# Why Consumers Go to All-You-Can-Eat Buffets?

Ya-Hui Wang Associate Professor

**Li-Hui Lin** Undergraduate Student

Department of Business Administration National Chin-Yi University of Technology No. 57, Sec. 2, Zhongshan Rd., Taiping Dist., Taichung 41170 Taiwan, R.O.C.

#### Abstract

All-you-can-eat buffet is a popular meal-serving system for people who want a wide variety of food and like to eat a lot. This study uses means-end chain (MEC) method and the laddering interviewing methodology to derive the goals relevant to all-you-can-eat restaurant consumers, as well as the interrelations among goals. The research findings show that "food quality", "variety", "environment", "price" and "food quantity" are the most important attributes. At the consequence level, "worth more than its cost", "affect appetite", "health", "a feeling of satiety", "revisit" and "delicious foods "are the major benefits for consumers. Finally, personal values that consumers most want to pursue are "happiness", "satisfaction" and "sense of value".

Keywords: All-you-can-eat buffet; Means-end chain; Laddering

#### 1.Introduction

All-you-can-eat buffet is a popular meal-serving system for people who want a wide variety of food and like to eat a lot. However, many consumers may have the experience of eating too much and then feeling uncomfortable after going to an all-you-can-eat restaurant, which gives rise to the following questions: Why people dining at all-you-can-eat buffets? What factors cause consumers' dining at all-you-can-eat buffets? What benefits and values can they get? What are the linkages of these attributes, consequences, and values for people dining at all-you-can-eat buffets? Consumer values play an important role in understanding consumer behavior. The traditional approach fails to capture the minds of consumers that actually drive their decisions because it often focuses on product attributes or benefits. Means-end chains approach is a method that employs the laddering interviewing technique to build value chains. It is based on a theory that product attributes are associated with its functional or psychosocial consequence, and finally to the underlying personal values the product can help consumers to fulfill. Therefore, means-end chains approach is helpful for market practitioners to understand consumer decision processes and design an effective advertising and marketing strategy.

Previous studies on all-you-can-eat related studies have focused on pricing (Nahata, Ostaszewski, and Sahoo, 1999; Just and Wansink, 2011; Erez and Gideon, 2012), service quality (Oyewole, 2013a; 2013b), paying timing for a meal (Siniver, Mealem and Yaniv, 2013), and the relationships between eating behavior and obesity (Wansink and Payne, 2008; Temple and Nowrouzi, 2013). With limited research targeting consumers' value orthe linkage of attribute-consequence–value for people dining at all-you-can-eat restaurants, this study uses means-end chain (MEC) method and the laddering interviewing methodology to derive the goals relevant to buffet consumers, as well as the interrelations among goals. Additionally, the results from hierarchical value map (HVM) can help buffet practitioners to understand consumers' needs and behaviors.

The rest of this paper is organized as follows. Section 2 reviews previous research on all-you-can-eat buffet restaurant and means-end chain (MEC) method. Section 3 describes the data and method we employ. Section 4 reports the empirical results, and section 5 concludes the paper.

# 2.Literature Review

#### 2.1All-you-can-eat buffet

All-you-can-eat buffet is great and popular for people who like to eat a lot and want a wide variety of food. It is a widespread meal-serving system where consumers can decide how much food they want to eat in a single meal for a fixed price. In a buffet restaurant, food is often placed in a public area where diners can directly view the food and immediately select which dishes they wish to consume.

Buffet consumers' eating behavior is related to paying timing for the buffet meal, price, service quality, and obesity. The experiment of Siniver, Mealem and Yaniv (2013) reveal that paying for the buffet meal after eating reduces sushi consumption as compared to paying before eating. Another experiment conducted by Just and Wansink (2011) also shows that a 50% meal price discount led customers to eat 27.9% less pizza and that individual taste ratings of pizza are inversely related to how much is consumed. Ovewole (2013b) showed that the top four dimensions of service quality most important to consumers are: freshness, hygiene, variety and reliability, and value. Temple and Nowrouzi (2013) conducted the relationship between buffets, energy intake, and weight gain. Wansink and Payne (2008) investigated the eating behaviors of people at all-you-can-eat Chinese buffets and found that people with higher body mass index (BMI) levels are more likely to be associated with using larger plates, seating facing the buffet, using forks, serving themselves immediately, not having a napkin on their lap, leaving less food on their plates, and chewing less per bite of food.

