

Application of Analytic Hierarchy Process to the tourism factory DIY experiential value evaluation

Ying-Jye Lee

Department of Cultural and Creative Industries
National Kaohsiung University of Applied Sciences
Kaohsiung City 824, Taiwan, R.O.C.
yjlee@kuas.edu.tw

Ching-I Chen

Department of Cultural and Creative Industries
National Kaohsiung University of Applied Sciences
Kaohsiung City 824, Taiwan, R.O.C.
1103363103@gm.kuas.edu.tw

Abstract—The theory of experiential marketing combined with the viewpoints of consumer behavior, local innovation, and cultural value are applied in this study, through in-depth interview, to extract semantic and vocabulary of tourists and businesses participating in DIY experience. It intends to discuss the value factors and organize the evaluation indices and the dimensions of value, test the content validity with expert questionnaire, and apply Analytic Hierarchy Process to calculate the weight and order of tourism factory DIY experiential value evaluation indices as well as to construct the DIY experiential value evaluation model with two major dimensions of experience quality and emotional gain, with higher importance, and two sub-dimensions of price function and social service, with lower importance, where playfulness presents the largest influence. Three findings are proposed in this study. First, the intangible gain of DIY is higher than the tangible gain. Second, the experiential value is led by tourists' self-consciousness. Third, the goods coverage is expanded outside the activity to form the comprehensive service. The fitting method and key points could offer reference for the industry related personnel for making decisions.

Keywords—DIY; experiential value; tourism factory; Analytic Hierarchy Process

I. INTRODUCTION

It is not rare to have “DIY” appear on the itineraries of sightseeing tours; tourism factories are the same. Industrial Development Bureau, Ministry of Economic Affairs, specifies the hardware environment required for the establishment of a tourism factory; for instance, “practical experiencing facilities related to factory registered products” are essential, meaning the planning, design, and practical introduction of DIY related contents. Moreover, relevant software and hardware related points are also included in the assessment of a tourism factory. DIY experience could satisfy people's demands for returning to the senses and ego and enjoy the process [1]. Experience design is even more important for DIY and is correspondent to the theories proposed by researchers. For example, Schmitt's series discourse of experiential marketing and strategic experiential modules (SEMs) have been broadly quoted by researchers and extended to various fields [2]. Tourism factories which appeal to the creation of experiential value for the development are one of the common verification of experiential marketing. Current analyses of tourism factory

DIY is mainly discussed with the case study of a factory that they are lack of macro discourse and evaluation criteria. Chang Chien and Lu [3] mentioned that tourism factories in Taiwan were mainly studied quantitatively, but lack of qualitative discussion, and suggested to cut in from the aspects of development history, transformation consultation, business management, and performance appraisal, expand the research coverage, and include multiple points of view. Based on above problem awareness, tourism factories, with better assessment rules, are regarded as the representatives of DIY experience to set the following research objectives.

(1) To discuss tourism factory DIY experience from the aspects of tourists with participation experience and businesses with management experience to convergently form the dimensions of value and evaluation indices.

(2) To discuss the weights of DIY experiential value indices with decision-making analyses to output the evaluation model for the reference of industries developing DIY experience.

II. LITERATURE REVIEW

A. Tourism factory and innovation management

Industrial Development Bureau, Ministry of Economic Affairs, defines tourism factories as “registered factories with industrial culture, educational value, or local characteristics, actually engaging in manufacturing and processing, but offering the products, processes, or factory sites and factory buildings for tourists' visit and rest”. It encourages manufacturing industry with willingness and demands to go for tourism, promotes the combination of local industrial culture and tourism flow, and assists domestic factories with unique industrial background and localization in the transformation. With the design and planning of leisure elements to present the brand-new atmosphere and the marginal benefits acquired from tourism service, it could satisfy the multiple market demands [4]. More and more traditional manufacturing industries gradually realize to enhance the quality management of the industry through the idea of “tourism factory” and to reinforce the organizational brand exposure [5]. In this case, tourists' impression on tourism experience, aiming at the environmental field and space planning of factory buildings, become critical when

engaging in transformation and reengineering from the aspect of “experiential marketing”. It is not just a moment to change from the thought of OEM manufacturing to the focus on creativity and style, but has to extract touching elements between industry and life with the rich cultural background of an enterprise, to present innovative and unique service and goods from the thematic situation imagination of learning and entertainment, to create unforgettable experience and emotional value, and to extend “Made in Taiwan” to “Created in Taiwan”. When looking for value innovation, a tourism factory needs to understand the internal and external environments, enhance the competitive advantage, and search for new markets and footing in order to find out innovation opportunities.

