## CUSTOMER BEHAVIOR IN BANGKOK AND SURROUNDINGS IN PURCHASING SKINCARE PRODUCT ONLINE

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#### Abstract

Cosmetic industry has been important parts in Thailand, especially skincare product that has been growing rapidly in terms of production and consumption since 2008. In Thailand, skincare product can gain the largest market share including serum and cream for whitening, moisturizing and anti-wrinkle. The main objective of this research is to explore the relationship among personal factors, marketing mix (4Ps) and customer behavior in purchasing skincare product online. The research questionnaires survey used for collecting the data consists of three sections, personal data, marketing mix and the customer behavior. The analysis is done by descriptive statistic. The relationship among the personal factors, marketing mix (4Ps), and customer behavior is analyzed by Chi-square test.

Keywords: Cosmetic Industry, Skincare product, Customer Behavior, Online, Purchasing, Social commerce, E-Commerce

#### **1. INTRODUCTION**

Cosmetic is a chemical product that is used on the human body for caring skin and can enhance personalities of people. Most of the cosmetic and skincare products are made from chemical ingredients but some products are made from natural substances. In the world, when we talk about female consumers, the first thing that we think of is beauty because most female consumers want to have good personalities so they need to care for their skin first, especially the face skin. Nowadays, most people turn to care more about their face skin in order to protect it from ultraviolet, which is the main problem of the skin and some people prefer to follow the trend of the Korean style because they especially want to have a white face. Thus, skincare product is a good alternative for female consumers as it can enhance and protect their skin at the same time.

The cosmetic is wide spread around the world. Most female consumers use more cosmetic and skincare products in daily life. Therefore, the cosmetic industry has been growing continuously, increasing a total sale. Cosmetics are divided into five categories including skincare, hair care, make-up, fragrance and the others. Skincare products are the largest target segment in the world which represents 27% of the cosmetic industry (Perry Romahowski, 2010). The United States is the largest market for cosmetic products; Procter&Gamble was a leading cosmetic firm in 2011, representing 14.2% (Cory SchulZ, 2013) of the market share in the United States. In Asia, there are three leaders of cosmetic products: Japan, China, and South Korea respectively.

The Thai market size of cosmetic is 40,000 million baht per year in the domestic sector, representing 40% and about 60,000 million baht per year in the export sector, representing 60% (The Federation of Thai Industries,2013). Thus the overall of the cosmetic industry gained is approximately 540,000 million baht. There are totally1206 Thai producers, divided into two categories including 1091 producers are general industries and 115 producers

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are Good Manufacturing Practice (GMP) industries (Department of International trade Promotion, 2012).

There is more potential growing continuously in Thailand in terms of production and consumption. In order to enhance a distribution channel of skincare products, recently marketers have offered a new channel which is an online channel using the Internet to communicate with customers. The factor of skincare demand has impact on seasonal changes, trend, climate, lifestyle, and fashion. The Thai cosmetic market has more competitors to enter because of its low barrier to entry. Particularly, in middle income economy, the customers are more sensitive to prices. Demand arising, the marketers need to make a promotion or launch a new product to attract the customers.

E-commerce is a transaction tool using the internet, for example, a web site, to transact the product. The consumers can shop on 24 hours but they do not need to communicate with the sellers immediately. People 25 - 49 years old do the most purchasing online in Thailand, representing 68.8 % and 57% of them purchase lower than 3000 baht (THB) (National Statistical office of Thailand, 2011).

Social commerce is using social technology for shopping experience. In the recent, the rate of using social network in Thailand has been growing; online has grown by 50% from 2012 to 2013. Nowadays, social networks such as Facebook, Instragram and twitter are very popular. According to ZocialRank who make a statistic about social network, Thailand has 66 million people and 25 million of them are Internet users, and among these people can be 18 million people use social networks. There are three most popular social networks including Facebook (85% of all Social network users), Twitter (10% of all Social Network's users) and Instragram (5% of all Social Network's users) (ZocialRank, 2013). In May 2012, most Thai users posted on Tuesday during 8 pm - 11 pm but on Sunday few posted on Facebook because people did not stay at home and they had more activities to do outdoors (Infographic, 2012).

