policy makers can be leveraged. By doing this, value co-creation can be guaranteed. Finally, the visualization of creative tourism on a tool of an experience journey map can facilitate designing and finalizing tourism services.

III. RESEARCH METHODOLOGY

To achieve creative tourism value co-creation and service design for cultural communities, data of tourism behaviors and creative tourism service needs from tourists were collected by using a questionnaire survey in 6 Bangkok provinces with the potential to offer their cultural communities for creative tourism during September 2013-January 2014. The provinces include Phra Nakorn, Samphanthawong, Pom Prap Sattru Phai, Bangkok Yai, Bangkok Noi, and Taling Chan. Fig. 2 shows Bangkok province map totally of 50 provinces. The random sampling method was employed as it is hard to purposively identify tourists with creative tourism experiences. Nevertheless, the samples were preliminarily filtered by focusing on the tourism areas in which creative tourism is likely to take place or exists in little extent. The number of respondents once removing ones with incomplete and error information are totally 934 respondents consisting of 128 respondents for Phra Nakorn district, 162 ones for Samphanthawong district, 168 ones for Pom Prap Sattru Phai district, 145 ones for Bangkok Yai district, 175 ones for Bangkok Noi district, and 156 ones for Taling Chan district
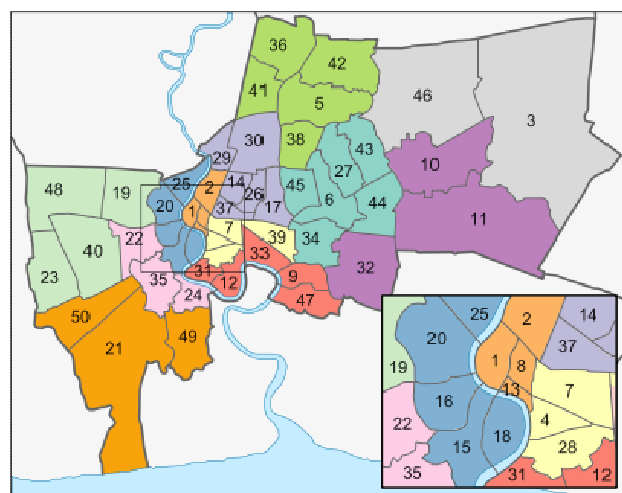
(1) Phra Nakorn; (13) Samphanthawong; (8) Pom Prap Sattru Phai;
(16) Bangkok Yai; (20) Bangkok Noi; and (19) Taling Chan

Fig. 2 Bangkok province map

Data from the questionnaire was rearranged for the data mining process. Beginning with 14 input variables and 7 output variable (Table I), the code and scale were specified. The respondents were asked to rate their preferences on those variables, except demographic ones, by using the scale of 1 to 5. It is likely this various degrees of preferences for each variable can reflect more insightful behaviors of tourists and desired creative tourism services from tourists when clusters analysis is taken place. The cluster analysis was performed by using Predixion Insight software application. It is noted that most of variables having rating scale of 1 to 5 were segmented before performing a neural networks model of tourist behaviors and desired creative tourism services variables. For

instances, the variable of activities have attributes of seeing, buying, hanging, involving, and learning. The respondents provided rating score for each attribute. The segmentation results show that there can be linkages between those attributes in pair or groups. This forms clusters of tourist behaviors associated with their tourism activities.

TABLE I
VARIABLES IN THE QUESTIONNAIRE

No.	Tourist behavior variables	No.	Desired creative tourism services variables
1	Sex	1	Types
2	Age	2	Time
3	Marriage status	3	Place
4	Attitude	4	Program
5	Value	5	Experiences
6	Aspiration in travel	6	Role
7	Cultural knowledge	7	Delivery
8	Activities		
9	Travel behaviors		
10	Providers		
11	Tourism services		
12	Communication		
13	Experiences		
14	Involvement		

IV. FINDINGS AND DISCUSSION

A. New Creative Tourism Services

The results from data mining technique in Fig. 3 show the segmentation of tourist in Phra Nakorn district. In Phra Nakorn district, it is where the Grand Palace and well-known road, Khao San Road are located. Apart from these favorite tourist attractions, there are cultural communities in which their cultural assets are about to evanescent; Ta Tien community, Banglumpu community, and Sao Chingcha community. Based on tourist behaviors and their desired creative tourism services for Phra Nakorn district, two segments of creative tourism service offerings are yielded. These segments can reflect different major needs for new creative tourism value to be offered in the district as tourists already have had experiences in culture, attractions, and people around Phra Nakorn district. As key features of creative tourism in Phra Nakron district were discovered. Next, it is feasible to design the creative tourism service for Ta Tien, Banglumpu, and Sao Chingcha community by considering the features of creative tourism value in consistent with their cultural assets.