B. Origin of DIY and the application to tourism

DIY was originated from the renovation of residences in the UK after being ruined in World War II, when the reconstruction speed of the government could not satisfy the needs that the residents responded to “Do It Yourself” in order to recover the homes as soon as possible. It became the fashion at the time. The magazine Do-It-Yourself was issued in 1957 to deliver knowledge and techniques, which was good for the popularity of DIY. Following the development of globalization, it was gradually popular in Europe and then spread to the USA; later on, Asian countries like Japan and Taiwan also established such an idea so that “DIY” was deeply rooted. Chang [1] defined DIY as activities to make residences and home life more comfortable and better by mending, repairing, and improving living environment by oneself. The following DIY industry was defined as tools, equipment, materials, finished products, semi-finished products, and various service tasks for executing DIY. General forms of vocabulary and concept of DIY have been derived for the application to various industries nowadays. Aiming at the characters of tourism factories, this study focuses on collecting the application of DIY activities in which tourists participate in the field of leisure and recreation. Learnable hand-made activities for group courses, parent-child fun, and friend sharing are popular touring items in recent years, and the integration of humanism and local culture is the precious development experience in tours [7]. The planning of DIY courses in sightseeing tours has been advancing all the time. It is classified into three types in this study. One is the specialty production created for towns, such as rice milling DIY in Wumile Chingliao Community in Taiwan, jam DIY in Longmu Community in Kaohsiung, and popped rice DIY in Shangkuan Community in Miaoli. Another is the leisure service about agriculture, fishery, and husbandry, e.g. Paotun hand fishing in Penghu, fruit picking in Chin-Yong DIY Recreational Farm in Hsinchu, and woodwork DIY in Checheng, Shuili, Nantou. The other is the tourism factory experience, such as wave paper collecting DIY in PuliPaper, Fermented soy bean DIY in Wuan Chuang Soy Sauce Tourism Factory, and accessory DIY in Tulanshan Jewelry. Such tourist participation processes are the models successfully bringing out learning in tours, entertainment in learning, satisfaction with entertainment, identity in satisfaction, and consumption in identity.

C. Experiential value

Experience is the practical wisdom accumulated by the interaction between organism and environment and could be used for guiding the affairs in life. For this reason, experience is the life presenting clear understanding or pleasant cognition and is defined by people’s self-respect [2]. The key in successful experience marketing lies in “detail” and “creativity”. Customers no longer ask for product function and positioning segment, but consumption experience, that marketing managers are suggested to get rid of the “product” marketing oriented “engineer” attitude, understand customers’ consumption details, and develop the marketing model with five major experiences of sense, feel, think, act, and relate to further develop sensory experience and brand charm which could touch people [3]. In traditional economic field, value engineering (VE in short) is regarded as the management skill to reduce costs and enhance benefits. However, experience is established on the interaction between external environment and individuals. In the experiencing process of technological goods or service management, the establishment of experience value is contained, meaning that customers’ actual perceived value. In the economic discussion, people intend to purchase products because of the expected value accompanied with the experience in the consumption process [8].

III. METHODS

According to the discussed problems and objectives, this study is divided into three stages. At the first stage, this study focuses on the collection and discussion of studies on the development and management of tourism factories, the origin of DIY vocabulary and the application to tours, as well as experiential marketing and cultural value. The hierarchical structure is output at the second stage; the composition of evaluation indices and experiential value dimensions are gradually organized through in-depth interview and semi-structured questionnaire survey of tourists with actual operation experience as well as the extraction of key elements of DIY value with open coding. At the third stage, experienced experts are invited to fill in the questionnaire for the revision suggestion to reinforce the content validity; finally, Analytic Hierarchy Process is utilized for discussing the weight relationship between the dimensions of value and the correspondent evaluation indices so as to make the DIY experience evaluation model more complete.

