

# MARKET OPPORTUNITY FOR LAUNCHING THE HYGIENIC HAND CREAM IN BANGKOK METROPOLITAN AREA

โอกาสทางการตลาดสำหรับออกผลิตภัณฑ์ครีมทามือฆ่าเชื้อโรคในกรุงเทพมหานคร

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## Abstract

This study aimed to investigate market opportunity for introducing the Hygienic Hand Cream in Thailand. There are numbers of hand hygiene products available in Thailand, however, most of them are alcohol-based products which occasionally caused several skin problems. This new product launch “Hygienic Hand Cream” could be a perfect product substitution and better diversification than alcohol-based hand gel. Thus the study attempted to discover consumers buying factors using demographic and marketing factors, which could consequently influence consumers’ decision making. Self-administered questionnaires had been launched in Bangkok metropolitan area using simple random sampling technique and tools of research. Through a basic descriptive statistics as well as logit and probit regression models, the results clearly show that consumers’ buying decisions depend on pricing as the most significant. Consumers who have already used alcohol-based hand gel will be willing to buy the new Hygienic Hand Cream compared to consumers who never used this kind of products previously.

**Keywords:** Alcohol-based hand gels, Hygienic Hand Cream, marketing mix (4Ps)

## บทคัดย่อ

การวิจัยนี้มีวัตถุประสงค์เพื่อสำรวจโอกาสสำหรับครีมทามืออนามัยในตลาดประเทศไทยโดยเฉพาะในเขตกรุงเทพมหานคร ซึ่งมีจำนวนของผลิตภัณฑ์ทำความสะอาดมือมากมาย อย่างไรก็ตามผลิตภัณฑ์ทำความสะอาดมือที่มีส่วนผสมของแอลกอฮอล์มักเป็นสาเหตุของการระคายเคืองผิว ครีมทามืออนามัยอาจเป็นทางเลือกที่ดีที่จะทดแทนผลิตภัณฑ์อนามัยที่มีส่วนผสมของแอลกอฮอล์ ดังนั้นการวิจัยนี้จะหาปัจจัยของการตัดสินใจของผู้บริโภค โดยแจกแบบสอบถามในกรุงเทพฯ จากการสำรวจพบว่า การตัดสินใจของผู้บริโภคขึ้นอยู่กับปัจจัยด้านราคามากที่สุด และผู้บริโภคที่ใช้เจลทามืออนามัยมีความปรารถนาที่จะทดลองใช้ครีมทามืออนามัยมากกว่าผู้ที่ไม่เคยใช้

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## Introduction

In 2004, the World Health Organization (WHO) launched a global campaign “Clean Care is Safer Care” to promote hand hygiene practices by developing a guideline on Hand Hygiene in Health Care (Larson, Girard, Pessoa-Silva, Boyce, Donaldson & Pittet, 2006). The aim of sanitizing our hands is to prevent transmission of several infectious diseases such as colds, diarrhea, and flu viruses. Regular hand wash is recommended for preventing the infectious risk.

For the past decade, alcohol-based products have been introducing for consumers convenience to keep their hands safe and clean. The benefits of alcohol-based hand gels have been shown to drastically reduced bacteria counts on contaminated hands (Komonruginan, 2015). In Thailand, people also have been faced with many infectious diseases in day-to-day life such as H1N1, H5N1 (Songserm, Jam-On, Sae-Heng, Memak, Post, Sturm-Ramirez and Webster, 2006). With the concern over these infectious diseases which transmitted through contacts, the sales of alcohol-based hand gel products have been increasing. However, some people face difficulties of using alcohol-based hand gel as alcohol concentration causes skin dehydration and skin irritation. To improve product quality for consumers, manufacturers are concerned to develop new products to prevent skin irritation and dryness but maintain skin softening.

