

# Developing a Lifestyle Design Approach in Brand Design Process Through UCD Methodology

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**Abstract.** This paper presents a lifestyle design approach in the design process of the QM (a local furniture manufacture in China) brand design project. The approach was developed to help designers efficiently understand segmented customers' profile based on market research. Designers can be inspired by lifestyle prototypes generated through the lifestyle design approach. This approach is developed based on three UCD methodology principles: user focus, using prototype and iteration with evaluation. The lifestyle design approach has three steps: concretizing customer profile, creating lifestyle prototype and evaluating lifestyle prototype. We implement the approach in the QM brand design project to deliver several lifestyle prototypes and evaluate them. This paper concludes that the lifestyle design approach can connect customer research and creative design. It will be of interest to designers and market researchers.

**Keywords:** Lifestyle design approach · Brand design process · UCD methodology

## 1 Introduction

Increasing social media and e-commerce have changed the relationship between customers and the brand. Customers' value has become a significant factor in brand strategy design. Recent brand design studies have been focused on rearrangement of a brand design process and approach to apply in different circumstances. Some researchers have found that companies should co-create the brand strategy with their customers [1]. They have provided a series of tools to engage customers as participants in the brand design process. Other brand design methods have been developed through an important design foundation theory that is the emotional design theory [2].

The co-creation method and the emotional approach could be categorized as a UCD (user centered design) methodology. UCD is a design process and philosophy in which the designer focuses on users' needs, wants, and limitations through the planning, design and development stages of a product (Usability Professionals Association, 2011). These UCD methods focus on the creation stage of design process. In this stage, studies of customers' need are the key issue. However, few attempts were made to build UCD approaches in the earlier stage of brand design. In this design, key issues of the study are customer classification, customer value definition, consumption view etc. In the traditional brand design process, these studies were included in lifestyle research

for marketing. It would be of interest to establish a lifestyle research approach from the UCD perspective in brand design.

The main purpose of this study is to build a UCD based lifestyle approach focused on the first stage of brand design process. The paper is organized as follows: Firstly, a review of the UCD methodology and lifestyle research is presented. Secondly, a framework of lifestyle research approach is proposed including purposes, methods, tools etc. Thirdly, we demonstrate this method with a case study of the lifestyle research approach in the QM furniture brand design project. Finally, we explain several future research opportunities of our work.

## 2 A Theoretical Framework

### 2.1 Lifestyle Research in Traditional Brand Design Process

Lifestyle is a series of consumer behavior patterns, which reflects consumer’s choice to spend their time and money [3]. In most cases, marketers and designers use lifestyle research as a market segmentation method, such as VALS(Values and Lifestyles system). VALS method segments American adults into eight distinct types using a specific set of psychological traits and key demographics that drive consumer behavior. In China, researchers introduced a China-VALS system to segment Chinese consumers into 14 groups [4]. Marketers use these tools to define target market segmentation and transfer them to designers in the early stage of brand design. This stage is called design definition. The segmentation information including consumers’ activities, opinion and interests is usually organized by demographic characteristics. In the next stage, creative design stage, designers develop brand design strategy on the basis of segmentation information. They use some UCD methods such as persona [5], co-work with consumers [1] to understand market segmentation clearly and use it efficiently (Fig. 1).

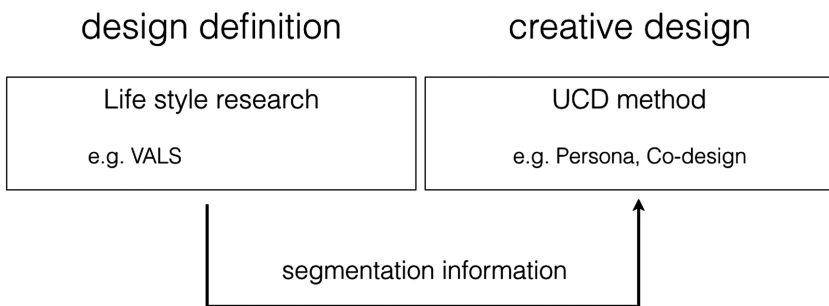


Fig. 1. Lifestyle research in design process

## 2.2 Insert a Lifestyle Design Stage into Brand Design Process

However, in this process designers always misunderstand segmentation information. Because most of lifestyle researches focus on consumers' general characteristics, they lost details of consumers' life style. Designers need these details to build an image of consumers' life when they generate a design strategy. Besides, the segmentation information is based on facts that occurred in the past. Designers prefer to be inspired by something new. To solve these problems, we insert a new stage named lifestyle design between design definition and creative design. In this stage, designers create some design themes from the result of lifestyle research, which show new lifestyles in a concretized way (Fig. 2).