A. In-depth Interview

In-depth interview is a common and practical research method in qualitative research. Interview is the opinion exchange among people [9]. In order to acquire effective evaluation indices, semi-structured interview is utilized in this study for easily master the key points of the interviewees as well as keep the flexible space for the free development so that the interviewees’ opinions are not restricted to the standard answers in a structured interview. The required key information is further analyzed.

The population for the in-depth interview in this study is divided into tourists and tourism factory businesses. Purposive Sampling is first used for determining the representative

interviewees, and Convenience Sampling is applied to decide the possible interviewees. Accordingly, 6 subjects accept the interview in this study, where tourists are coded with the word Tourist, as T1, T2, and T3 in short, and businesses are coded with the word Company, as C1, C2, and C3, Table 1.

Table 1. Interviewed subject and background

Interviewed subject	Code	Category	Form	Interviewee background
Tourists	T1	Individual visitor	Interview	Frequent DIY parent-child activity on holidays
	T2	Group visitor	Interview	Business head of a branch of a famous travel agency
	T3	Author	Internet	An author of a travel website and travel & cuisine, and the manager of a famous blog
Businesses	C1	Ceramic industry	Interview	A DIY instructor in Hsin-Wang Shu Ceramics Memorial Museum
	C2	Wood industry	Interview	A receptionist in Furniture Manufacturing Eco-Museum in Tainan
	C3	Metal industry	Interview	An interpreter in Taiwan Metal Creation Museum

B. Expert questionnaire

An expert questionnaire is also named as an expert survey. When a researcher proposes an evaluation scale, experts involving in the research topic or with rich experience in the relevant field are invited to preliminarily check the measured items and the dimension content. In consideration of the purpose, it is a kind of expert validity test, testing the adequacy of the contents of evaluation dimensions and evaluation indices so as to present the content validity. It means that an evaluator would precede logic analyses of dimensions and questions according to the professional intelligence and literature and make reasonable judgment [10]. Aiming at the construction of the tourism factory DIY hierarchical structure in this study, 6 experts with experience in tourism factory DIY design and management are invited for the test. They are coded with the word Expert, as E1, E2...E6, and the qualification, service unit, and position are listed in Table 2.

Table 2. Interviewed subject and background

Code	Qualification	Service unit	Position
E1	Appraisal experience	Southern Taiwan University of Science and Technology	Associate Professor
E2	Management experience	tourism factory	curator
E3	Management experience	local tourism factory association	vice secretary-general
E4	Research experience	Southern Taiwan University of Science and Technology	Professor
E5	Research experience	National Kaohsiung University of Applied Sciences	Professor
E6	Research experience	National Kaohsiung University of Hospitality and Tourism	Assistant Professor

C. Analytic Hierarchy Process (AHP)

Analytic Hierarchy Process, as a systematic, scientific, and complex multi-objective decision-making method being able to solve multiple standards and subjective decision-making

problems, is applied to the decision-making problems with uncertain situations and various evaluation criteria [11] [12]. The major feature of Analytic Hierarchy Process is to systematically link the complex relationship among factors with hierarchical structure. The paired comparison could reduce the load of decision-makers and allow them more clearly respond to the intention. Moreover, the group decision-making feature could integrate and analyze individual expert's opinions through a clear hierarchical system to enhance the evaluation validity and reliability. The results are output with numerical units so that the relative importance and order among factors are easily understood. The data collection with AHP and the hierarchical structure setting in this study are explained as below.

(1) AHP data collection

The sampling of paired comparison in the hierarchical analysis in this study is also acquired from the expert questionnaire survey. In addition to five experts, coded E1, E2, E3, E4, and E6, in Table 4, another 3 qualified experts (coded E7, E8, and E9) are included in the list. Total 8 experts participate in the AHP questionnaire survey, Table 3. The increase of tested experts could reinforce the validity of this study and enhance the overall measurement quality.