One of a new product launch in this project is called “Hygienic Hand Cream” which aims to

keep the hand clean without skin dehydration or irritation. On the one hand, hand cream can be absorbed easily and maintained moisturising the skin; on the other hand, it helps to clean germ and bacteria because of “Triclosan”, which is one of the ingredients used in Hygienic Hand Cream. Triclosan is a chemical composition, added to many consumer goods to reduce and protect virus and bacteria contamination (U.S. FDA, November 25, 2013). It can be used as a part of household products, garments, and medical instruments (U.S. FDA, November 25, 2013). Furthermore, it can also be added to antiseptic soaps and shower gel, mouth wash, and some skincare products for cleaner and healthier of skincare which are approved by the U.S. Food and Drug Administration (FDA).

To support the safety of Triclosan, the U.S. FDA also conducted an extensive experiment on the effectiveness of Triclosan in “Colgate Total” toothpaste (U.S. FDA, November 25, 2013). The result confirmed that Triclosan can prevent gingivitis (U.S. FDA, November 25, 2013). In addition, Chitsamphandhvej, Teewasutornkun, and Banditwongpisarn (2008) also studied the safety of Triclosan in toothpaste. From the study, Triclosan does not cause Chloroform which is harmful to human health (Chitsamphandhvej et al., 2008).

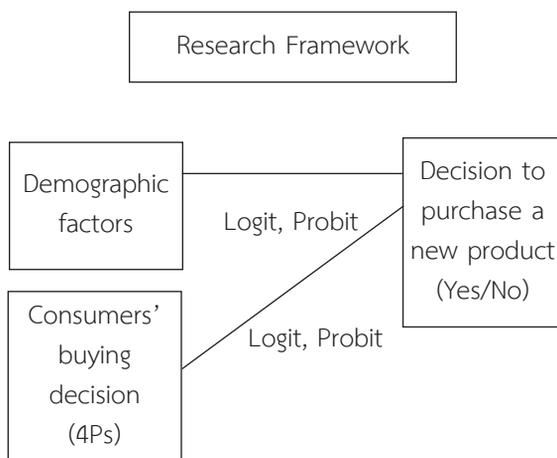
Thus, the Hygienic Hand Cream is introduced for multi-purpose hand cream product in Thailand. In addition, the Hygienic Hand Cream product will be categorized as part of cosmetic segment in which recently it is

witnessed strong growth of the sector for the past decade (Angelis, 2013). Moreover, the cosmetic industry in Thailand has been grown continuously, around 18% per year over the past few years (Thailand cosmetic society, 2014). The market value of cosmetic products was 2.1 billion baht in 2014 and Thailand is the biggest manufacturer and exporter cosmetic in the world (Thailand cosmetic society, 2014). Therefore, it is worth studying market opportunity of this new product launch in which Thai consumers can benefit from variety of product choices in the industry.

**Research objectives**

1. To understand relationship between different demographic factors and consumers’ buying decisions.
2. To identify factors associated with the consumers’ buying decision.

**Conceptual and research framework**



**Figure 1** Research framework

**Literature review**

1. Theoretical application of the Marketing Mix

The concept of analyzing product or consumers’ behavior can be conducted using a basic marketing mix (Kotler, 2000). To study consumer-buying decision, marketing mix (4Ps) can be used to apply in this study.

**Table 1** Model of Business Behavior

Marketing stimuli	Other stimuli	Buyer’s Decision
Product	Economic	Product choice
Price	Technological	Brand choice
Place	Political	Dealer choice
Promotion	Cultural	Purchase timing
		Purchase amount

Source: Kotler, 2000

The Market Mix model had previously been tested on several medical care products in Thailand. Kasempipatkun (2014) conducted a survey on “Factors related and affected repurchase intention of pharmaceutical products produced in Thailand by hospitals and clinics”. This research aimed to investigate factors that related and affected repurchase decision of pharmaceutical products manufactured in Thailand by hospitals and clinics. The basic marketing mix had been tested using perceived service quality, communication quality, selling ethics, price strategy, and product quality. The results showed that perceived service quality, communication quality, pricing strategy, and

product quality positively correlated with repurchase intention. Usanit (2011) studied on the factors affecting the decision on purchasing herbal facial skin consumers in Bangkok metropolitan area. The purposes of this study were to determine the personal factors, to determine the marketing mix factors that influence purchasing decisions and to determine the decision to purchase herbal facial skin on “One Tambon One Product” of consumers in Bangkok metropolitan area. Furthermore, Sakulamornbodee and Kongswatkiert (2011) studied on marketing factors influencing buying cosmetic of students in universities located in Pathumthani Province. The result indicated that demographic and marketing mix factors have positive relationship with the purchasing decision for cosmetic products at significant level of less than 0.05. In addition, product and add-on service were the most important factors whereas distribution channel was the least.