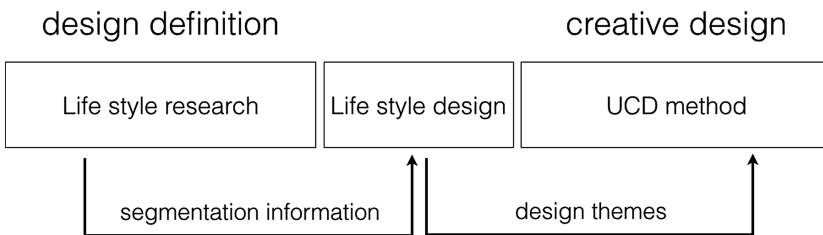


Fig. 2. Lifestyle design stage in design process

## 2.3 A Discussion of UCD Principles

UCD methodology was developed from computer engineering field (Nielsen), which includes a series of methods organized by a design process. Many researchers discussed the methods and process and some models can be categorized into a framework (Table 1).

- From these research results we can find out some common principles in UCD process and methods.
- User focus. Users are very important in UCD methodology because in every design stage users are concerned frequently, such as user profile, personas and usability test. And today user participatory design methods are becoming more and more popular in UCD, which engage with users throughout the whole process.
- Prototype methodology. Prototype is an essential tool used through overall UCD process. In the early stage it can be a tool to show different possibilities of solution; in the last, it can be tested in the usability testing and improved to be a final product.
- Evaluate and iteration. This principle is related to the user focus and prototype.

Users mean people who use the product in UCD method, and in our study, customer will replace users because they only touch the brand and have not used the product.

**Table 1.** A review of UCD methodology

Researchers	Process	Methods
Mark Ominsky [6]	Solution outline	user profile, solution modeling
	Macro design	low-fidelity prototyping, cognitive walkthrough
	Micro design	high-fidelity interaction prototyping, usability design walkthrough
Vredenburg, K [7]	<ul style="list-style-type: none"> <li>•Market definition</li> <li>•Task analysis</li> <li>•Competitive evaluation</li> <li>•Design and walkthrough</li> <li>•Design evaluation and validation</li> <li>•Benchmark assessment</li> </ul>	—
JAN GULLIKSEN [8]	Vision and plan	
	analyze requirements and user needs	Contextual inquiries, task analysis
	design for usability by prototyping	Low-fidelity prototyping
	Evaluate use in context	Usability test
	Construct and deploy	Usability test
	Feedback and plan the next iteration	—
Tomasz Miaskiewicz [5]	—	Personas
Wilkinson, C. R. [9]	Requirements analysis	Participatory design
	Prototypical design solutions	
	Finalist design solution	
	Evaluation and analysis	

### 3 Development of the LSD Approach Through UCD Principles

We define LSD (Lifestyle design) as a design inspiration mechanism that connects design definition and creative design. In LSD stage, the design purpose is to show customers’ life style image and details. We deliver the outcome of LSD stage as a life style proposal or prototype including customers’ aesthetic preferences, consumption motivation, social position and so on. In the next **creative** design stage, designers can use this lifestyle proposition as sources of creativity. We develop the LSD approach through the UCD principles discussed in the last paragraph into three steps, concretize customer profile, create lifestyle prototype and evaluate lifestyle prototype.

### 3.1 Concretize Customer Profile

In this step, we concretize customer profile into a concrete form, image boards. Every segmented customer profile information including their life conditions, consumption views and brand views is collected using traditional marketing methods such as focus group and different customer segments categorize interview and this information. The image board is a tool for information visualization, which uses typical images to interpret abstract data. Except the photos we took from customers' daily life, we also use a customer participatory method to choose image in this step. In the focus group session, every participating customer was requested to pick out pictures that can show their life style from materials prepared for them. The pictures were collected from the popular life style magazines and websites about fashion, home furnishing, food, automobile and digital products. These pictures are the main references when we make the image boards.

