

Understanding Illegal Cosmetic Circulation in Indonesian Online Marketplace through Problem Analysis Triangle

Edi Priyo Yuniarto¹, Yudo Anggoro²

School of Business and Management Institut Teknologi Bandung^{1,2}
TK Low Center for Executive Education, Graha Irama (Indorama) 12th floor
Jl. H.R. Rasuna Said Kav 1-2 Jakarta, 12950, Indonesia
Correspondence Email: edi_yuniarto@sbm-itb.ac.id
ORCID ID: <https://orcid.org/0000-0003-2073-096X>

ARTICLE INFORMATION

ABSTRACT

Publication Information

Research Article

HOW TO CITE

Yuniarto, E.P., & Anggoro, Y. (2021). Problem Analysis Triangle of Illegal Cosmetic Circulation in Indonesia Online Marketplace. *Journal of International Conference Proceedings*, 4(3), 34-41.

DOI:

<https://doi.org/10.32535/jicp.v4i3.1297>

Copyright@ year owned by Author(s).
Published by JICP



This is an open-access article.
License: Attribution-Noncommercial-Share Alike (CC BY-NC-SA)

Received: 2 November 2021

Accepted: 2 December

Published: 11 December 2021

In Indonesia, selling cosmetic products that do not have a distribution permit is an unethical business practice and even a criminal act that violates regulations that require every cosmetic must have a distribution permit and meet safety and quality standards. This business practice certainly can threaten the Indonesian cosmetic business climate and threaten Indonesian cosmetic consumers with both economic and health consequences. This study aims to identify the factors causing illegal cosmetic circulation in the Indonesian online marketplace. Collected data from consumer surveys, observation, and interviews, were analyzed by the problem analysis triangle. The result shows that seven factors are causing illegal cosmetic circulation in the Indonesian online marketplace: consumer's lack of awareness on cosmetic legality; difficulty in identifying the legality of cosmetic products; seller's opportunity to sell illegal cosmetic products; seller's motive; seller's lack awareness on cosmetic legality; lack of supervision in the marketplace; and less controlled environment. The result of the study can be used as a basis for the Indonesian FDA to develop a comprehensive prevention strategy.

Keywords: Crime Prevention, Illegal Cosmetic, Indonesian FDA, Online Marketplace, Problem Analysis Triangle

JEL Classification: H11, I18, K42

INTRODUCTION

The cosmetic product is one of the products routinely used in everyday life. The use of cosmetic products is widespread, not limited to make-up for beauty, but also skin care, perfume, personal care, hair care, and other purposes. This increasingly widespread use of cosmetic products forms a growing cosmetic market from year to year. The global cosmetic market grew by an average of 4.6% per year from USD 319 billion in 2010 to USD 500 billion in 2019 (Gerstell et al., 2020) before finally dropping to USD 487 billion in 2020 (Beckwith & Villena, 2021). Indonesia, which has a population of 270.20 million (BPS-Statistics Indonesia, 2021), is a large market for the growth of the cosmetics industry. Indonesia's cosmetic market amounts to almost USD 7 billion in 2020 (Statista, 2021a). Notified cosmetic products in Indonesia have increased in the last five years, doubling from 44,398 items in 2016 to 75,530 items in 2020. This condition certainly supports the cosmetic business climate in Indonesia. However, the favorable cosmetic business climate also invited the presence of unethical business actors who provide illegal cosmetic products in the Indonesian cosmetic market, including the online market. From 2018 to 2020, the Indonesian FDA has accused more than 341 business actors of producing or circulating illegal cosmetic products (Indonesian FDA, 2021). More than USD 27 million of illegal cosmetic products were seized from the Indonesian cosmetic market.

Based on Simon Kepp (2021a), the total amount spent in global consumer e-commerces in 2020 is USD 665.6 billion from the fashion and beauty category and USD 413.8 billion for the food and personal care category, which increased 27% and 41% from 2019, respectively. Meanwhile, the total amount spent in Indonesia consumer e-commerces in 2020 is USD 9.81 billion from the fashion and beauty category and USD 4.66 billion for the food and personal care category, which increased 50% and 61% from 2019 respectively (Simon Kepp, 2021b). Based on Statista (2021b), online proportion in the distribution of cosmetic market sales in Indonesia is increasing significantly from 13.5% in 2019 to 20.6% in 2020 and projected to 30.4% in 2024. On the other hand, the widespread circulation of illegal cosmetic products in the online market is undoubtedly a severe threat. Based on the result of Operation Pangea XIII Indonesia in 2020, 4.455 items worth more than USD 2.6 million of illegal cosmetic products were seized from the Indonesian online market (Indonesian FDA, 2021). While, based on the cyber patrol held by the Indonesian FDA in 2020, more than 26,000 links related to illegal cosmetic circulation in the online marketplace were identified. The widespread online circulation of illegal cosmetic products in the increasing development of the Indonesian cosmetic online marketplace needs attention. Understanding the factors causing the illegal cosmetic circulation in the Indonesian online marketplace is required as a basis for formulating a comprehensive prevention strategy.

LITERATURE REVIEW

Illegal Cosmetic Product

According to Minister of Health Regulation No. 1176/Menkes/PER/VII/2010 concerning Cosmetic Notification and Regulation of Indonesian FDA No. 12 of 2020 regarding Procedures for Submitting Cosmetic Notification, Cosmetics are defined as substances or preparations intended for use on external parts of the human body such as the epidermis, hair, nails, lips and external genital organs, or teeth and mucous membranes of the mouth, especially to clean, perfume, change appearance and/or improve body odor or protect or keep the body in good condition. Every cosmetic circulated in Indonesia is obliged to meet the standards and/or requirements by the provisions of the legislation and must have a distribution permit. This requirement is based on Law No. 36 of 2009 on Health, article 105 verse (2) and Article 106 verse (1) and (2). Thus, every

cosmetic which does not meet the standards and/or requirements by the provisions of the legislation, e.g., containing hazardous ingredients or has no distribution permit (notification) categorized as an illegal cosmetic product.

