A Study on the Consumers' Brand Cognition and Design Strategy by ZMET

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Abstract. The research used Means-End Chain as theory basis to combine the consumers' inclinations sense to form the chain-relation as "attributes-result-value", using a new Zaltman Metaphor Elicitation Technique to analyze the high involvement people thoughts and feelings to find out about the consumer's profound concept. Personal interview data was examined in the application of qualitative analysis of Laddering Technique and content analysis method, so as to explore the hierarchical relations of customers' cognitive value, and to build up their mental map and hierarchical value map (HVM). Based on the collected HVM elicited from the study, it has shown that the consumers' ultimate values through 73 components are "pleasure", "commoditization", "agelong power", "free and easy", "exhilaration", "experience of Japanesque life", "progress in personal sense. he results of the research help designer understand precisely the detailed product in accordance' deep thoughts, as well as the factors that affect customers' buying behavior.

Keywords: ZMET (Zaltman Metaphor Elicitation Technique), Brand Values, Consumers' Inclinations.

1 Introduction

Traditional economy looks at a product in terms of their function, form and price. Modern economic trend are seen from life style and scenarios; creating sensory experiences and recognition of thinking. The consuming behavior has transformed from the simple "product consumption" to "emotional consumption". An article from Harvard Business Review called "Welcome to the Experience Economy" points out that the design trend from experience economy strives for an enterprise as the center of service. Using a product as their material, the consuming behavior strives for emotional appeal and scenarios; creating emotions worth memorizing for the consumers.

In order to understand the needs and thoughts of consumers, the rational side can be satisfied through the function, environment and purposes of a product. The emotional appeal can be created through elements such as design and imagery. Combining these two levels, the consumer can discover the value of a product and create "emotional" consuming behavior. Emotional appeal refers to our inner conscious values; personality, likes, emotion, objects that triggers our emotion. If one looks at the emotional program of a consumer and understands the products of a consumer;

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one can get hold of the inner conscious values. The preference and needs of the consumers are discovered. The aim is to find the products that fulfill the needs and the messages that stimulate the consumer, thereby discovering the consuming elements of the consumers; with the ultimate goal of producing products that fulfils the needs of the consumer.

This study discovers the persistence and essence of MUJI: products that stays true to its values and not to be simple and clean for the sake of it, but rather for the sake for the consumers. The essence of MUJI does not emphasize the redundant values brands provide to consumers but rather thinks about the consumers. Therefore, the method of combining Means-end-chain with the structure of ZMET is used to understand the preference and cognitive structure of the consumers. This aims to gain the mind map, Sensory Image, The Summary Image, digital images and Consensus Map of the consumers to satisfy the product needs of the consumers.

This study has the following four objectives:

1. Understand the relations between attributes-result-value of MUJI's consumer products on high involvement.
2. Guide the consumer to find their preference over MUJI products in order to extract the preference of this group.
3. Provide texts and visuals on the elements of preference the consumer has for MUJI and conclude the direction a designer needs when designing a product for MUJI.
4. Provide direction for the designer on extended product to reassure product image and increase its competency in the market.

2 Understanding the Method

A consumer is a decoder in the process of receiving messages from a product. Through the understanding of how consumers detect, recognize and determine product messages, a better understanding on the inner values of the consumers can be achieved.

2.1 Consumer Cognition

The whole cognitive process includes the different layers of feelings and senses; these include the immediate reaction from these external stimulations called sensation. These sensations are as follows: sight, hearing, smell, taste and touch; namely our five senses. Perception refers to the fundamental biological sensing organs, transferring stimulation into meaningful messages; which are used to explain or react to our surroundings.

2.2 Product Message and Consumer Needs

The consumer's willingness to purchase often decided upon their perceived acquisition value. When a consumer gains more than what they had paid for, the probability of purchase is higher. Whether a product has the benefit of purchasing is decided by the value it provides for the consumer. In this emotional consuming social structure, a product becomes a medium for the transferring of messages. It's not just their functions that are considered but also their meaning.