Table 3. List of tested experts for tourism factory DIY hierarchical analysis paired comparison

Code	Qualification	Service unit	Position
E1	Appraisal experience	Southern Taiwan University of Science and Technology	Associate Professor
E7	Appraisal experience	National Kaohsiung University of Hospitality and Tourism	Professor
E2	Management experience	tourism factory	Curator
E3	Management experience	local tourism factory association	Vice secretary-general
E8	Management experience	cultural & creative industries park	Manager
E4	Research experience	Southern Taiwan University of Science and Technology	Professor
E6	Research experience	National Kaohsiung University of Hospitality and Tourism	Assistant Professor
E9	Research experience	Southern Taiwan University of Science and Technology	Associate Professor

(2) Setting of AHP hierarchical structure

The explored objective (tourism factory DIY experiential value) is placed on top of the hierarchical structure in this

study, the experiential value dimensions analyzed by the combination of in-depth interview and expert questionnaire are introduced in the second level of the hierarchical structure, and evaluation indices to achieve the dimensions in the second level (i.e. value factors organized and constructed in this study) are placed at the bottom level, Fig. 1.

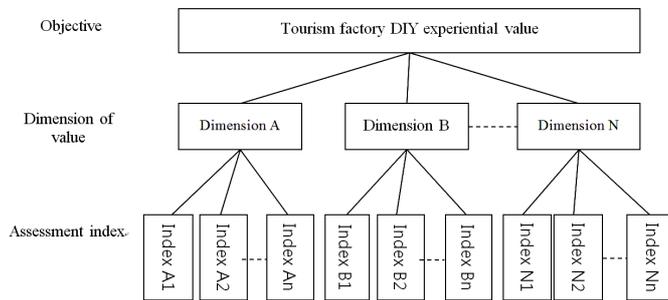


Fig. 1. AHP hierarchical structure of tourism factory DIY experiential value

IV. RESULTS

A. Evaluation index extraction

With in-depth interview, 6 complete interview records are acquired through interview outline and data coding, including three from tourists and another three from businesses. Tourists' opinions are acquired from individual visitors, group visitors, and authors, while businesses are three tourism factories in different industries offering DIY experience. Evaluation indices, including selectivity, creativity, appeal, symbolism, achievement, simplicity, interactivity, recollection, playfulness, comprehensiveness, guidance, and storytelling for "experiential marketing", "tourist psychology", "innovative management", and "cultural value" are extracted.

B. Evaluation index revision

To effectively organize the evaluation indices to present the support on the evaluation dimensions of value, the evaluation indices are proceeded comprehensive inventory and integration in this study. Besides, 6 experts are requested for filling in the questionnaire to provide revision suggestions of the evaluation indices and the adjustment of the correspondent experiential value evaluation dimensions, Table 4.

Table 4. Expert suggestions aiming at tourism factory DIY experience evaluation index revision

Experiential value dimension	Evaluation index	Appropriate	Inappropriate	Treatment	Revision suggestion
A. Tangible goods	A1.selectivity	5	1	Remained	-
	A2.creativity	5	1	Remained	-
	A3.appeal	4	2	Remained the same	Particularity Relevance
B. Experiencing process	B1.symbolism	4	2	Remained the same	Uniqueness
	B2.achievement	4	2	Remained	Knowledge

Experiential value dimension	Evaluation index	Appropriate	Inappropriate	Treatment	Revision suggestion
C. Intangible gain	ent			the same	
	B3.simplicity	4	2	Remained the same	Reverse questions of complexity
	C1.interactivity	5	1	Remained the same	-
D. Service response	C2.recollection	4	2	Remained the same	Relevance
	C3.playfulness	5	1	Remained the same	-
	D1.comprehensiveness	4	2	Remained the same	Thoroughness
	D2.guidance	4	1	Remained the same	Derivative
	D3.storytelling	4	1	Remained the same	Topicality

According to experts' suggestions, it is better for a dimension presenting the theoretical structure of Customer Perceived Value. Such a theory is emerged based on tertiary industry and evolved from customer value that it conforms to current conditions. Thaler [13] (1985) considered that the weights of "pay" and "gain" in perceived value on goods were evaluated by sacrifice consciousness and interest consciousness, and the presentation of perceived value was the overall effect. Ravald & Gronroos [14] revealed that an enterprise should offer customers with higher value than others in the same industry that Customer Perceived Value was a difference and the primary element of competitive advantages. Teas & Agarwal [15] defined perceived value as customers' perception judgment reflected to goods and service after measuring between give and take. In other words, consumption intention was customers' consideration of perceived value of goods or service. Parasuraman & Grewal [16] also pointed out Customer Perceived Value as the key indicator of customers' repurchase intention. Sweeney & Soutar [17] divided Customer Perceived Value into price, quality, emotion, and society.