The Hygienic Hand Cream product can be classified as medical skin care product which is close to pharmaceutical products. Another study conducted by Mitpratan (2011) also investigated on “Factors affecting purchasing behaviors of sun protection body lotion among Consumers in Bangkok”. The study used marketing mix (4Ps) as analysis factors, which could affect purchasing behavior for sun protection of consumers in Bangkok.

## 2. Previous researches and findings

Sameer Kumar (2004), studied “Exploratory analysis of global cosmetic industry: major players, technology and market trends”

which show that cosmetic consumers focus on, Cosmeceuticals Environmental issues, Natural ingredients, and Safety concern. The meaning of safety concern is consumers can use skincare without any irritation.

Charles N. Haasa, Jason R. Marieb, Joan B. Rosec & Charles P. Gerba (2004), found that advantage of the use of triclosan-containing materials reduced the hazard of illness and infection.

Hilburn J., Hammond, B. S., Fendler, E. J. & Groziak, P. A. (2003), “Use of alcohol hand sanitizer as an infection control strategy in an acute care facility” revealed benefit of using alcohol gel hand sanitizer, which can simultaneously decrease infection rates of disease. Kampf & Loffler (2003) briefly mentioned in their research that although alcohol hand rub could disinfect and prevent hand related infection diseases. Nonetheless, some people may incurred skin irritation or other skin-related problems by using too regularly (Kampf & Loffler, 2003). However, Kampf & Ennen (2006) conducted the study in 2006 that regular use of a hand cream after washing could mitigate skin dehydration and skin roughness. In the U.S., a survey is conducted to test the awareness of college students using hand hygiene products. The result showed that Gender and ethic made differences of using behavior of students in several colleges in Texas (Anderson, Warren, Perez, Louis & Phillips, 2008).

## Research methodology

A cross sectional survey was conducted in order to explore customers’ behaviors in

buying the Hygienic Hand Cream in Bangkok metropolitan area. Self-administered questionnaire surveys were carried out within Bangkok metropolitan area. The questionnaires consisted of demographic information, frequency of use, skin types as well as problems of using this product and any experiences or problems related to the use of alcohol-based hand gel. The research also employed different statistical techniques through SPSS, Logit and Probit.

## Results and discussion

The results are divided into 2 parts which are descriptive analysis of the questionnaire and hypothesis result.

### Questionnaires analysis

#### 1. Demographic information of respondents

First part of the questionnaires revealed respondents personal information. The analysis shows that 67.8% of respondents were females while 32.2% were males. Average ages of respondents are between 22-30 years old with majority of them hold bachelor's degree (48.5%). In addition, the largest group that composed of 30.5% of respondents earned average monthly income between 10,001-20,000 Baht and second largest, 21.2% hold average income between 20,001-30,000 Baht. Finally, most respondents are office workers, government offers, personal staff from hospitals and university students respectively.

#### 2. Experience on and problem(s) of the use of alcohol-based hand gel

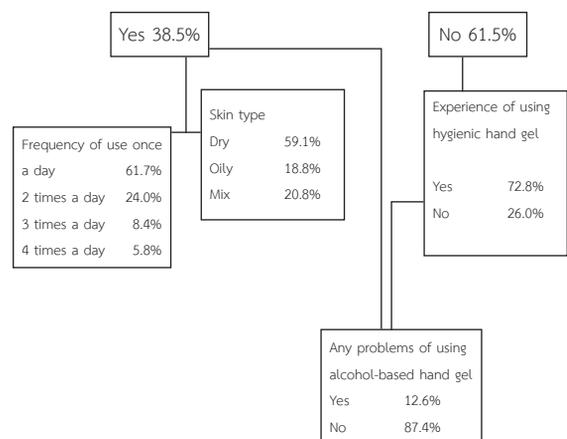
Figure 2 displayed the results of alcohol-based hand gel consumers by asking the frequency of use, skin types as well as problems

of using this product. The question also asks those who have not used whether they have any experiences of using alcohol-based hand gel as well as problems.