2.3 Consumption Values

Sheth proposed five consumption values to explain collectively the buyers' multiple-facet decision process of purchasing what they wanted. (Fig1.)The first is functional value, which emphasized on the consumption utility of a particular product/service. Everyone's preference may differ and usually depend on his/her own budget, and purpose. Secondly, the linking to the buyer will influence his/her purchasing decision. The third is that reflects the purchasing feeling and enthusiasm surrounding a specific intention, atmosphere or situation. The buyer may be eager to purchase the on sale product or service that gives the buyer new knowledge or special consumption experience. Besides, some technological products are usually used under considering the condition of compatibility or network externality.

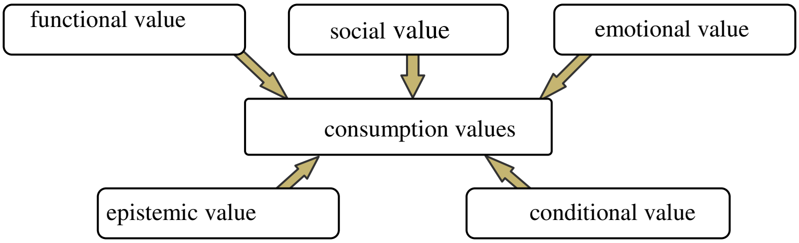

Fig. 1. Five consumption values Sheth, Newman and Gross (1991)

This study focuses on the "consumption experience" and discusses the needs of a product's functionality and emphasizes on a consumer's reaction on a product's "senses", "aesthetics" and "emotions"; investigating the values consumers gains from the consumption of MUJI products.

3 Mothed

The research had Means-End Chain as theory basis, using a new ZMET, Zaltman Metaphor Elicitation Technique to analyze the high involvement people thoughts and feelings for MUJI products. According to this method, we could realize the correlation about the products attributes、consuming consequences and ultimate values. The first phase is to find out about the consumer's profound concept through ZMET. The chain-relation of MEC then forms "attributes-result-value", so the relation level of consumers on the products' product attribute, consume result and personal value is gained. Further rich connotation gained from MEC&ZMET is then fused into the emotional program of products, to confirm the mode of transaction between the consumer and the product. These deeper values, characteristics and preferences are used to grasp needs that consumers have yet to discover. Elements that are needed to stimulate needs of the product are then found to conduct a design method that will fit with consumer's preferences.

3.1 Means-End Chain

The prototype of Means-end chain is as follows, proposed by Young & Feigi :

Consumers link product attributes with consequence. These consequence are linked with personal value. Attributes, Consequences, values are the three elements that forms the knowledge structure of a consumer's understanding on a product. The completion of Means-end chain is as follows, proposed by Gutman. MEC is a tool to analyze the link between products and consumers and to gather information on consumers goal structures starting from the analysis of their decision-making processes (Figure2.). It allows to uncover/analyze consumer cognitive structures and decision maps (also referred as Hierarchical Value Maps), by the utilization of an innovative research method – means-end chain analysis – coupled with a in-depth interviewing technique called laddering.

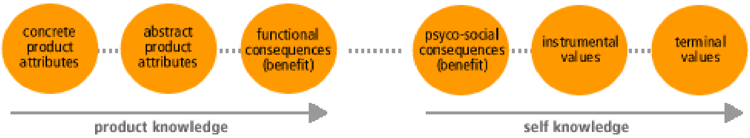
concrete product attributes
abstract product attributes
functional consequences (benefit)
psyco-social consequences (benefit)
instrumental values
terminal values
product knowledge
self knowledge

Fig. 2. Means-end chain theory Reynolds and Gutman, 1988

MEC connects relations between A/C/V, it can also analyze the emotion product attributes brings to the consumers, what overall value thinking. The connection is seen is Fig.3.