### 3.2 Create Lifestyle Prototype

Prototype is a very important tool in UCD method, which transfers the concepts in designer's brain to real products. In the beginning of design process, Low-fidelity prototypes are made to show different possibilities of solution. With the deeply design on the prototypes, they approach to the final scheme and will be tested by users before the final product release. We use the prototype concept to build lifestyle design method. In LSD stage we create hypothetical lifestyle prototypes based on the customer profile, which shows different possibilities of target customers' life. Although lifestyle prototype is designed from real customers' life segments, it is a totally new scene differentiated from customers' real life. It is a hypothesis and prediction of a target customer segment, which can give inspirations to designers in the creative stage.

We create lifestyle prototype from customer profile in three steps as follows.

Step 1. Extract keywords from customer profiles.

In this step, we review every customer profile and select keywords that can describe their life style features. These keywords are abstract information from people's real life and will be the basis of lifestyle prototype design.

Step 2. Use images to define lifestyle characteristics.

According to the keywords extracted in last step, we search images to explain and describe the customers' life style features. We scan the popular media and leading company websites to find images that can show trends. The images may be product photos, color schemes, material samples, interior decoration, fashion shows and so on. The purpose of this step is to enlarge and enhance the lifestyle characteristics that keywords represented.

Step 3. Create lifestyle themes.

In this step, we give every image a keyword to define its style, just like Step1. The difference is that keywords represent the customer lifestyle features in Step1 while they represent the lifestyle trends in this step. We sort the image and keyword into different groups and give each group a style theme.

Step 4. Assemble themes into lifestyle prototype.

After step1-step3 finished, we can design several lifestyle themes for every customer segment, which show different aspects of people’s life. These themes can be assembled into lifestyle prototype that is concrete, detailed and cutting edge. Lifestyle prototype can be different forms including image board, video, object and space. Different forms can inspire designers for different purposes. For example, when a designer wants to advertise a brand, the target customers’ lifestyle prototype he needs should be an image board or video.

This whole process of lifestyle prototype creating is a combination of logical thinking and image thinking. When we extract a keyword, we use logical thinking and when we choose an image to explain a style, we use image thinking. After several rounds of thinking combination, the prototype can be presented richly and accurately. Figure 3 describes the full view of lifestyle prototype creation.

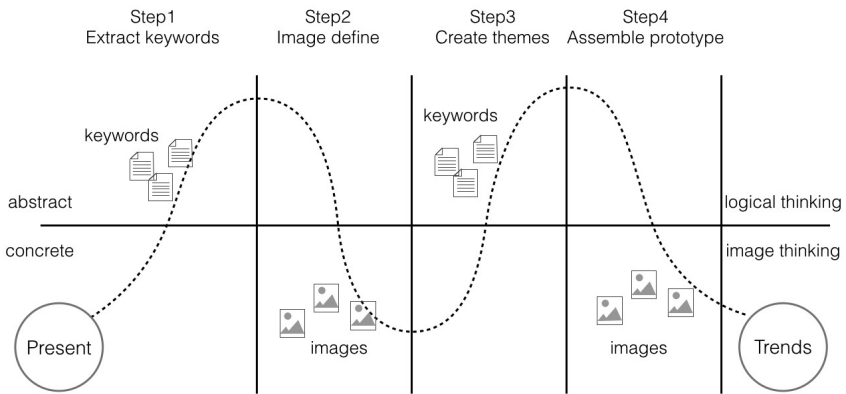


Fig. 3. Full view of lifestyle prototype creation

### 3.3 Evaluate Lifestyle Prototype

After lifestyle prototype design finished, we invite target customers to evaluate and improve it. We use usability test as a reference to build method in this part. Just like a usability test we observe customers when they review and experience the lifestyle prototype. Moreover we interview customers or make a survey after the test. Then we analyze customers’ behaviors and options to support the improvement.

Through UCD principles, we build the LSD approach with three main parts, concretize customer profile, create lifestyle prototype and evaluate lifestyle prototype. As the result of the LSD stage, lifestyle prototypes can be a bridge to connect the customer research and creative design. Designers will have concrete and detailed customer lifestyle samples instead of the abstract text, number or chart, so they can understand the target customers’ life more accurately and efficiently when they design the brand strategy.

## 4 Results and Discussion

We implemented the LSD approach in the QM brand strategy design project that aimed to help QM brand connecting with their target customers more tightly. We took a research roadmap from concretizing customer profile to lifestyle prototype creation and evaluation, and delivered a series of lifestyle prototypes to designers for QM advertising and flagship store design.