#### 2.2. Means-end chain (MEC) Theory

Gutman (1982) first proposes a model linking perceived product attributes to values. In means-end chain (MEC) model, product attributes are viewed as a means to end, whereas the end could be a consequence or abstract value. A product has many attributes, and these attributes cause some consequences or benefits to consumers, which in turn fulfill consumers' desirable personal values. In other words, there exist some attribute-consequence-value chains in the minds of consumers (Walker et al., 1986; Pitts et al., 1991; Olson and Revnolds, 2001).

Consumers often viewed a product as a collection of some attributes (Kotler, 1997). Attributes refer to the physical characteristics or intangible characteristics of a product that consumers can perceived (Walker Celsi, and Olson, 1987; Schoell, Guiltian, Pritchett, and Pritchett, 1990; Pitts, Wong, and Whalen, 1991), such as color, package, price, brand, quality, services, seller reputation (Stanton, Etzel, and Walker, 1991). Richardson (1994) suggested that attributes are made up of intrinsic attributes and extrinsic attributes. Intrinsic attributes refer to those attributes that are related to the physical product itself such as color, shape, design, etc. On the contrary, extrinsic attributes refer to those product-related attributes which are not parts of the physical product like brand name, stamp of quality, product knowledge, etc. Attributes can also be classified into concrete attributes and abstract attributes (Reynolds et al., 2001). Concrete attributes refer to those characteristics that can be clearly described by consumers, while abstract attributes are abstract meanings that derived from concrete attributes.

Sometimes consumers tend to consider a product by its consequences rather than attributes. Consequences refer to the outcomes (or benefits) a consumer wants to get or the risk he wants to avoid after the use of a product or service. Consequences can be divided into functional consequences and psychosocial consequences. Functional consequences are the immediate and tangible consequences of product use, it is a more concrete and direct experience for consumers. On the contrary, psychosocial consequences are intangible, internal or personal outcomes, it is how a product or service makes you feel (Haley, 1968; Olson and Reynolds, 1983). Values refers to those states that are most desirable in consumers' deepest mind, it is belonging to an abstract concept of behavior or an ultimate goal of beliefs, and the beliefs will make consumers prefer a particular behavioral mode or states of existence. Values can be classified into instrumental values and terminal values (Rokeach, 1973).Instrumental values, the means of achieving the terminal values, refer to the preferable modes of behavior or the methods a person would like to adopt for achieving his aim of life such as, ambition, courageousness, honesty, imaginativeness, independence, etc. Terminal values are desirable end-states of existence like freedom, happiness, inner harmony, recognition, self respect, comfortable life, professional excellence, etc. In other words, terminal values are the goals that a person wants to reach during his or her lifetime.

#### 2.3 Laddering and hierarchical value map (HVM)

Laddering is the most commonly used interviewing technique to build the value chains (Reynolds and Gutman, 1988; Claeys et al., 1995). It is a qualitative method and can be further divided into soft laddering and hard laddering. To begin building a ladder, the facilitator asks a broad question and encourages respondent to describe in his own words why something is important to him by filling in each rung of the ladder. Afterward the interviewer takes the respondent up the ladder step-by-step through a series of probing questions, which ultimately forms the attribute-consequence-value chain. In other words, the interviewer gathers qualitative data through in-depth interviews, and then the output is structured and coded for quantitative analysis. Using content analysis, analysts code the ladders from in-depth interviews to provide quantitative data for further analysis. Through calculating the number of direct and indirect connections in the ladders, a summary implication matrix (SIM) can be gathered and a hierarchical value map (HVM) can be drawn based on the number of direct connections from SIM. The *HVM* is a graphical representation of the most meaningful relationships (ie, exceeding a certain cut-off level) among the categories in the *SIM*. It reveals the most common decision paths that explain consumer behavior (Reynolds and Gutman, 1988).