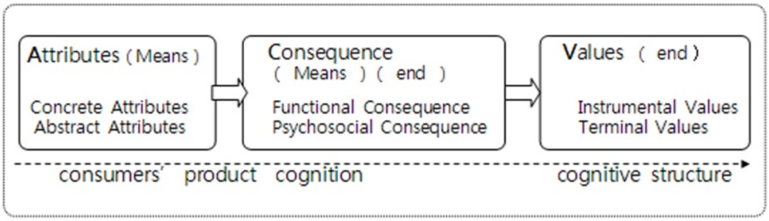
Attributes (Means)
Concrete Attributes
Abstract Attributes
Consequence
(Means) (end)
Functional Consequence
Psychosocial Consequence
Values (end)
Instrumental Values
Terminal Values
consumers' product cognition
cognitive structure

Fig. 3. MEC connects relations between Attributes/Consequence/ Values

There are twelve subjects are used on interview. In-Depth Interview is used on a one-on-one basis to find out about the preference and needs of the consumer. Laddering is used to build the chain of consumer attributes-result-value to understand how consumers transform product attributes into meaningful connotations. Hierarchical Value Map (HVM) is then induced.

It is divided into Attribute/conclusion/value and the elements are divided in levels. The elements of A/C/V relation matrix decide the main path or the connections of the relation elements. The matrix describes the elements gained or the number of indirect relations. These are made into HVM. Through HVM, the overall structural relation of the product is understood through MEC. The importance of the products is illustrated to provide designers, marketers, creative staff to decide the appropriate product attributes, enhancing the values of the product and decrease errors made by the direction of the product.

This study is based on the Means-end chain method to understand the product attribute to the final value of the potential linkage. This is integrated with ZMET to speculate the product attribute that influences greatly on consumer's consumption and its final value.

3.2 Zaltman Metaphor Elicitation Technique

Zaltman Metaphor Elicitation Technique is a mixed non-text language (images) and texts (In-Depth Interview) to study consumers. This new consumer research method is proposed by Prof. Zaltman of the Mind of the Market Laboratory of Harvard University in the 90's (Zaltman and Coulter , 1995) Our intent is to contribute further to the understanding of consumers' impressions of advertising and the meanings that they associate with it, as well as to introduce the Zaltman Metaphor Elicitation Technique (ZMET) more formally as a means to conduct advertising research (Zaltman 1997; Zaltman and Coulter 1995). ZMET is a hybrid methodology grounded in various literature, including verbal and nonverbal communication, visual sociology, visual anthropology, literary criticism, semiotics, mental imagery, cognitive neuroscience, and phototherapy. The method involves semi-structured, in-depth, personal interviews centered around visual images that the informant brings to the interview (Denzin 1989; McCracken 1988).

The main concept of includes metaphor, image analyze and story-telling, using images as a medium, metaphors as a method for exploration tool (Metaphor Analysis). Images can be used to communicate its visual metaphor, as seen in Fig4.

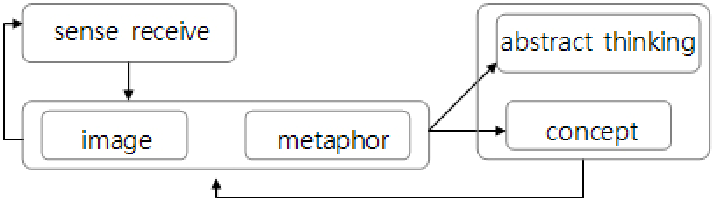

Fig. 4. Metaphor cognitive operation plans Zaltman & Coulter , 1995

ZMET provides the compound method of credibility and efficiency, especially image analysis. It can develop non-textual communication channels and induce specific thoughts and feelings of the consumers; displaying the mental modes of the consumers and other insights into the rich inner world of the consumers.

