

# A Service Design Research on New Information Technology of Fruit Brand Experience and Innovation

Liang Yin<sup>1</sup>, Bin Bin Li<sup>2</sup>, and Shengli Lu<sup>3</sup>

<sup>1</sup> Design Campus, Politecnico di Milano, Milano 20159, Italy

<sup>2</sup> School of Design, Jiang nan University, Wuxi 214122, China

<sup>3</sup> Wuxi PeachWell IOT Technology Co. Ltd Wuxi 214122, China

y1401402@hotmail.com, lbbwx@vip.sina.com, lu\_sunny@139.com

**Abstract.** This article focus on studying brand experience under the background of IOT through data selecting and analysis , try to make a service design plan according to the design-driven branding innovation. We take a local fruit brand as study object named “Taozhiyuan” , not only focus on logo or package but try to establish a co-design platform which all the stakeholders and take part in . This platform is based on the system supported by the Wuxi PeachWell IOT Technology Co. Ltd .

We exploit our own toolkit for brand experience under the help of anti-counterfeit and packaging technology of sponsor. Then we try to establish the cultural identity and value features of “Taozhiyuan” based to brand identity and package design, according to this we will develop the innovative approach and new method under the idea of design-driven brand innovation.

According to the Schmitts theory of five-element-pattern brand experience, we carry out design- -intervention and make service design plan about branding innovation system including: information technology platform own by ourselves, platform for user data collection, analysis system for user data , operating a platform for user service system, according to this , we want to approach branding innovation and improvement in the end.

**Keywords:** New information technology, Fruit brand, Brand Experience, Brand innovation, Product service design.

## 1 Experience Theory Based User Information Collective Platform for Taozhiyuan Yangshan Juicy Peach

In this topic, we study the experience evaluation of the hang packag of PeachWill Brand Yangshan Peach (the original package A). To enhance its brand image, we designs new packages( the new package B, the new package C) to facilitate our empirical research. And we did association analysis on the data and factors got from the psychological evaluation of user experience by designing experience evaluation chart (Yangshan Peach semantic analysis chart). In view of the above, the empirical research is conducted in order to improve Wuxi’s local fruit brand

In this topic, we chose the hand package with anti-counterfeiting trace technology of Peachwill as our target of Yangshan Peach's brand package experience evaluation, which is Package A for short. And based on brand experience theory, our research group of the design school designed package B&C for Peachwill Brand to compare psychological evaluation of the original package and the new designs.



**Fig. 1.** Package Design Proposals for Yangshan Peach Brand

The semantic analysis scale of Yangshan peach package design, our evaluation tool, consists of 20 adjectives (Test Variables). Our evaluation objects are original package A (referred as package A below), redesigned package B (referred as package B below), and redesigned package C (referred as package C below). And we get the result from Customer Satisfaction Index, referred as CSI below.

We mainly discuss the common point, different point, maximum and minimum value of three packages' CSI. In appliance with Schmitt's brand experience theory, we collect adjectives about sensory experience, affective experience, behavioral experience, intellectual experience and relative experience of Yangshan peach package experience. After pre-experiment, finally we made the testing questionnaire.

In our questionnaire interview, we mainly collect various people's CSI about Yangshan peach package experience and do association analysis and factor analysis between customer feature and their CSI.

We hope that the result analysis of our empirical research will lead the improvement of Yangshan peaches' package service design.

## 2 User Participatory Based Experience Information Respond Platform for Taozhiyuan Yangshan Juicy Peach

According to Figure 2:

Package A's CSI ranges from 2.42 to 3.63. The element with the highest consumer evaluation is "protective" of behavior experience with CSI (3.63), while collectable element gets the lowest CSI evaluation with 2.42. To package A, the elements with highest CSI are unique (3.31), warm-colored (3.45), and protective (3.63). However elements with lowest CSI are high-class (2.75), good-quality (2.82), spiritual (2.84), and collectable (2.42), which belong to the affective experience and intellectual experience.