## 3. Data and Methodology

This study uses means-end chain method to conduct in-depth interviews with 50 buffet consumers. These interviews were conducted in a one-on-one and face-to face interview, and each interview lasted 30 minutes on average. The whole interview process was recorded and a transcript was established to facilitate the further analysis. Using the laddering interviewing technique, the highly trained interviewers gather qualitative data through one-on-one in-depth interviews, and then the output is structured and coded for quantitative analysis. To begin building a ladder, the interviewer asks a broad question such as "Why something is important to you?" and encourages respondent to describe in his own words. The interviewer takes the respondent up the ladder step-by-step through a series of probing questions, which ultimately forms the attribute-consequence-value chain. If the respondent's answer jump around different levels of the ladder, the reviewer have to confirm the ladder with respondents to ensure that their thought process was accurately captured.

Through content analysis, analysts assign codes to core attribute, consequence, value variables and code the ladders from in-depth interviews to provide quantitative data for further analysis. A summary implication matrix (SIM) can be gathered bycalculate the number of direct and indirect connections in the ladders. The hierarchical value map (HVM), a graphical representation of the most meaningful relationships among the categories in the SIM, can also be drawn based on the number of direct connections from summary implication matrix. HVM reveals the most common decision paths that explain consumer behavior

### 4. Results

There are 50 respondents in our study, including 18 males (36%) and 32 females (64%). In the males group, 14 are younger than 20 years old and 4 are more than 20 years old. However, 23 are younger than 20 years old and 9 are more than 20 years old in the females group. After laddering interviewing, the contents of 50 interviews were classified into attribute, consequence and value categories. As presented in Table 1, 3 independent coders classified these categories into 10 attribute, 9 consequence and 5 value categories in this study. It is defined to have good reliability when intercoder reliability has a value greater than 0.8 (Woodruff and Gardial, 1996) or 0.9 (Wimmer and Domimick, 1994). In this study, the values of intercoder agreement of 3 coders are 0.94, 0.91 and 0.91 respectively, yielding an average intercoder agreement value of 0.93 and a final reliability value of 0.98, which indicates good reliability.

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Attribute	n	Consequence		Value				
A01 variety	24	C01 worth more than its cost	36	V01 happiness				
A02 price	16	C02 diversified choices	V02 satisfaction	32				
A03food quantity	11	C03 a feeling of satiety	16	V03 sense of satiation	7			
A04 food quality	39	C04 delicious foods	14	V04 sense of value	17			
A05 restaurant reputation	6	C05 affect appetite	23	V05 warm relations with others	8			
A06 environment	19	C06 revisit	21					
A07 service	6	C07 feeling of freshness	3					
A08 service people	3	C08 convenience	4					
A10 specialty	7	C09health	19					
A11 location	3							

Fable	<b>1Elements</b>	category
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In order to identify the linkages among the 10 attributes, 9 consequences and 5 values, all associations elicited from the interviews were structurally analysed using content analysis. We found 120 ladders, which were subsequently converted into a summary implication matrix (see Table 2), and a hierarchical value map (HVM) was drawn based on the number of direct connections from SIM (see Figure 1).

According to the hierarchical value map (HVM), we can see that "food quality", "variety", "environment", "price" and "food quantity" are the most important attributes. At the consequence level, "worth more than its cost", "affect appetite", "health", "a feeling of satiety", "revisit" and "delicious foods" are the major benefits for buffet consumers. Finally, "happiness", "satisfaction" and "sense of value" are personal values that buffet consumers most want to pursue.