The value factors in the interviewees' feedback in this study are quoted from the dimensions proposed by Sweeney & Soutar [17]. The relevance between the semantic and the vocabulary of the original dimensions are referred and further revised. The dimension of value in the hierarchical structure are renamed as "tangible goods" to "commodity demand", "experiencing process" to "experience quality", "intangible gain" to "emotional gain", and "service response" to "social service" in order to have the dimensions present the discourse basis of consumer research. Furthermore, according to the viewpoint of Parasuraman & Grewal [16], tourism factory businesses could reach the "real benefit" mentioned by experts through the formation of Customer Perceived Value. Based on the opinions organized in expert questionnaire, the original hierarchical structure is remained, and the naming in the original hierarchical structure is revised as the experts'

suggestions. Total 4 experiential value dimensions and 7 evaluation indices are adjusted, and merely 5 evaluation indices remain the same as the original case. The semantic of the renamed content is adjusted the vocabulary explanation, as the experts' suggestions, Table 5.

Table 5. Experts suggested revision of vocabulary explanation of tourism factory DIY experiential value dimensions and evaluation indices

Experiential value dimension and evaluation index	Vocabulary explanation
A. Commodity demand	Tourists' consideration of handmade works by participating in DIY production, including price, function, beauty
A1.selectivity	Providing various supporting aiming at different subjects or distinct patterns aiming at different preference
A2.creativity	Having tourists freely develop creativity and decide the work style
A3.particularity	Generally referring to the brand awareness, industry image, and local relevance poured by businesses into works
B. Experience quality	Referring to the quality of tourists participating in DIY production, containing steps, action, and thoughts
B1.uniqueness	The brand or industrial appeal delivered by a business, e.g. uniqueness and professionalism
B2.learnability	To highlight the value by crossing difficult challenge and participating in the production
B3.simplicity	Clearly understandable management rules and step design with high success rate to avoid complicated processes
C. Emotional gain	Referring to tourists acquiring non-physical benefits from the participation in DIY, such as knowledge, experience, and emotion
C1.interactivity	Interpersonal exchange between service staff and tourists, tourists and partners, as well as tourists and strange tourists
C2.relevance	Establishing tourists' key memories, creating links with life, and inspiring successive behaviors as in-depth learning, report, and purchase
C3.playfulness	Positive perception for the happy emotion and satisfaction of tourists
D. Social service	Referring to tourists participating in DIY arranged by a business to help the social bonding and agreement with

Experiential value dimension and evaluation index	Vocabulary explanation
	the service established, including interpretation, instruction, and accompany
D1.thoroughness	To maintain the Basic quality of safe and fluent itinerary and to take care of individual needs and emotion of tourists
D2.guidance	Guiding to know the industry and brand, establishing basic knowledge, and connecting interpretation service of visit and DIY
D3.topicality	Referring to the contents before and after the transformation, the change process, the historic appearance, and the traditional spirit

C. DIY experiential value evaluation weight

The expert questionnaire in this study is designed with 9-point scale for the AHP hierarchical analysis. Total 8 experts, E1, E2, E3, E4, E6, E7, E8, and E9, are distributed the questionnaire, and the acquired data are proceeded structural computing and data organization. The dimensions of value in the second level and the evaluation indices in the third level are analyzed the weights and output the importance order. The results reveal that the importance appears extreme values. It could be generally classified into two levels. One with higher importance is the primary dimensions, i.e. "experience quality" (weight 0.358), followed by another one with slight difference, i.e. "emotional gain" (weight 0.354); the other one with smaller importance is the secondary dimension, i.e. "commodity demand" (weight 0.147); and, the one with little difference is the last, i.e. "social service" (weight 0.141). In regard to the order, those ordered 1 and 2 present critical influences, and ones ordered 3 and 4 appear limited value effect (Table 6).