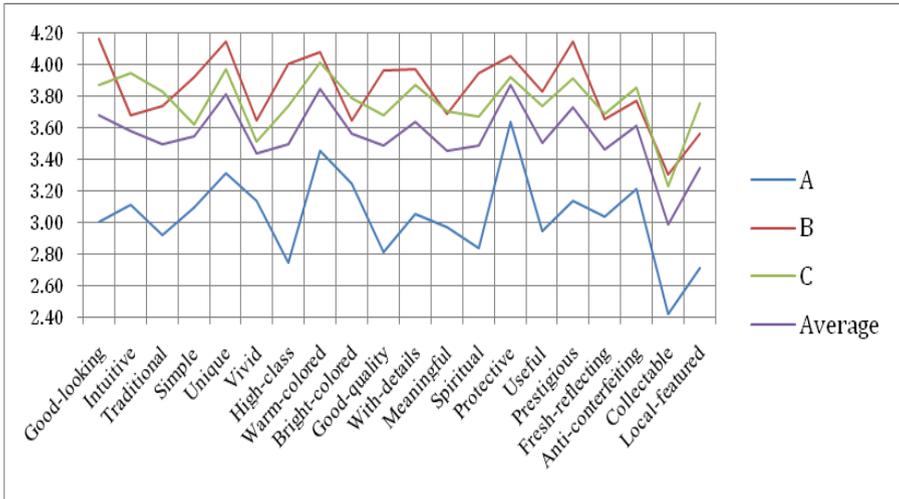


Fig. 2. Experience Analysis of Brand Package A、 B、 C

Package B gets CSI score from 3.31 to 4.15 with consumer’s positive evaluation in all aspects, among which, the lowest CSI appears in collectable of intellectual with 3.31 score. And package B’s unique and prestigious elements of affective experience get the highest average CSI of 4.15.

Package C achieves CSI of 3.23 to 4.02. Its highest CSI score is 4.02 of warm-colored element of sensory experience, while the lowest CSI score is 3.23 of collectable element of intellectual experience.

From average CSI curves, we can tell that the CSI arranges from 2.99 to 3.87. The highest score exists in the "protective" element of behavioral experience with CSI score 3.87 for the reason that the three packages uses patented suspension technology of hang package. User’s collectable evaluation of intellectual experience has the highest average CSI of 2.99, suggesting that as a high-class gift package, all the three packages of Yangshan peach need improvement in intellectual experience.

Comparing the curves of package A、 B、 C, packages A’s CSI in lower than package B & C’in every evaluation aspect. In 13 aspects out of 20, package B achieves higher CSI than package C. So users experiences best about package B. So the overall experience rank is B better than C, and better than A (B>C>A).

In summary, the suspension design of package A, B, C enhances customer experience in protection. To package A, consumers accept its simple red- white appearance in sensory experience. However it still has improvement space for users’ affective and intellectual experience. The peach flower element of package B & C positively enhance consumers’ brand experience. But as high-class package, package B &C have to bring customers better intellectual experience, especially in collectable.

Comparing simplicity and details, customers more like simplicity, rather than a lot of details. In other words, it’s the more details, the better. Package design with certain details and simplicity at the same time would achieve customer brand experience promotion.

### **3 Information Technology Based Service Design for Taozhiyuan Yangshan Juicy Peach**

The high-tech company mainly producing high-end juicy peaches Wuxi Taozhiyuan Internet Technology Co. Ltd is the base for case study and empirical research. Chose as object of our brand package design, the sling-style and anti-counterfeiting package and the Internet support platform are two competitive features of the brand package of Taozhiyuan Yangshan Juicy Peach, which have both value in sustainable system design and service design. Because Taozhiyuan represents the high-end brand package design. At the same time, its Internet support platform meet the development trend of contemporary agriculture. The sling-style and anti-counterfeiting package adopted two key designs: the sling-style that the juicy peach is slanged up so that it is effectively protected from collision and extrusion during transportation; the disposable lock-up that only by breaking that can the consumer take out the juicy peach, which guarantees non-repetitive usage of the package.