Marketing Mix is a business strategy that is used to enhance the opportunity of the business to achieve the objectives or goal: product (products or services are offered to customers.), price (price of product can make a revenue and profit.), place (channel of distribution and sale of products or services to customers.) and promotion (activities to advertise products to attract customers). Thus, marketing mix is used to compete with the competitors. (Philip Kotler and Kevin Lane Keller, 2009, P. 62)

6W 1H Theory is used to analyze customer behavior by using the questions for matching the customer behavior. The questions about who are, who the target market and who participates in buying. The question about what is, what the customer buys. The question about when is, when the customer buys. The question about why is, why the customer buys. The question about where is, where the customer buys. The question about how is, how the customer buys. (Engel Kollat and Blackwell, 1968)

#### 2. METHODOLOGY

The methodology of this study is conducting survey through questionnaires. The total numbers of female's population in Bangkok and Metropolitan region are currently unknown. Therefore, we applied Sample Size formula of Cochran as shown in equation (1) (Cochran, 1977).

$$n = \frac{Z^2}{(4*e)^2}$$
(1)

Where:

n = Sample Size Z = 1.96 at confidential level 95 % e = Allowable error Define confidential level is 95% and define allowable error is 5%.

$$n = \frac{1.96^2}{(4 * 0.05)^2}$$

 $n = 384.16 \sim 385$  samples

For better analysis, the researchers increased the sample size from 385 to 730We use Purposive Sampling by distributing the total 730 copies of questionnaires to all ranges of ages in 13 locations, including Lotus (Navanakorn), Mata Restaurant 3 branches (Navanakorn, Pratunampra-in, Rangsit University), Rajabhat University, SIIT Thammasat University, Bangkok University, School, The mall, Siam, Horwang's students and parents, Toyota Tsusho (DinDaeng), True corporation (Ratchada). The data is analyzed by using descriptive statistic, frequency statistic, Chi-square test and Weight Quality Score. The conceptual model for this research consists of personal factor as Independent variables and customer behavior and marketing mix as dependent variables. Therefore, the survey consists of three sections, personal information, marketing mix (4Ps) and customer behavior. In this study, the researchers use age as independent variables because it is an interesting personal factor which marketers use to penetrate advertisements by using Social networks as tools to catch up the target age group.

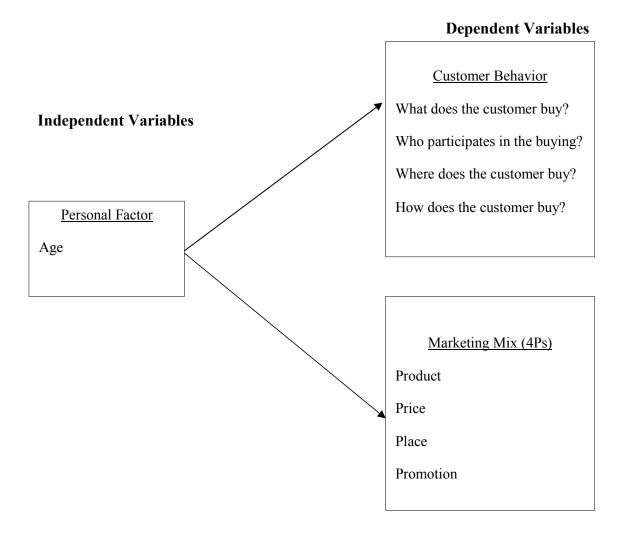


Figure1: Conceptual Model

### **3. DATA ANALYSIS**

### **3.1.** Descriptive statistics

A total number of 730 questionnaires were distributed to female consumers and 600 responses were received representing 82.19%. The descriptive statistic of both independent variables and dependent variables are shown in Tables 1 - 9. In Table 1, the largest age group response to the survey is 18 - 23 years old followed by the age group less than 18 years old. Table1 shows the independent variable which is age separated into 5 groups. This table interprets the personal factor which is used for learning our target group. We concentrate more on the age group of 18-23 years old as it has large responsive rate, so we consider this group as our target group.

Age	Frequency	Percent
Less than 18 years old	123	20.5
18-23 years old	236	39.3
24-29 years old	106	17.7
30-40 years old	75	12.5
More than 40 years old	60	10.0
Total	600	100.0

Table 1: Descriptive Statistic for Ag
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In Table 2, it shows how we predict which types of product customers will buy. The majority of the types of product are for moisturizing and whitening respectively, which that indicates the dependent variables in the group of customer behavior conformed to what the customer will buy.