Table 6. Positive reciprocal matrix, weight, and order of tourism factory DIY experiential value dimensions

Dimension of value	Social service	Emotional gain	Commodity demand	Experience quality	Weight	Order
Social service	1	0.4275	1.052	0.3321	0.141	4
Emotional gain	2.339	1	2.3248	1.1067	0.354	2
Commodity demand	0.9506	0.4301	1	0.4394	0.147	3
Experience quality	3.0106	0.9036	2.27597	1	0.358	1
$\lambda_{\max}=4.03$; C.I.=0.01 ; C.R.=0.0111						

What is more, the evaluation index analyses are shown in Table 7.

In terms of commodity demand, “creativity” (weight 0.631) is the most important evaluation index, followed by “selectivity” (weight 0.213) and “particularity” (weight 0.156).

In regard to experience quality, “uniqueness” (weight 0.383) appears the largest effect, followed by “simplicity” (weight 0.329) and “learnability” (weight 0.288).

Regarding emotional gain, the three evaluation indices of “playfulness” (weight 0.415), “relevance” (weight 0.370), and “interactivity” (weight 0.215) show even importance.

In terms of social service, “thoroughness” (weight 0.509) appears higher, followed by “guidance” (weight 0.304) and “topicality” (weight 0.188).

Table 7. Positive reciprocal matrix, weight, and order of tourism factory DIY experience evaluation index

Dimension of value A	Evaluation index	A1.Selectivity	A2.Creativity	A3.Particularity	Weight	Order
Commodity demand 0.147	A1.selectivity	1	0.32256	1.43519	0.213	2
	A2.creativity	3.1002	1	3.87684	0.631	1
	A3.particularity	0.696772	0.257942	1	0.156	3
Dimension of value B	Evaluation index	B1.Uniqueness	B2.Learnability	B3.Simplicity	Weight	Order
Experience quality 0.358	B1.uniqueness	1	1.15243	1.34432	0.383	1
	B2.learnability	0.867732	1	0.75788	0.288	3
	B3.simplicity	0.743871	1.31947	1	0.329	2
Dimension of value C	Evaluation index	C1.Interactivity	C2.Relevance	C3.Playfulness	Weight	Order
Emotional gain 0.354	C1.interactivity	1	0.541636	0.556957	0.215	3
	C2.relevance	1.84626	1	0.828603	0.370	2
	C3.playfulness	1.79547	1.20685	1	0.415	1
Dimension of value D	Evaluation index	D1.Thoroughness	D2.Guidance	D3.Topicality	Weight	Order
Social service 0.141	D1.thoroughness	1	1.76301	2.57284	0.509	1
	D2.guidance	0.567212	1	1.70674	0.304	2
	D3.topicality	0.388676	0.585912	1	0.188	3

To thoroughly understand the relative importance of evaluation indices to DIY experience, the weights of experiential value dimensions and the evaluation indices are weighted to show the relative weight to the entire tourism factory, Table 8.

Table 8. Relative weight and order of weighted experiential value evaluation index

Dimension of value (Dimension weight)	Evaluation index (Index weight)	Weighted evaluation index relative weight	Order
A. Commodity demand (0.147)	A1.selectivity (0.213)	0.031	10
	A2.creativity (0.631)	0.093	6
	A3.particularity (0.156)	0.023	12
B. Experience quality (0.358)	B1.uniqueness (0.383)	0.137	2
	B2.learnability (0.288)	0.103	5
	B3.simplicity (0.329)	0.118	4
C. Emotional gain (0.354)	C1.interactivity (0.215)	0.076	7
	C2.relevance (0.370)	0.131	3
	C3.playfulness (0.415)	0.147	1
D. Social service (0.141)	D1.thoroughness (0.509)	0.072	8
	D2.guidance (0.304)	0.043	9
	D3.topicality (0.188)	0.027	11

Form the overall review of the results, the primary evaluation index appears on “playfulness (weighted value 0.147)” in “C. Emotional gain”, and “uniqueness (weighted value 0.137)” in “B. Experience quality” and “relevance (weighted value 0.131)” in “C. Emotional gain” are the second and the third ones. Referring to the index explanation, tourists’ happy emotion and satisfactory perception present the most importance in the entire value composition, followed by uniqueness and professionalism of brand or industry, which could result in deep experience impression, and relevant mechanisms or factors in tourists’ daily life and successive behaviors also show great effects on the entire value establishment.