Turning value to experiences requires induction process from the data mining results. Starting by looking at cultural assets of the communities, the list of cultural assets in these three communities are shown in Table II. The analysis and interpretation of the segments were conducted.
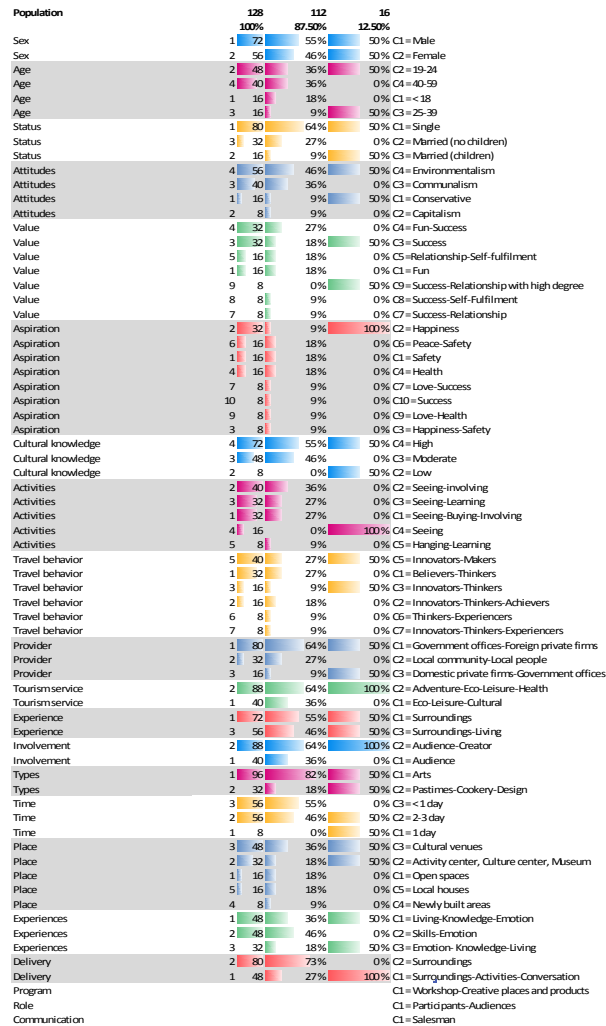
Population	128 100%		112 87.50%	16 12.50%	
Sex	1	72	55%	50%	C1=Male
Sex	2	56	46%	50%	C2=Female
Age	2	48	36%	50%	C2=19-24
Age	4	40	36%	0%	C4=40-59
Age	1	16	18%	0%	C1=<18
Age	3	16	9%	50%	C3=25-39
Status	1	80	64%	50%	C1=Single
Status	3	32	27%	0%	C2=Married (no children)
Status	2	16	9%	50%	C3=Married (children)
Attitudes	4	56	46%	50%	C4=Environmentalism
Attitudes	3	40	36%	50%	C3=Communalism
Attitudes	1	16	9%	50%	C1=Conservative
Attitudes	2	8	9%	0%	C2=Capitalism
Value	4	32	27%	0%	C4=Fun-Success
Value	3	32	18%	50%	C3=Success
Value	5	16	18%	0%	C5=Relationship-Self-fulfilment
Value	1	16	18%	0%	C1=Fun
Value	9	8	0%	50%	C9=Success-Relationship with high degree
Value	8	8	9%	0%	C8=Success-Self-Fulfilment
Value	7	8	9%	0%	C7=Success-Relationship
Aspiration	2	32	9%	100%	C2=Happiness
Aspiration	6	16	18%	0%	C6=Peace-Safety
Aspiration	1	16	18%	0%	C1=Safety
Aspiration	4	16	18%	0%	C4=Health
Aspiration	7	8	9%	0%	C7=Love-Success
Aspiration	10	8	9%	0%	C10=Success
Aspiration	9	8	9%	0%	C9=Love-Health
Aspiration	3	8	9%	0%	C3=Happiness-Safety
Cultural knowledge	4	72	55%	50%	C4=High
Cultural knowledge	3	48	46%	0%	C3=Moderate
Cultural knowledge	2	8	0%	50%	C2=Low
Activities	2	40	36%	0%	C2=Seeing-involving
Activities	3	32	27%	0%	C3=Seeing-Learning
Activities	1	32	27%	0%	C1=Seeing-Buying-Involving
Activities	4	16	0%	100%	C4=Seeing
Activities	5	8	9%	0%	C5=Hanging-Learning
Travel behavior	5	40	27%	50%	C5=Innovators-Makers
Travel behavior	1	32	27%	0%	C1=Believers-Thinkers
Travel behavior	3	16	9%	50%	C3=Innovators-Thinkers
Travel behavior	2	8	18%	0%	C2=Innovators-Thinkers-Achievers
Travel behavior	6	8	9%	0%	C6=Thinkers-Experiencers
Travel behavior	7	8	9%	0%	C7=Innovators-Thinkers-Experiencers
Provider	1	80	64%	50%	C1=Government offices-Foreign private firms
Provider	2	32	27%	0%	C2=Local community-Local people
Provider	3	16	9%	50%	C3=Domestic private firms-Government offices
Tourism service	2	88	64%	100%	C2=Adventure-Eco-Leisure-Health
Tourism service	1	40	36%	0%	C1=Eco-Leisure-Cultural
Experience	1	72	55%	50%	C1=Surroundings
Experience	3	56	46%	50%	C3=Surroundings-Living
Involvement	2	88	64%	100%	C2=Audience-Creator
Involvement	1	40	36%	0%	C1=Audience
Types	1	96	82%	50%	C1=Arts
Types	2	32	18%	50%	C2=Pastimes-Cookery-Design
Time	3	56	55%	0%	C3=<1 day
Time	2	56	46%	50%	C2=2-3 day
Time	1	8	0%	50%	C1=1day
Place	3	48	36%	50%	C3=Cultural venues
Place	2	32	18%	50%	C2=Activity center, Culture center, Museum
Place	1	16	18%	0%	C1=Open spaces
Place	5	16	18%	0%	C5=Local houses
Place	4	8	9%	0%	C4=Newly built areas
Experiences	1	48	36%	50%	C1=Living-Knowledge-Emotion
Experiences	2	48	46%	0%	C2=Skills-Emotion
Experiences	3	32	18%	50%	C3=Emotion- Knowledge-Living
Delivery	2	80	73%	0%	C2=Surroundings
Delivery	1	48	27%	100%	C1=Surrqundings-Activities-Conversation
Program					C1=Workshop-Creative places and products
Role					C1=Participants-Audiences
Communication					C1=Salesman