Type of Product		Frequency	Percent
	Yes	352	58.7
Whitening	No	248	41.3
	Total	600	100.0
	Yes	275	45.8
Anti-acne	No	325	54.2
	Total	600	100.0
Anti-aging	Yes	199	33.2
	No	401	66.8
	Total	600	100.0
	Yes	385	64.2
Moisturizing	No	215	35.8
	Total	600	100.0

**Table 2**: Descriptive Statistic for Type of Product

In Table 3, the majority of types of product are influenced by friend and expert factors respectively, which that indicates dependent variable in group of customer behavior conformed to who participates in buying.

Influenti	al people	Frequency	Percent
	Yes	93	15.5
Celebrity	No	507	84.5
	Total	600	100.0
	Yes	185	30.8
Expert	No	415	69.2
	Total	600	100.0
	Yes	126	21.0
Family	No	474	79.0
2	Total	600	100.0
	Yes	199	33.2
Friend	No	401	66.8
	Total	600	100.0
	Yes	114	19.0
Web Reviewer	No	486	81.0
	Total	600	100.0

**Table 3**: Descriptive Statistic for Influential people

In Tables 4-5, it shows the dependent variables in group of customer behavior conformed to where the customer will buy the product and purchasing channel. The result is customers tend to buy products from department stores, Central, Siam Paragon and Tesco Lotus, Big C respectively. In addition, is the transaction through the Internet customer tends to buy more on social Network than web-site.

Preferable Market Place		Frequency	Percent
Department	Yes	475	79.2
store, Central,	No	125	20.8
Siam Paragon	Total	600	100.0
	Yes	180	30.0
Drug Store	No	420	70.0
	Total	600	100.0
	Yes	58	9.7
Market	No	542	90.3
	Total	600	100.0
Social	Yes	64	10.7
Network	No	536	89.3
INCLWOIK	Total	600	100.0
Tagaa Latua	Yes	188	31.3
Tesco Lotus,	No	412	68.7
Big C	Total	600	100.0
	Yes	86	14.3
Direct Sale	No	514	85.7
	Total	600	100.0
	Yes	68	11.3
Web site	No	532	88.7
	Total	600	100.0

**Table 4**: Descriptive Statistic for Preferable Market Place

Preferable Purchasing Channel		Frequency	Percent
	Yes	107	17.8
Web-site	No	493	82.2
	Total	600	100.0
	Yes	186	31.0
Social Network	No	414	69.0
	Total	600	100.0

**Table 5**: Descriptive Statistic for Preferable Purchasing Channel

In Table 6, it shows the numbers of Likes and comments have no impact on decision making, which indicate the dependent variable in group of customer behavior conformed to how the customers buy.

**Table 6**: Descriptive Statistic for Decision Making

<b>Decision Making</b>		Frequency	Percent
	Yes	196	32.7
Likes & Comments	No	404	67.3
	Total	600	100.0

In Table 7, it shows the majority of ingredient factors that customer would appreciate the most are natural ingredients and Alcohol-free ingredients respectively, which indicates marketing mix conformed to what would be our product.

<b>Ingredient Factor</b>		Frequency	Percent
	Yes	484	80.7
Natural ingredients	No	116	19.3
	Total	600	100.0
Oil-free ingredients	Yes	197	32.8
	No	403	67.2
	Total	600	100.0
	Yes	258	43.0
Alcohol-free ingredients	No	342	57.0
	Total	600	100.0

In Table 8, it shows the most preferable prices that customers take concentrate on 100-399(THB) and 400-699(THB) respectively.

Preferable Price	Frequency	Percent
Less than100Bath	25	4.2
100 – 399 Baht	148	24.7
400 – 699 Baht	142	23.7
700 – 999 Baht	106	17.7
1000 – 1499 Baht	83	13.8
1500-1999 Baht	41	6.8
2000 - 2499 Baht	13	2.2
2500 - 3000 Baht	17	2.8
More than 3000	25	4.2
Total	600	100.0

Table 8: Descriptive Statistic for Preferable Price

In Table 9, it shows advertisement is more effective than Discount/Coupon/Promotion, which that indicates marketing mix conformed to what would be our promotion.