### 4.1 Concretize Targeted Customer Profiles

After early studies, targeted customer segments were defined for QM brand. In the early studies stage, we have taken some typical photos from customers' daily life and some costumers who participated in the focus group were asked to pick some pictures to represent their lifestyle. These pictures help us to make the customer profiles image board more accurately and efficiently. As a delivery of this step, we made image board for every customer segmentation that includes customer persona, interior decoration, consumption scenario and so on.

### 4.2 Lifestyle Prototype Design Workshops

We held several workshops in this step and invited some target customers and designers to work together to design lifestyle prototypes. Firstly, we extracted keywords from the profiles, which can describe customer lifestyle's characteristics. Then, we search images to concretize keywords, which are about cloth, food, car and so on (Fig. 4). All this images are found in leading company and top media and represent the newest trend.

In the next step, we gave every image a keyword to describe the lifestyle trends that they represent. The keywords in this step are an update of the keywords in the previous step. After a round of logical thinking mixed image thinking, we found the newest trend of target customers' lifestyle. In the following step, we mixed and matched some keywords to be some trend themes and visualization them.

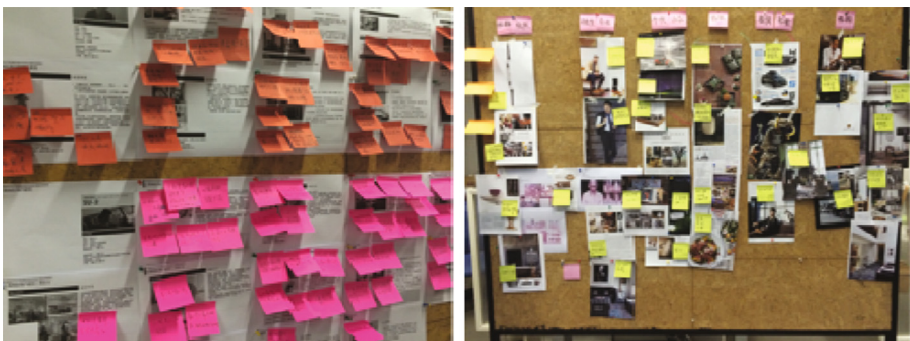


Fig. 4. Extract lifestyle keywords

Every targeted customer segmentation has several trend themes that show different aspects of people's life. We assembled them together to build an overall perspective lifestyle prototype, which represents customer's value, consumption view, daily life scenario, aesthetic preference and so on.

### 4.3 Evaluate Lifestyle Prototype in QM Store

With the help of QM Company, we conducted a lifestyle prototype in QM store. This lifestyle prototype is a space based prototype and built in a QM flagship store in Beijing. We put some furniture and decorations in the store space depending on our LSD proposition (Fig. 5). The evaluate process is more like a usability test, which aimed to gather customer's option about our lifestyle prototype. We invited target customers to shop in the store wearing a headset eye tracker machine that can record people's sight. After analysis of customers' eye track data and opinions, we fixed and improved our lifestyle prototype.



Fig. 5. Lifestyle prototype in QM store

## 5 Conclusion

The purpose of our study is to build a method to connect design research stage and creative design stage. Mostly designers feel difficult and confused when they read a design research report full of abstract information. And what we study is to transfer the research result to be a form that designers can easily recognize. We redesign the abstract information to be a prototype that can be used as design inspiration resources. From this point of view, the design inspiration resources become a design object, so we can use a design methodology to create them.



In our study, we choose UCD methodology to design the research result, which is the most popular design method in this time. Through the essential principles of UCD method, we build the lifestyle design approach in the brand design process, which developed around the lifestyle prototype. Compared with the prototype in the creative design stage, lifestyle prototype is very special because it is not a real product or service. Lifestyle prototype is more like a prediction of customers' life status in the future.

At last, through this paper a lifestyle design approach in brand design process was presented and its instruction was made by a case study of QM brand design project. The approach can be divided into three steps. They are concretizing customer profile, creating lifestyle prototype and evaluating lifestyle prototype. Another feature of this approach is the mixed usage of logical thinking and image thinking. After several rounds of keywords-image interaction, the lifestyle can be described accurately.

In this study, the designers become the "customers" of our LSD approach. However, designers in the case study did not evaluate our approach. We will gather designers' options about our approach and improve it in the future.

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