Only 38.5% of the respondents have used alcohol-based hand gel. Of those respondents who reported to use the alcohol-based hand gel, 61.7% used the product once a day and 24% used twice a day. In addition, 60% of respondents who used alcohol-based hand gel have dry skin.

Regarding the group who has not used alcohol-based hand gel, which comprise of 61.5%, 72.8% have heard about or have previous experiences with alcohol-based hand gel products.

The study is also interested to know number of people who use or have experience of using and have problem(s) of using alcohol-based hand gel product. It found that 42% of respondents had faced problems with the smell of the product and had experienced skin dryness.



**Figure 2** Survey of alcohol-based hand gel consumers

### 3. Introducing “Hygienic Hand Cream”

More than 60% of respondents are interested to buy the Hygienic Hand Cream when it is launch. The scent that was chosen by the majority of respondents was fruit scented (28.3%). Flower scented and fragrance free was chose by about 25% of the respon-

dents. Furthermore, 58% of the respondents preferred the price of less than 100 Baht. Around 80% of the respondents reported that they make their own decision when trying or buying any new products.

Descriptive and data analysis for consumers' buying decisions

**Table 2** Males who are willing to buy the Hygienic Hand Cream

Male/ Age	Under 5,000 Baht	5,000- 10,000 Baht	10,001- 20,000 Baht	20,001- 30,000 Baht	30,001- 40,000 Baht	40,001- 50,000 Baht	>50,000 Baht	
<21	1	6	7	1				24% (15)
22-30	1	4	8	10	6	2	3	54.83% (34)
31-40			2	2	2	2	2	16.12% (10)
41-50				2			1	4.8% (3)
51-60								
>60								
	3.22% (2)	16.12% (10)	27.4% (17)	24.19% (15)	12.9% (8)	6.45% (4)	9.67% (6)	

**Table 3** Females who are willing to buy the Hygienic Hand Cream

Female/ Age	Under 5,000 Baht	5,000- 10,000 Baht	10,001- 20,000 Baht	20,001- 30,000 Baht	30,001- 40,000 Baht	40,001- 50,000 Baht	>50,000 Baht	
<21	5	11	16	2				17.89% (34)
22-30	4	8	37	28	10	9	5	53.15% (101)
31-40		2	6	7	13	3	8	20.53% (39)
41-50		1		2	3		5	5.78% (11)
51-60			1	1			1	1.58% (3)
>60						1	1	1.05% (2)
	4.7% (9)	11.57% (22)	31.5% (60)	21% (40)	13.68% (26)	6.84% (13)	10.52% (20)	

**Table 4** Descriptive mean score for each questionnaire

	N	Mean	Measurement of	M
1. Product is certified by FDA	400	4.38	Very important	0.896
2. Product does not cause skin irritation	400	4.29	Very important	0.858
3. Scent of the product is important	400	4.02	Important	0.902
4. Brand is reliable	400	3.94	Important	0.903
5. Product is used natural or organic ingredients	400	4.04	Important	0.872
6. Texture of cream is easy to absorb	400	4.14	Important	0.887
7. Price is important	400	4.09	Important	0.852
8. Product quality is justify for price level	400	4.13	Important	0.846
9. Product is available in convenient stores	400	3.92	Important	0.907
10. Product is available at department stores	400	3.88	Important	0.926
11. Product is available in hospital/chemist shops	400	3.79	Important	1.017
12. Product is available in beauty & health stores e.g. Booth, Watson	400	3.88	Important	0.963
13. Product is available through "Direct sale"	400	3.38	Neutral	1.214
14. Having sale assistant	399	3.83	Important	1.034
15. Provide discount and premium	400	3.89	Important	0.897
16. Product guarantee policy	400	3.89	Important	0.958
17. Provide free sample	400	3.95	Important	0.926
18. Provide discount coupon	399	3.81	Important	0.984
19. Attractive packaging	400	3.95	Important	0.927
20. Travel kit packaging	400	4.11	Important	0.882
21. Good value for money (available in big size)	400	3.81	Important	1.073
22. Easy to use package	400	4.08	Important	0.882
23. Durable package	400	4.02	Important	0.891
24. Reliable package	400	4.2	Important	0.895
25. Variety of product sizes	400	4.07	Important	0.988