Promotion		Frequency	Percent
	Yes	92	15.3
Discount/Coupon/Promotion	No	508	84.7
	Total	600	100.0
	Yes	148	24.7
Advertisement	No	452	75.3
	Total	600	100.0

**Table 9**: Descriptive Statistic for Promotion

#### **3.2.** Chi-Square test

We analyze data by Chi-square test into 2 sections — first, Chi-square test of personal factor and customer behavior; and second, Chi-square test of personal factor and marketing mix. We use the confidence or risk level ( $\alpha$ ) as 95% which means that, if a 95% confidence level is selected, 95 out of 100 samples will have the true population value within the range. A 95% confidence level and p = 0.5

From table 10, we can conclude that there are significant relationships between age and whitening, anti-acne, anti-aging, and moisturizing where female of 18-23 years old are the majority who purchase these types of product. There are significant relationships between age and celebrity, expert, friend, and web-reviewer where female of 18-23 years old are the majority who are influenced by these influential people. There is no significant relationship between age and family for influential people. There are significant relationships between age and department store, drug store, night market, Tesco Lotus, Big C, and direct sale where female of 18-23 years old are the majority who purchase product from these types of market place. There are no significant relationships between age and social network, and web site for types of market place. There is significant relationship between age and social network where female of 18-23 years old are the majority who purchase product from preferable purchasing channel. There is no significant relationship between age and web site for preferable purchasing channel. There is significant relationship between age and web site for preferable purchasing channel. There is significant relationship between age and likes & comments where female of 18-23 years old are the majority who use this to consider in decision making.

From Table 11, we can conclude that there are significant relationships between age and natural ingredients & oil-free ingredients where female of 18-23 years old are the majority who consider that these ingredient factors should be our product. There is no significant relationship between age and alcohol-free ingredients for ingredient factor in our product. There is significant relationship between age and preferable price where female of 18-23 years old are the majority who influence what would be our price. There are significant relationships between age and discount/coupon/promotion, and promotion where female of 18-23 years old are the majority who influence what would be our promotion.

**Table 10**: The summary of Chi-Square Analysis of relationship between Customer Behavior and Age related to type of product, Influential People, Preferable Market Place, Preferable Purchasing Channel, and Decision Making.

Custor	ner Behavior	Age		
What does the customer buying?				
	Whitening	*		
Type of	Anti-acne	*		
Product	Anti-aging	*		
	Moisturizing	*		
Who participates in the buying?				
	Celebrity	*		
Influential	Expert	*		
Influential	Family	NO		
People	Friend	*		
	Web Reviewer	*		
Where does the customer buy?				
	Department			
	store, Central, Siam Paragon	*		
	Drug Store	*		
Preferable	Market	*		
Market Place	Social Network	NO		
	Tesco Lotus, Big C	*		
	Direct Sale	*		
	Web site	NO		
Preferable Purchasing	Web-site	NO		
Channel	Social Network	*		
How does the customer buy?				
Decision	Likes &			
Making	Comments	*		

\*: There is a relationship between independent variable and dependent variable. (p-value >  $\alpha$ ) NOT: There is no relationship between independent variable and dependent variable. (p-value <  $\alpha$ )

<b>Table 11</b> : Chi-Square Analysis of relationship between Marketing Mix (4Ps) and Age related
to Product, Price, and Promotion.

Marketing Mix (4Ps)		Age	
Product			
Ingredient Factor	Natural ingredients	*	
	Oil-free ingredients	*	
	Alcohol-free ingredients	NO	
Price			
Preferable Price	Less than 100 Bath	*	
	100 – 399 Baht		
	400 – 699 Baht		
	700 – 999 Baht		
	1000 – 1499 Baht		
	1500-1999 Baht		
	2000 – 2499 Baht		
	2500 – 3000 Baht		
	More than 3000		
Promotion			
Promotion	Discount/Coupon/Promotion	*	
	Advertisement	*	

\*: There is a relationship between independent variable and dependent variable. (p-value >  $\alpha$ ) NOT: There is no relationship between independent variable and dependent variable. (p-value <  $\alpha$ )

## 4. CONCLUSION

This research studied on customer behavior in purchasing skincare product online. This studied, we can see the relationship of personal factor and marketing mix (4Ps) and 6W 1H. From the analysis, there is a relationship between age and product type. The numbers of survey are 730 surveys that were distributed to female consumers. There are 600 responses, representing 82.19%. The respondent female consumers are 18 - 23 years old. They preferred whitening product and prefer a price is 100 - 699 (THB) and the purchasing channel is department store. The limitation of this research is that the survey conducted only in 13 selected locations. Moreover the researches only focus on the skincare product.

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