Table 1. The interview followed these ten steps

STEP1 STORYTELLING – They were asked to describe the content of their photos. I began by placing the scenario instruction sheet on the table (Non-Renao). I took the collection of photos they had taken and shuffled them into a stack. They weren then asked to select 8 to 10 pictures that they thought best exemplified the scenario out of the many they had taken. The pictures were then laid out on the table and the respondent was asked to describe the content of each picture. As they chose each picture, I identified its number for the audio recording.
STEP 2 MISSED IMAGES – They were asked which image they did not get but would have liked to include because of the nature of the picture capturing something important they would like to express about the topic. They were then asked to describe those missing images.
STEP 3 SORTING TASK – They were asked to put the pictures into groups that were in some way meaningful to them and to describe those groups. Each group of photos were spread out on the table and photographed and an audio recording stating the group's title and the identification number of each photo.
STEP 4 CONSTRUCT ELICITATION – Using respondent generated photos as stimuli, I elicited basic constructs and their relationships using laddering techniques. All of the groups of the photos were put back into a single pile and mixed up. I randomly selected three pictures and placed them on the table. Interviewees were asked to tell me how two of these pictures are the same and how they are different from the third picture. This is The Kelly Repertoire sorting technique that forces interviewees to create meaningful connections by grouping two images together and separating them from another image in a way that means something to them. For each point the respondent makes, they were asked repeatedly to elaborate on the ideas they bring forth. This is known as the Means-End Chain Analysis and Laddering Techniques.
STEP 5 MOST REPRESENTATIVE PHOTO – They were asked to select the picture that most represents the scenario given to them and to explain why this picture is most representative. Again, each idea presented was followed up as much as possible to get more meaning from this single picture. The picture was identified on the recording for reference purposes.
STEP 6 OPPOSITE IMAGE – Each interviewee was asked to find any picture that is most unlike or opposite to the given scenario. Again, as many follow up questions were asked as possible to get more meanings from this single picture. It was also identified for the audio recording.
STEP 7 SENSORY IMAGES – Respondents were asked to relate the core idea to their senses. They were asked what positive and negative associations they made with regards to taste, smell, touch, sound, color and emotion to the topic being explored. Each idea was explored as much as possible to get at more meaning.
STEP 8 THE MENTAL MAP – They were then shown the Post-It notes of ideas that I collected while they were talking and they were asked to show how these are related to each other by making groups and drawing connecting lines.
STEP 9 THE SUMMARY IMAGE - Respondents create a picture collage to summarize their ideas. They were asked to take scissors and cut out parts of any photos to put together a summary image or collage of their feelings about the scenario. Respondents were encouraged to place any pictures on an empty A4 page and cut them up, combine them, and even change any of the pictures using a pencil to draw anything into the collage. When complete, the Summary Image is photographed and I checked to make sure the picture was clear. The respondent then introduced the meaning of the collage.
STEP 10 VIGNETTE – The final step was to create a Vignette. They were asked to think about the scenario and that if they could make a short movie that included their important feelings about the scenario, tell me what that movie would be like Respondents then described their movie to me.

4 Result and Analysis

ZMET has displayed a route that surpasses words through the use of metaphors. This aims to discover the innr world and deeper thoughts of the consumers. MEC enables researchers to formulate the gained thoughts and mental map into the A-C-V structure that represents the consumers. These two methods support each other to help researchers understand the inner values of the consumers which emphasize its value.

