

Discussing the innovative experience design model of tourism factory—A case study on Shiroi Koibito Park in Hokkaido, Japan

Hsieh Hsiu-Ching¹, Huang Chun-Yu², Zhuang Yun-Ci³

¹Department of Creative Design, National Yunlin University of Science and Technology

^{2,3}Graduate School of Creative Design, National Yunlin University of Science and Technology

Abstract

In the experience economy era, a pleasure experience is the key success factor in modern tourism factories. Taking Shiroi Koibito Park in Hokkaido, one of the most representative chocolate tourism factories in Japan, as the object, this study aims to discuss how a tourism factory creates impressive experience for consumers. A consumer-centered “innovative experience design model of tourism factory” is constructed to analyze the experience design of a tourism factory so as to enhance consumers’ user experience and verify the practicability of the model. The research is preceded in two stages. Based on Shiroi Koibito Park in Hokkaido as the case analysis, the “innovative experience design model of tourism factory” is constructed at the first stage to preliminarily verify the practicability. The research result is expected to propose related suggestions for tourism factories in Taiwan proceeding aesthetic and creative experience process design through the “innovative experience process”.

Key words: tourism factory, experience aesthetics, user experience and experience design

Introduction

In the experience economy era, a pleasure experience is the key success factor in modern tourism factories. Experience design aims to understand and solve people’s needs and satisfy the higher demand for aesthetic perception (Tractinsky, 1997; Jordan, 2000; Karvonen, 2000; Norman, 2004). Nevertheless, the problem of tourism factories in Taiwan lies in the experience design not being pleasure, satisfactory, and learnable. From domestic and international design trend in past years, it is extended from the functional consideration of “ease of use” to the deeper dimension of “aesthetic experience”. The emphasis on the experience perception in the use and users’ pleasure sense has become the key issues in the research on design.

Shiroi Koibito Park in Hokkaido, with more than 40-year history and as one of the most representative chocolate brands in Japan, is selected as the research object. The factory in Sapporo is rebuilt a quality tourism factory, including a park, a museum, and a manufacturing factory. In addition to the introduction of the brand history and the product production process, historical tea sets, chocolate packages, and chocolate posters of various countries are collected. It is the research motivation to discuss how a tourism factory creates impressive experience for consumers. A tourism factory development potential assessment model (Lin, 2009), a tourism factory innovative business model (Chien, Chen, Wang & Kang, 2013), and a tourism factory spatial development strategy model (Lin, 2010) have been constructed from the aspects of tourism and recreation, business, and architecture, respectively. Nonetheless, there has not been a consumer-centered design

model. For this reason, it is necessary to construct a consumer-centered “innovative experience design model of tourism factory”.

The purposes of this study contain

1. To construct a consumer-centered “innovative experience design model of tourism factory” through literature review.

2. To verify the practicability of the “innovative experience design model of tourism factory” by analyzing the case of Shiroi Koibito Park in Hokkaido, Japan.

Literature review

2.1 About tourism factory

“Tourism factory” promoted by Ministry of Economic Affairs is generally classified into two categories. One is, because of industry decline, to utilize existing factory facilities and product production for developing tourism elements so as to transform and develop new industrial economy. The other is the conservation and the promotion of “industrial culture”, where the businesses, after a long period of industrial development, present identity and sense of mission on the history and expect to pass down the industrial culture through tourism (website of Industrial Development Bureau, Ministry of Economic Affairs, 2003). According to the research of Industrial Technology Research Institute (2012), tourism factories aimed to assist manufacturing in developing tourism service for factory tourism, new knowledge experience, and industrial knowledge and culture delivery. The industrial tourism of a “tourism factory” allowed the public, schools, or groups enjoying activity experience and learning the core value of industry.

2.2 About experience economy and experiential marketing

The idea of “experience economy” was proposed by Pine II and Gilmore (2003). With service as the axis to increase the added value of products and satisfy users’ psychological needs, experience economy advocated “personal experience” to create economic activity worth users’ memory. Experiential marketing proposed that products or services could create complete experience for users by providing sensory, creative, and emotional experience. The application of “experiential media” contained communication tools, identification, product presentation, co-branding, space environment, electronic media, and people to create sensory, emotional, thinking, action, and related consumer experience. Based on the theory of individual consumer psychology and social behavior in traditional marketing, Schmitt (1999) proposed experiential marketing theory. The experiential marketing structure covered strategic experiential module and experiential media. Strategic experiential module was the basic strategy of experiential marketing, while experiential media was the applied strategy. Five strategic experiential modules contained 1.sensory experience, 2.emotional experience, 3.thinking experience, 4.action experience, and 5.relevant experience.