D. DIY experiential value evaluation model

The weighted ratio of the overall evaluation index is calculated according to weight and order. Such a combination with a measurement scale could form the evaluation model of DIY experiential value and create the decision-making method for the judgment. Likert Scale’s point scale (1~5) is utilized for making the demonstrated checklist in this study. In this case, the judgment body is assumed a single item of DIY experience; taking the example of the experience of interviewee C3, the evaluation model could be applied to check the experiential value for the evaluation value to specifically distinguish the goodness. As shown in Table 9, the possible score of experience, through the demonstrated checklist, is 3.961.

Table 9. DIY experiential value evaluation model (demonstrated checklist)

Dimension of value	Evaluation index	Score					Weighted ratio	Weighted score
		1	2	3	4	5		
A. Commodity demand	A1.selectivity			✓			3.10%	0.093
	A2.creativity		✓				9.30%	0.186
	A3.particularity			✓			2.30%	0.069
B. Experience quality	B1.uniqueness					✓	13.70%	0.685
	B2.learnability			✓			10.30%	0.309
	B3.simplicity					✓	11.80%	0.59
C. Emotional gain	C1.interactivity				✓		7.60%	0.304
	C2.relevance				✓		13.10%	0.524
	C3.playfulness				✓		14.70%	0.588
D. Social service	D1.thoroughness					✓	7.20%	0.36
	D2.guidance				✓		4.30%	0.172
	D3.topicality			✓			2.70%	0.081
Total							100%	3.961

The conversion of above DIY experiential value evaluation model, except DIY experience, could judge the overall DIY service quality of a business. Leisure businesses which engage in the development of DIY experience or tourists who intend to select the consumption could refer to this evaluation model to make the judgment conforming to the needs.

According to the weights, three research findings are summarized.

(1) Intangible gain higher than tangible acquisition

The referred intangible gain is no longer restricted to “consumption symbol” in the past; instead, it is the connection with tourists’ emotion, delivering the industrial experience (uniqueness) through DIY experience, stimulating the positive emotion (playfulness) in the DIY participation process, introducing the memories (relevance) after the participation, and excluding possible negative emotion (simplicity, thoroughness). Those are the key factors in tourists directly or indirectly becoming normal consumers or deepening brand image so that they are worth of more emphasis.

(2) Emergence of tourists’ self-consciousness leading value orientation

Although more secondary analysis data are acquired through the businesses’ experience, the mission of industrial knowledge delivery of goods, service, or businesses is based on tourists’ commercial behaviors. In spite that businesses take the characteristics of cultural goods into account, more than a half factors are related to consumer observation, e.g. style ruling, types of goods, the optimal group, and characteristic elements; the space for free development (creativity) is even commonly affirmed.

(3) DIY goods not simply do it by hands

The core value of DIY lies in experience, such as experience quality. However, research revealed that experience did not simply talk about the sessions when tourists participating in DIY; the package arrangement of tours (thoroughness) to the interpretation for basic knowledge instruction (guidance), the provision of purchase information in advance (selectivity), and possible marketing channels afterwards (relevance) are the comprehensive service, rather than simply the target object or activity.

V. CONCLUSION

Based on strategic experiential modules, consumer behavior model, tourism factory local innovation model, and cultural value elements to establish the questions and in-depth interview as well as expert questionnaire to establish the hierarchical structure, “A. Commodity demand”, “B. Experience quality”, “C. Emotional gain”, and “D. Social service” are output in this study as the experiential value dimensions, through the processes of hierarchical organization, weighing, renaming, and revision as well as the opinion integration from the expert questionnaire. AHP (Analytic Hierarchy Process) is further used for calculating the weights. The results show that “experience quality” and “emotional gain”, with high weights, are the primary dimensions of value, “commodity demand” and “social service”, with lower influence, are the secondary dimensions. The indices “uniqueness” and “simplicity” in “experience quality” appear the most weight; “playfulness” is the major evaluation index of “emotional gain”, followed by “relevance”; “creativity” in “commodity demand” presents high priority; and, “thoroughness” is the key index of “social service”. The comprehensive analyses of weighted dimensions of value and evaluation indices reveal “playfulness” as the most influential index, followed by “uniqueness” and “relevance”.

Acknowledgments

The author would like to thank the Ministry of Science and Technology of the Republic of China for financially supporting this research under Contract No. MOST 105-2410-H-151-009.

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