÷	C01¢	<b>C02</b> ₽	C03₽	C04+2	<b>C0</b> 5₽	C06₽	<b>C07</b> ₽	C08₽	<b>C09</b> ₽	V01¢	V02₽	V03₽	V04₽	V05.	ъ¢
A01¢	<b>6.01</b> ₽	<b>9</b> ₽	<b>6</b> ⊷	¢	1₽	<b>1</b> ¢	¢	¢	ą	0.12+2	0.04₽	0.03₽	0.03₽	0.01	ъ.
A02∉	<b>11</b> ₽	÷	1₽	ę	÷	2⊷	÷	1₽	1₽	0.09¢	0.01₽	¢,	0.04₽	0.02*	ъ¢
A03↔	4₽	÷	7⊷	÷	÷	¢,	÷	÷	÷	0.04	0.02₽	0.01₽	0.04	¢,	₽
A04∉	8₽	÷	2₊₂	11₽	5₽	7⊷	÷	÷	4₽	0.190	0.12₽	0.01₽	0.03₽	1.02*	ъ.
A05⇔	3₽	÷	÷	÷	÷	¢,	1₽	1₽	÷	0.02*	0.01₽	0.01₽	0.01₽	0.02*	ą¢
A06↔	1₽	÷	÷	ę	8.02+2	4.01₽	÷	÷	7⊷	0.07	0.08₽	ę	0.02+2	¢,	ø
A07∉	÷	÷	ę	ę	2₽	4₽	÷	÷	÷	0.05	¢,	ę	0.01₽	÷	ø
A08↔	÷	÷	÷	¢,	1₽	<b>1</b> +2	÷	÷	÷	0.03	¢,	ę	ę	¢,	₽
<mark>A9</mark> ₽	1₽	÷	1₽	3₽	÷	¢,	2⊷	÷	÷	0.05	0.01₽	0.01₽	ę	¢,	ø
A10∉	÷	ą	ę	ę	÷	0.01¢	÷	2⊷	÷	0.02+2	¢,	ę	ą	÷	ø
C01@	ą	ę	ę	ę	ę	ę	ę	ę	ę	18₽	5₽	2₽	<b>9</b> ₽	2.01	ъФ
C02₽	<b>1</b> @	Ð	÷	÷	÷	¢,	÷	÷	÷	4₽	1₽	1.01₽	1₽	1₽	ø
C03₽	¢,	÷	÷	÷	÷	¢,	÷	÷	÷	10₽	4₽	1₽	2⊷	¢,	ø
C04↔	0.01	÷	÷	ę	÷	¢,	÷	÷	÷	7₽	5₽	1₽	1⊷	¢,	ø
C05₽	÷	÷	÷	÷	÷	1+2	÷	÷	÷	13₽	5₽	ę	1₽	¢,	ø
C06₽	¢,	÷	÷	÷	÷	1+2	÷	÷	÷	8.010	4₽	1₽	3₽	3₽	ø
C07₽	÷	÷	÷	÷	÷	¢,	3₽	÷	÷	÷	¢,	ę	ę	¢,	ø
C08₽	4J	÷	÷	¢,	÷	1+2	÷	÷	÷	2.01	¢,	¢,	¢,	1₽	ø
C09¢	¢,	÷	÷	ę	10	¢,	÷	47	ę	3⇔	7.01₽	ę	ę	¢,	ę

olication matrix



Figure 1: Hierarchical value map

### 5. Conclusion

All-you-can-eat buffet is a popular meal-serving system for people who want a wide variety of food and like to eat a lot. In order to understand the linkages of the attributes, consequences, and values for people dining at all-you-can-eat buffets, this study uses means-end chain method to conduct in-depth interviews with 50 all-you-can-eat buffet consumers. Results from hierarchical value map (HVM) show that "food quality", "variety", "environment", "price" and "food quantity" are the most important attributes. At the consequence level, "worth more than its cost", "affect appetite", "health", "a feeling of satiety", "revisit" and "delicious foods" are the major benefits for buffet consumers. Finally, "happiness", "satisfaction" and "sense of value" are personal values that buffet consumers most want to pursue.

According to the research results, we suggest that buffet restaurant practitioners should provide delicious foods at a reasonable price and pay more attention to their food quality and food variety, thus creating consumers' feelings of "worth more than its cost" and "happiness", which in turn increase consumers' revisit intention to go to an all-you-can-eat restaurant.

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