2.3 Discussing the relevance between “experience aesthetics” and experience design from the aspect of aesthetics

Petersen (2004), an interactive media researcher, applied “practical aesthetics” derived from Dewey’s aesthetics, emphasized the mutual relationship between psychology and body, and claimed that the interactive aesthetic perception did not exist in the solid interactive interface, but occurred in the interactive process between people and systems and among people. Users and the environment were not independent, but would extend the thinking to the integration and mutual relationship of participants and the environment. Interactive aesthetic perception was related to the induction of imagination, stressing on the autonomous ideas and perception after stimulating and encouraging people to take spontaneously interaction. In this case, a designer, when designing interaction with aesthetic experience as the axis, needed to consider the dimensions of use premise, user experience, and physical equipment interface of experience in order to present more effective interaction and allow users experiencing the cultural content and profound meaning behind the creator’s work (Petersen, 2004).

2.4 Discussing experience-user experience and experience design from the aspects of human-computer interaction and design psychology

User experience is a constant cycling process. Users, after using a product, would appear experience established by certain perception and cognition. Hassenzahl (2007) mentioned that a designer constructed a product including the content, performance pattern, function, and interactivity to induce the contact and interaction with users. A product contained two characters of practical attribute and entertainment attribute. The former referred to the effectiveness of a product, and the latter indicated the interactive pattern provided by the product or the emotion resulted from the use process arousing the past memory or inducing some ideas to eventually present attractive, pleasure, or satisfactory experience. Roto (2007) regarded user experience as the experience quality of a person interacting with physical equipment within specific time as it involved in products, services, or systems. From the viewpoint of users, researchers (Desmet and Hekkert, 2007) mentioned that user experience covered the degree of being satisfied (aesthetic experience), the physical meaning given to products (meaning experience), and the induced feeling and emotion (emotional experience) under the effect of the interaction between users and physical equipment.

Research method

Two stages are included in this study. Stage 1 is to construct the design model. The “innovative experience design model of tourism factory” is constructed by integrating “experiential marketing” in experience economy and “user experience” and “experience aesthetics” in human-computer interaction through literature review and relevant theories. At stage 2, Shiroi Koibito Park in Hokkaido is taken as the case study to preliminarily verify the practicability of the “innovative experience design model of tourism factory”. In order to provide more interesting, more pleasure, and better experience for users, the “innovative experience design model of tourism factory” is constructed according to previous theories, as

following figure.



Fig. 1 Innovative experience design model of tourism factory

Case analysis of the interactive experience design of “Shiroi Koibito Park in Hokkaido”

4.1 Introduction of “Shiroi Koibito Park in Hokkaido”

Shiroi Koibito chocolate, as one of the most representative chocolate brands in Japan, appeared in 1976 with 40-year history and rebuilt the factory in Sapporo into quality tourism factory. The major innovative experience design contains “time tunnel of chocolate” and “Shiroi Koibito chocolate production process” to introduce the history of chocolate and chocolate production, respectively. Such two experience facilities are therefore selected for the case analyses to interpret the constructed theoretical model.

4.2 Experiential facility of “time tunnel of chocolate” in “Shiroi Koibito Park in Hokkaido”

The entrance of “time tunnel of chocolate” is the established experience facility at stage 1. At stage 2, a British chocolate factory in the 19th century is exhibited with models in the window. The model exhibition is divided into material selection, baking and forming, and exhibition of chocolate production. At stage 3, a palm-shape sensor is equipped in front of the window for consumers triggering the models in the window to exhibit the chocolate production process. 4D film projection is used for the detailed introduction of chocolate production process at stage 4. The 4D film is dubbed with Japanese and subtitled with Chinese and English to explain the process. Meanwhile, a thick chocolate fragrance would appear during the film playing. Integrating the chocolate products of “Shiroi Koibito Park in Hokkaido” in the experience facility allows consumers understanding the product history and process through the interaction with the touch panel. By placing a hand on the touch panel to trigger the model exhibition and the explanation of chocolate production history with chocolate fragrance, the “time tunnel of chocolate” experience facility impresses consumers through touch, sight, hearing, and smell.