This study is based on consumer buying decision which involve only buy or not buy decision. Therefore the study adopts Logit and Probit regression models to analyze all data.

**Table 5** Logit, using observations 1-400/Dependent variable: buy/QML standard errors

	Coefficient	p-value	Slope*
const	0.627884	0.5815	
gender	-0.579737	0.0213	-0.127123
use	1.84636	<0.0001	0.404865
product	-0.0636925	0.0129	-0.0139663
price	0.221936	0.0678	0.0486654
promotion	-0.0937577	0.0372	-0.0205589

The result of logit revealed that gender, product, price, promotion, and use (experience of using hand gel) are the most significant variables. Moreover, there is an interesting result that male will buy the Hygienic Hand Cream more than female by almost 13%. In addition, it is confirmed that consumers who have already used hygienic hand gel will likely to buy the Hygienic Hand Cream for more than 40.4%. On the other hand, price factor is considered as significant factor for consumers who want to buy the product. Consumers who place less important on promotion will buy the new product more than consumers who concern promotion 2%.

To reconfirm the logit results, probit model is also used to make sure whether it is delivered in the same outcome.

**Table 6** Probit, using observations 1-400/Dependent variable: buy/Standard errors based on Hessian

	Coefficient	p-value	Slope*
const	0.421367	0.5274	
gender	-0.346894	0.0208	-0.126166
use	1.08072	<0.0001	0.39306
product	-0.0384653	0.0109	-0.0139899
price	0.133827	0.0620	0.0486731
promotion	-0.0555024	0.0388	-0.0201864

According to the probit regression table presented above, it is reconfirmed that gender, product, price, promotion, and use (experience of using hand gel) are major influences of consumers' buying decisions. Male will buy the Hygienic Hand Cream more than female 12.6%. And consumers who use hygienic hand gel will buy Hygienic Hand Cream 39.3% while consumers who see product factor as important are likely to buy the new product. On the other hand, price factor is significant for consumers who want to buy the product. Consumers who place less important on promotion will buy the new product more than consumers who concern promotion by 2%.

## Conclusions and recommendations

The findings from this study showed that hygienic hand gel consumers are a significant group that would be willing to try and buy the new hand sanitization product Hygienic Hand

Cream. It's also very interesting to observe that male consumers preferred to buy the Hygienic Hand Cream more than female consumers. Further research is needed to further investigate on reasons of such outcomes. However, the assumptions that researchers could draw from this result are 1) to buy as a gift for their love one or 2) increasing concern on their health and beauty. It is interesting to see that location (places to buy) is not an important factor compared to other marketing stimuli, i.e. the price of the product. However, there is a need to be cautious when focusing on promotion strategy. The results of this study display a diverse relationship between consumers' willingness to buy and level of promotional campaign. Moreover, product specification does not affect much to consumers buying

decisions.

Finally, it can be concluded that there is a market opportunity to launch the Hygienic Hand Cream in Bangkok metropolitan area. The factor that manufacturers should consider as the first priority is pricing strategy. The price of the Hygienic Hand Cream should be set at the same level or close to the price of alcohol-based hand gels in order to make it more competitive. This is considered as product diversification and can solve current limitation of alcohol-based hand gel products. Nevertheless, similar studies should be carried out after the Hygienic Hand Cream is actually launched as the current study conducted only within the Bangkok metropolitan area. Follow up research is also required to identify potential problems of using the product.

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