Fig. 3 Data mining results: Phra Nakorn district

TABLE II
LIST OF CULTURAL ASSETS

Community	Tourist behavior variables
Ta Tien	Salted fish market, Old building, Traditional Thai medicine, Traditional Thai massage
Banglumpu	Musician house, Thai instruments, Traditional Thai cuisine, Khao San Road
Sao Chingcha	The Giant Swing, Temples, Monk supply

Segment 1 is labeled "Creative activity". The tourists desire creative tourism in kind of art and craft. They focus on learning some skills and knowledge of community, feeling its culture and local living mainly through creative surroundings. Their expected roles during tourism are as audiences and participants in tourism activities. The workshops are set in cultural places of the community. These experiences are preferred by tourists who are in teen and middle age mostly with single status. They are communalism and environmentalism who are looking for fun, leisure and things reflecting their success. They need peace of mind, safety and good health. Their cultural knowledge is moderate to high.

They enjoy seeing, involving, learning and spending, respectively. Their purposes in traveling include finding something new, having leisure times with family, and traveling in the places worthwhile and in popular places. They have experiences in kinds of tourism such as recreation, eco-tourism, and adventure but never or have little experiences in creative one. Service providers they familiar with are government agencies and foreign companies. They typically gain tourism experiences from excursions and living with local in tourist areas. They commonly regard themselves audiences and creators.

TABLE III
KEY EXPERIENTIAL ANALYSIS FOR SEGMENT 1

Tourist stages	Sensing	Learning	Creative
Tourist goals	Excursions, involving, and spending	Excursions, involving, and learning	Feeling its culture and local living
Service Process	Sightseeing the Giant Swing, temples, shrine, and old building in the community, and listening to the community history Sightseeing and spending at Sao Chingcha fresh market, Salted fish market	Learning about monk supply and Buddhist way to dedicate monk supply Visiting musician house and learning traditional Thai instruments Learning Traditional Thai medicine, herbs, and Thai massage	Making hand-made local accessories Playing Thai instruments Practicing Thai medicine and massage

Service needs:
- Finding something new, having leisure times with family, and traveling in the places worthwhile and in popular places
- Art and craft
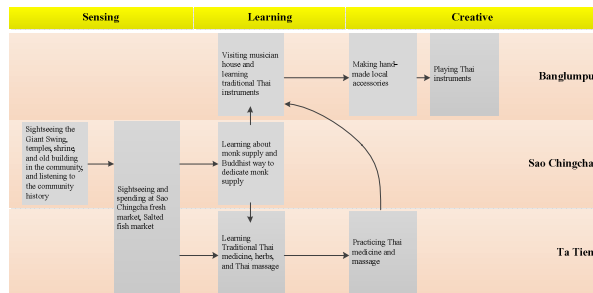- Learning some skills and knowledge of community, feeling its culture and local living

Fig. 4 Experience journey map of Ta Tien, Banglumpu, and Sao Chingcha community for segment 1