With the package, the company established three platforms based on Internet and cloud computing technology:

- the tracing system which allows every juicy peach be traced ;
- the perceptive delivery system, which creates better consumer experience by realizing perceptiveness during the whole process including purchase、pick-up、delivery、check-out and inquiry;
- the after-sale service platform, which collects consumer evaluation, regulate cooperater behavior in order to control quality, deal with online consumer complain in time and offer better inquiry.

IT-based service design for Taozhiyuan Yangshan Juicy Peach realized design-driving brand leverage by optimizing its fruit-brand satisfaction and reputation.

#### **3.1 High-End Brand package for Taozhiyuan Juicy Peach**

Among all kinds of fruit, peach is considered as the most mysterious one. In china, the well-beings, wishes, exorcising, birthday, wedding, thanksgiving and other social activities are all related to peach. So peach is one of top choice for presents since time immemorial. As one of the best present, “the premium one” achieved highest profit among all kinds of high-end juicy peach of Taozhiyuan in 2012.

#### **3.2 Introduction of the Pick-Up Electronic Code of High-End Brand Package**

The pick-up electronic code, part of the perceptive delivery platform of Taozhiyuan, is mainly designed to make juicy peach more appropriate as presents by virtualization. Usage process as follows:

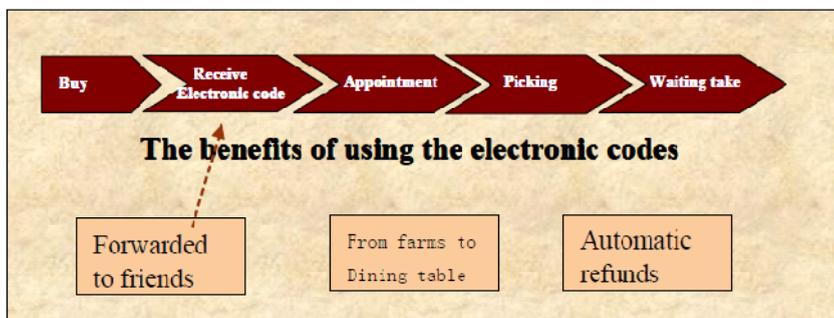


Fig. 3. Flowchart of Taozhiyuan Pick-up Electronic Code

Through pre-order, consumers not only get access to authentic juicy peach, but also first-hand fresh fruits delivered by “sweet from field to home” delivery model with discount on price. Two to three days after preorder, consumers can receive the fresh peach with a pick-up sheet with an ID number. Once it be promoted publicly, market share will increase, especially among high-end consumers and will form positive scale effect.

Taozhiyuan high-end brand package conveys the qualified, tasty, pure and authentic sensitive and knowledgeable experience of their product. On the other hand, it offers warm, thoughtful, convenient and instant service as emotional and behavioral experience to their users through the pick-up electronic code of its Internet support platform

## 4 Network-and-Internet Based Service Design

As information technology develops in a high speed at this age of experience economy, sophisticated service system is the guarantee of brand development. Donald. A. Norman suggested, “The only way to solve the complexity of service is to regard it as a system and design all the experience as a whole. If we design each part separately, it will finally turn out that each separated part can hardly work together.”<sup>1</sup> In our opinion, the tangible product and intangible service that integrates the fruit brand and tourism resources in Wuxi, combines local culture and the brand image of Yangshan juicy peach, establishes online information service platform and develops MT-related application to form online and offline experience model will create memorable experience. And we have 3 suggestions as follows:

### 4.1 Establish Fruit Brand Information Service Platform In Feature of Wuxi Local Culture

There is close relationship between the geographic feature and its cultural tourism or local product such as Wuxi Yangshan Juicy Peach, Shandong Fuji Apple, Xinjiang Hetian Dates and Ningxia Wolfberry.