Fig. 2 Experience process of experiential facilities in “time tunnel of chocolate”

4.3 Experiential facility of “Shiroi Koibito chocolate production process” in “Shiroi Koibito Park in Hokkaido”

After passing the 4D film area, the “Shiroi Koibito chocolate production process” is exhibited. Photos and film playing are used for interpreting “Shiroi Koibito chocolate production process” at stage 1. At stage 2, the chocolate materials are introduced through photos, texts, and physical objects for consumer perception through sight and touch. The cookie production process is interpreted with films at stage 3. At stage 4, a temperature device is equipped for consumers experiencing the temperature for baking cookies. At stage 5, the chocolate and cookie assembly process is directly viewed through a large piece of glass. At stage 6, a temperature device is equipped for consumers experiencing the temperature for cooling cookies. The Shiroi Koibito chocolate packing process is directly viewed through a large piece of glass at stage 7. Integrating the chocolate products of “Shiroi Koibito Park in Hokkaido” in the experience facility allows consumers understanding the product materials, assembly, and packing processes with real observation. The “Shiroi Koibito chocolate production process” experience facility contains three methods of viewing texts and photos and touching the physical model, sensing temperature by placing a hand on the touch panel, and directly viewing the production line of product assembly and packing. Consumers are impressed by such methods constantly stimulating the sensory experience through sight, touch, and taste.

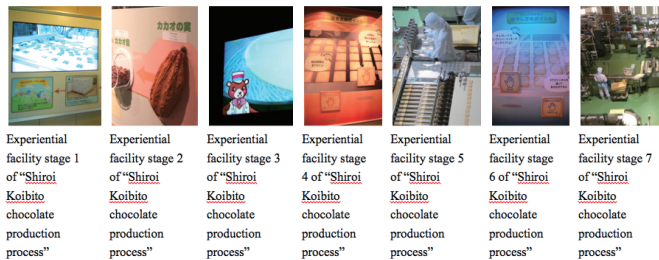


Fig. 3 Experience process of experiential facilities in “Shiroi Koibito chocolate production process”

From the case analysis of the interactive experience design, the “innovative experience design model of tourism factory” is found out the practicability. Businesses could inspect consumer perception of experience facilities as well as modify and improve the interactive experience facilities for consumers receiving good experience and better understanding the spirit of brand delivery.

Conclusion and suggestion

From above case study on “Shiroi Koibito Park in Hokkaido”, the potential practicability of the “innovative experience design model of tourism factory” is preliminarily verified. The model construction is the preliminary stage of this study. User questionnaire survey and in-depth expert interview will be preceded in the successive research to verify the theoretical model. The dimensions and directions of the planned mid-term interviews and data analyses contain three cores of experience design element, experience design coverage, and experience design assessment to further complete the mid-term user questionnaire survey, tourism

factory interview data, and expert interview analyses as well as test and adjust the “innovative experience design model of tourism factory”. Finally, the in-depth expert interview analyses are utilized for the discussion and analysis of tourism factories in Taiwan to verify the “innovative experience design model of tourism factory” again.

Acknowledgements

The authors gratefully acknowledges the support for this research provided by Taiwan Ministry of Science and Technology [grant number MOST 105-2420-H-224-006-MY2].

Reference

- [1] D. Norman (2004). Introduction to This Special Section on Beauty, Goodness, and Usability. *Human-Computer Interaction*. 19(4). 311-318.
- [2] Y.C, Lin (2009). The Evaluation Model for Factory Tour, Graduate Institute of Travel and Tourism Management, National Kaohsiung University of Hospitality and Tourism. Kaohsiung City.
- [3] C.C, Chien, Y.C, Chen, H.Y, Wang & W.T, Kang (2013). Embracing Tradition and Innovation: A Case Study of Tourism Factory. *Journal of Recreation Sport and Health Promotion*, 4,142-157.
- [4] H.Y, Lin (2010). The Research of Development Strategy in Space of Factory Tour : A Case Study of Taiwan Glass Ind. Corp. in Hsin Chu. Department of Architecture, National Taipei University of Technology. Taipei City.
- [5] Ministry of Economic Affairs (2003). Promotion of local industrial innovation and transformation conference. Taipei: printed by Ministry of Economic Affairs.
- [6] H.C, Hsieh (2012). Douliu City tourism factory resource survey program. College of Design, National Yunlin University of Science and Technology. Douliu City.
- [7] H.Gilmore , & B. J.,J. Pine II (2003). Experience economy time. Taipei City: Eco Trend.
- [8] H.B., Schmitt (1999). Experiential marketing. New York: The Free Press.
- [9] M., Petersen , O. S.Iversen , and P. G. Krogh, (2004), Aesthetic interaction: a pragmatist's aesthetics of interactive systems. in Proc. of DIS 04. ACM. 269-276.
- [10] M. Hassenzahl, & N. Tractinsky, (2006), User Experience - a research agenda, *Journal of Behaviour & Information Technology*, 25(2), 91-97.
- [11] V. Roto, (2007), User experience from product creation perspective, In Proc. workshop Towards a UX Manifesto.
- [12] P. M. A. Desmet, & P. Hekk, (2007), Framework of product experience, *International Journal of Design*, 1(1), 57-66.