Segment 2 is labeled "Creative relax" Tourists in this segment looks for creative tourism types of pastimes, gastronomy and design for knowledge and culture through creative surroundings, activities, and conversation. Their roles are both audience and participants. The creative tourism can take place in cultural venues, activity centers, and museums. Tourists are in the age of adolescence and middle age with either single or marital status. Their perspectives of life are communalism and conservative. They look for things

reflecting their success, spending time together and strengthening their relationship. Happiness is the goal. Cultural knowledge is mixed between low and high extent. Most of them travel by excursions. They travel to find something new and to the places worthy. Recreational tourism, eco- tourism, adventure and health tourism are typical type of tourism they are used to. Government agencies and foreign companies are their common service providers. Excursions and live a life in tourist areas. Like the segment 1, they typically gain tourism experiences from excursions and living with local in tourist areas. They commonly regard themselves audiences and creators. Taken into account the features of creative tourism value in Fig. 3, the experiential analysis is conducted and illustrated in the table as shown in Tables III and IV. As the experiences are carved, finally, they are represented in the journey map (Figs. 4 and 5). The creative tourism route for segment 1 and 2 are drawn between Sao Chingcha, Ta Tien, and Banglumpu communities.

TABLE IV
KEY EXPERIENTIAL ANALYSIS FOR SEGMENT 2

Tourist stages	Sensing	Learning	Creative
Tourist goals	Excursions, involving, and sharing conversation	Excursions and local living	Feeling its culture and local living
Service Process	Visiting and sightseeing creative places organizing creative activities such as musician house, temples, and museums Sightseeing Sao Chingcha fresh market, Salted fish market, and Khao San Road	Tasting authentic Thai cuisine while talking with people in the community such as vendors and artist	Experience Thai cookery in local Thai-style house Playing Thai instruments

Service needs:
- Finding something new and traveling in the places worthwhile and in popular places
- Pastimes, gastronomy and design
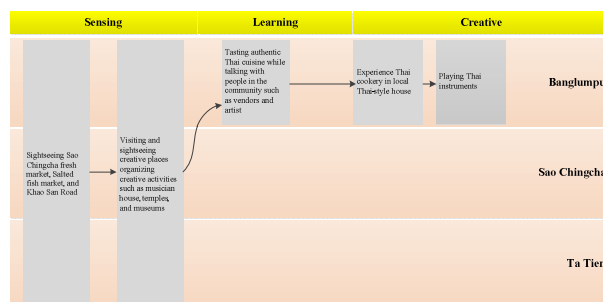- Receiving knowledge of community, feeling its culture and local living

Fig. 5 Experience journey map of Ta Tien, Banglumpu, and Sao Chingcha community for segment 2

B. Implication and Challenges

In the destinations with diverse and potential cultural

resources, like Bangkok, creating new tourism services can be vague. Through experience modularization together with data mining results, it can accommodate value co-creation in various ways including; (1) discovery of patterns of tourist behaviors and tourist desired services; (2) co-creation of the services as having linkage of both supply and demand perspectives on new creative tourism value offerings; and (3) alignment of cultural assets and tourist' desired values and experiences. Destination development can be made with clearer pictures of which creative tourism services would be offered to cultural communities in which districts. In addition, tourism routes to experience creative tourism around Bangkok' cultural communities can be designed and planned with more capability to capture their cultural value individually to satisfy general behaviors of tourists of creative tourism. The implications of this methodology are that Department of Tourism and Culture Sports and Tourism Department have more awareness of service design from insightful tourist experiences rather than dwindling brainstorming session like doing in the past. National creative tourism policy has been developed for years with difficulties to move away from serial reproduction of culture and community tourism as a solution to evanescent cultural communities can now have potential methodology to revive the culture with insightful information and service design thinking.

Nevertheless, this study only straightforwardly presents mixed feature of creative tourism services by taking into account of obvious clusters of experiences and cultural assets. It can be further analyzed if service designer needs to specify service features in more details for other clusters, i.e. designing for niche tourists from unique cultural value. Additionally, the data of tourism service providers can be collected and analyzed in the same manner as one of tourists. The new tourism services from both views are then compared and contrasted so that the higher degree of alignment of new creative tourism services will be ensured.

V. Conclusion

Data mining technique can reveal interrelations among values or experiences. This can lead communities to offer new creative tourism value in network manner. Especially, social contexts tend to require a systematic value creation process to deliver the same results as what business contexts can achieve. In tourism, values and experiences are not easy to capture. Creative tourism experiences are formed according to the network effects of supply and demand sides. Conventional approaches like focused groups and interviews may not be able to seize what experiences tourists actually need from new service offerings. Insightful information and service design thinking can enhance the value creation process by employing data mining technique and experience journey map can discover patterns of tourist behaviors and tourist desired services, co-creating the services, and aligning cultural assets and tourist' desired values and experiences. Cultural assets can be effectively exploited and new tourism value can be noticed.

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