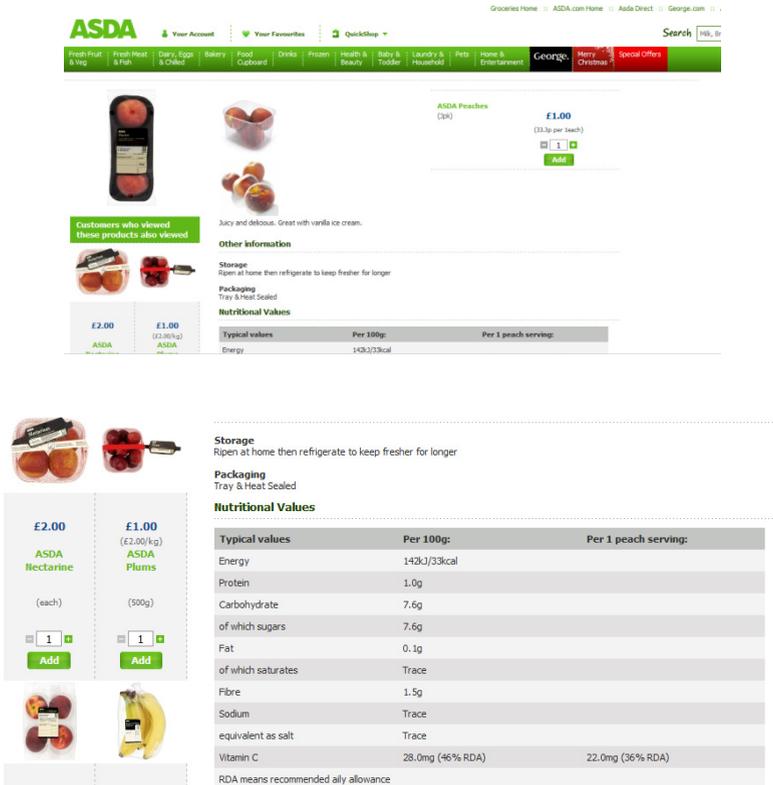


Fig. 4. Website of British Supermarket

Therefore, the geographic area is the label of a product. And the distinguished geographic and cultural feature will enhance the impressiveness of a product. Bearing the rich culture of Wu, the Wu style and spirits cultivates various local-featured agricultural products including Yangshan Juicy Peach. So to encourage a better understanding in Wuxi and its fruit brands, we should promote the fruit brands with Wuxi culture and express with its fruit brands by integrating all the fruit brands in Wuxi, referring to some styles of foreign supermarket websites, and establishing information service platform.

#### 4.2 MT-Related Application as Assistance

The development of mobile Internet makes it possible to anyone to get access to anything they need anytime and anywhere. To embed the promotion of Wuxi fruit brand into people’s mobile live, we need to develop an application in feature of Wuxi local culture and in association with its information service platform, which integrates the tourism resources and fruit brand information in Wuxi. Through application service such as introduction of local characteristics, navigation, information update and

activity notifications, it will increase both first-time and returning tourists to Wuxi and realize the sustainable development of tourism and mordent agricultural products in Wuxi.

### 4.3 Brand Promotion with Panoramic and Whole-Coursed Experience

Appealing to consumer need in close-to nature life experience, the existing experience activities, such as farm stay, fruit picking and plant adoption enriches fruit brand promotion in Wuxi. However, existing experiences are comparatively limited. So we can start up the local-featured fruit brand experience for the visitors at their first step in Wuxi by expanding brand promotion from one location to an entire city and enhance their impression in Wuxi fruit brand by making brand experience into a continuing activity.

In conclusion, under the background of experience economy, we should shift fruit brand promotion from product to user experience, establish brand image with local culture, push the species boundary of fruit brand and increase fruit brand value in a untied, open and orderly-competitive modern market system.

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