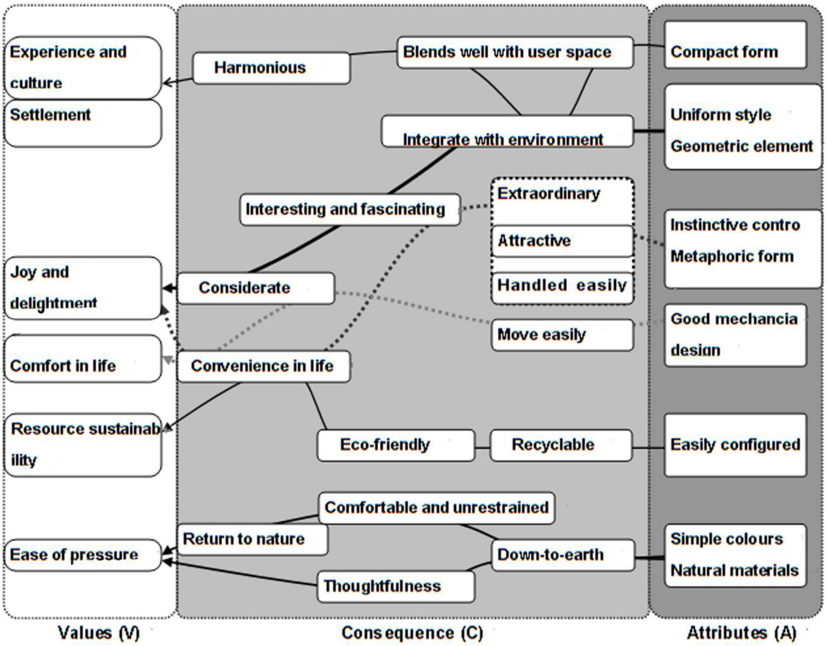
Experience and culture
Settlement
Harmonious
Blends well with user space
Compact form
Integrate with environment
Uniform style
Geometric element
Interesting and fascinating
Extraordinary
Attractive
Handled easily
Instinctive contro
Metaphoric form
Joy and delightment
Considerate
Move easily
Good mechancia design
Comfort in life
Convenience in life
Resource sustainability
Eco-friendly
Recyclable
Easily configured
Comfortable and unrestrained
Return to nature
Down-to-earth
Simple colours
Natural materials
Ease of pressure
Thoughtfulness
Values (V)
Consequence (C)
Attributes (A)

Fig. 5. HVM image

A final HVM image is gained in Fig.5, this is created from 39 tree-form links. HVM is an valuable tool for the analysis of A-C-V.

Fig.5, one can observe the attribute level concept:Through the linkage between the lines to represent the relations, in order to understand the consumer's relation level of the A-C-V concept. This will let researchers understand the key elements that enables consumers to make the purchase, but also helps designers to apply HVM linkage to find out the correct decisions on market segmentation, product orientation and advertisement needs.

In Fig.6, the value level of HVM and the Originator construct, Connector construct and Destination construct of ZMET.

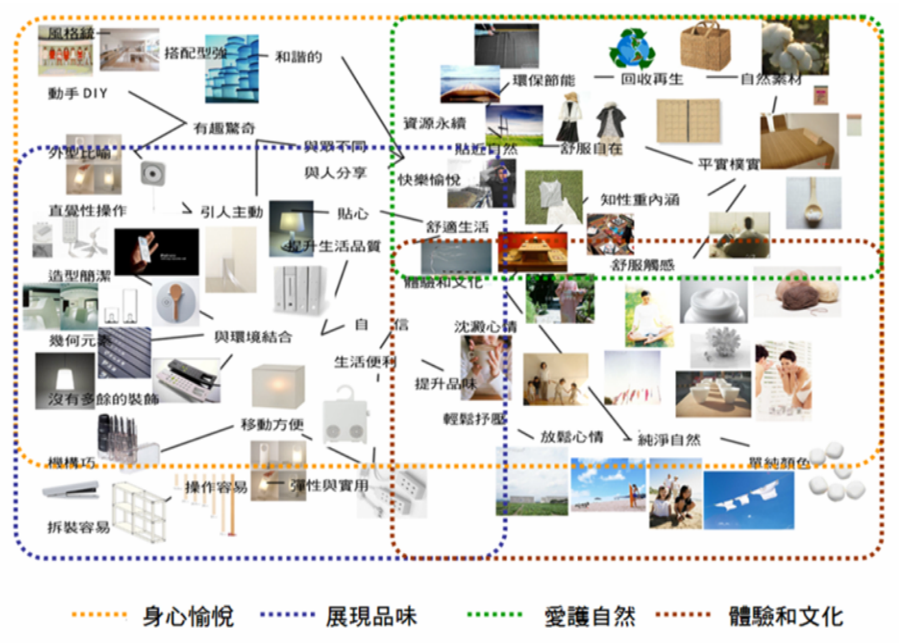
風格綠
搭配型強
和諧的
動手 DIY
有趣驚奇
外型比喻
與眾不同
與人分享
直覺性操作
引人主動
貼心
提升生活品質
造型簡潔
幾何元素
與環境結合
自
信
生活便利
沒有多餘的裝飾
移動方便
機構巧
操作容易
彈性與實用
拆裝容易
環保節能
回收再生
自然素材
資源永續
貼近自然
舒服自在
平實樸實
快樂愉悅
知性重內涵
舒適生活
舒服觸感
體驗和文化
沈澱心情
提升品味
輕鬆抒壓
放鬆心情
純淨自然
單純顏色
身心愉悅
展現品味
愛護自然
體驗和文化

Fig. 6. The value level

The Consensus Map based on its meaning are elaborated as follows:

1. Comfort

MUJI avoids a luxury style and extracts various natural materials. Its natural and unpretentious style is praised and affirmed by the consumers that seeks comforts and joy. In the material of its line of clothing, bed covers and sofas, seasonal cotton and linen are used. The colours are white and beige, brown, camel, indigo. The soft materials are perfect with user personality, producing harmony between man and nature; also creating comfort closer to nature.

2. Good taste

Branding is not an emphasis to MUJI, however many consumers agrees to its attitude and the extra values the brand brings. This is similar to the trend and fashion of wearing a Calvin Klein lebel or the wealth and social status Mercedes Benz brings. These values are meaningless to MUJI consumers, they are concerned about the quality of life and the clean design it brings.

3. Love for nature

The consumers of MUJI products are a group of individuals that loves nature. MUJI is about natural foods, recyclable products and clothing; a thorough spirit on their simplicity and love for nature. MUJI avoids many materials for the health of the consumers, for example PVC; which creates dioxin when heated. shirts which is created through excess yarn is unique, becoming collector's item for the consumers.

4. Experience and culture

The products that the interviewees mentioned are products of traditional Japanese products. The words mentioned are Zen, Japanese gardens, Japanese room. MUJI consumer gains through the design of MUJI product is a lifestyle that should not be overlooked.

5 Result and Recommendation

In total, 43 key concepts were formed as part of the HVM. This study is based on the inner need and attribute organization of the HVM, using a mode consisting of images and texts to present MUJI consumers preferences. They are namely: comfort, good taste, love for nature, experience and culture.

1. Product form and colour: The form of the product tends to be rectangular, oval, minimal and simple geometric shapes. The form is created for its necessity; the complexity of the living space is reduced through the design of simple elements that can comfortably integrate with the living environments. relaxing sensation.
2. Intuitive control: Metaphoric and imitative product form, which are familiar actions of everyday habits that is transformed onto the using behaviour of the products. This consideration of using user behaviour integrated with life experience reduces the distance between the user and the product.
3. Application of natural materials: Most of MUJI's products are manufactured using natural or recycled materials. They are kept as close to their natural form as possible, without too many artificial manufacturing. Recycling and preservation of energy are also important issues to them, they want to be more natural and gain from nature.
4. Experience of Japanese lifestyle: When a consumer purchases at MUJI, they do not just purchase the product itself but in addition, all the simple, natural and basic lifestyle the product presents. Once they discover that such simple products can also provide high quality and aesthetics to their lifestyles, it fulfills their longing for a simple life.

6 Further Studies

This study provides the following suggestions, to provide further studies:

1. This study is emphasized on the understanding of the MUJI consumer cognitions. This gains an extensive A-C-V relation linkage of the consumers on MUJI. This is not an exploration on a single specific product; a deeper study might be made if this is done on a single specific product.
2. This study integrates MEC and ZMET and apply it on product strategy and conceptual development. It can be integrated other marketing, brand imaging methods to discover other
3. This is a qualitative study, the analysis is objective and systematic, however, if a quantitative method is included, it will definitely add efficiency and credibility to the study.

4. This study applied the result to the validation of conceptual development and viability of a product. The attributes, result and value are not tested to consumers. Completion of this process will strengthen the relations of construct elicitation on Hierarchical Value Map.

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