Problem Analysis Triangle

Clarke and Eck (2016) presented the problem analysis triangle (or called as crime triangle) to analyze the crime. This framework was formulated from the Routine Activity Theory. According to the problem analysis triangle framework, the crime is affected by the condition of target, offender, and place, which each of the variables has a controller. The guardian is the controller of the target, the handler is the controller of the offender, and the manager is the controller of the place. According to Routine Activity Theory, a crime happens when three conditions are there at the same time and place: a suitable target, a motivated offender, and lack of supervision preventing the crime (ASU Center for Problem-Oriented Policing, 2021). Corcoran et al. (2016) described the application of routine activity theory to understand the geography of fire events and identify ignitions situations triggered through behavioral regularities. Porter & Graycar (2016) applied the crime triangle to study the corruption in the public sector with a problem-oriented policing approach.

RESEARCH METHOD

The qualitative study was conducted by collecting primary data from a consumer survey, online marketplace observation, and interviews and secondary data from journals, books, articles, and Indonesian FDA reports related to cosmetic supervision. A consumer survey was conducted to identify the behavior of online cosmetic consumers in Indonesia's online marketplace. Consumers who buy cosmetics in the online marketplace are asked to answer questions in the form of a questionnaire that is circulated online. Observations on the practice of selling illegal cosmetics were carried out in three online marketplaces in Indonesia. Interviews were conducted with several parties related to the circulation of online cosmetics: civil investigator, cyber patrol surveillance coordinator, cosmetic product notification holder, consumer, and marketplace provider. Use of interview method in qualitative method been used by Hanif & Sunistiyoso (2021) to analyze the occurrence of repeated findings in financial statements of a government institution and Hikmatiyar & Anggoro (2021) to analyze the implementation of risk management program on the food industry in the food industry. The data collected was analyzed using the problem analysis triangle approach.

RESULTS

The results of the Consumer Survey

Demographic of respondents

The 400 respondents are cosmetic consumers consist of 331 women (82,75%) and 69 men (17,25%). The respondents' occupations consist of government employees as much as 182 (45,5%), private employee 112 (28%), entrepreneur 39 (9,75%), not working 37 (9,25%), and student 30 (7,5%). The respondents come from 29 provinces where the majority of respondents live in DKI Jakarta, West Java, Banten, Central Java, West Kalimantan, East Java, and DI Yogyakarta.

Behavior of respondents

The majority of the respondent (74,5%) bought cosmetics more often online in the past year. This condition shows the preference of cosmetic consumers who have bought cosmetics online before, prefer to buy the cosmetic product online than offline. The most reason cosmetic consumers buy cosmetic products in the online market is more efficient, save time, easier to compare prices, and cheaper. Skincare is the most cosmetic

products which purchased (46%) followed by personal care (24.75%), make up (16.75%), perfume (11.5%), hair care (0,75%), and nail care (0,25%) respectively. Related to the type of marketplace, most of the respondents (83,50%) prefer to buy the cosmetics in an official store than the unofficial store (16.5%).

Most of the respondents (67,75%) stated that they had seen illegal cosmetics in the online marketplace, and most of the respondents who had seen illegal cosmetics in the online market decided not to buy illegal cosmetics (90,04%). They reasoned that it is unsure about the safety of illegal cosmetic products, unsure about the quality of illegal cosmetic products, and they want to obey the rule (See **Figure 1**). Meanwhile, a small number of cosmetic consumers (9.96%) who decided to buy illegal cosmetics reasoned that the cosmetic product has a good review, they don't know that cosmetic products are illegal, they want to try the cosmetic product, more affordable, get a recommendation from a friend, and they feel suitable with the cosmetic product (See **Figure 2**).

Figure 1. Consumer's reason who decides not to buy even though they have seen illegal cosmetic products in the online marketplace

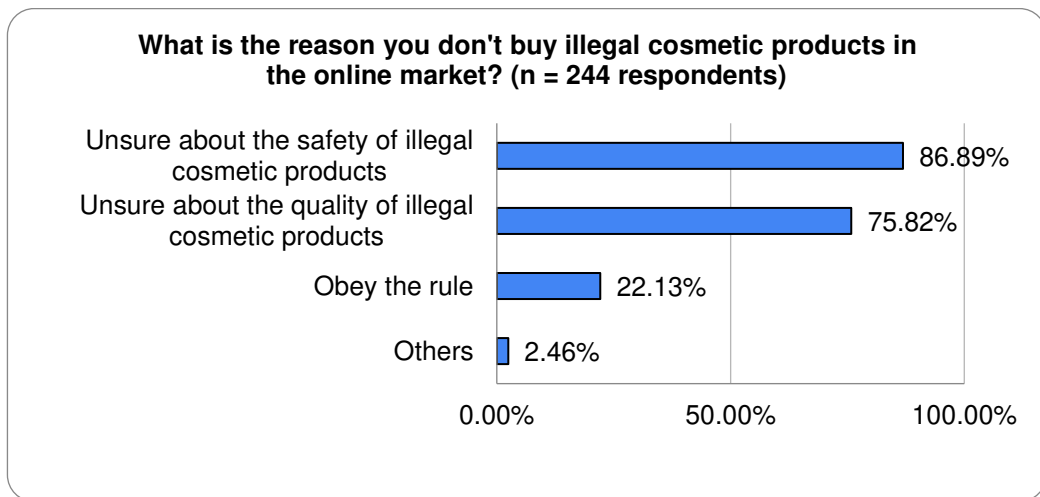
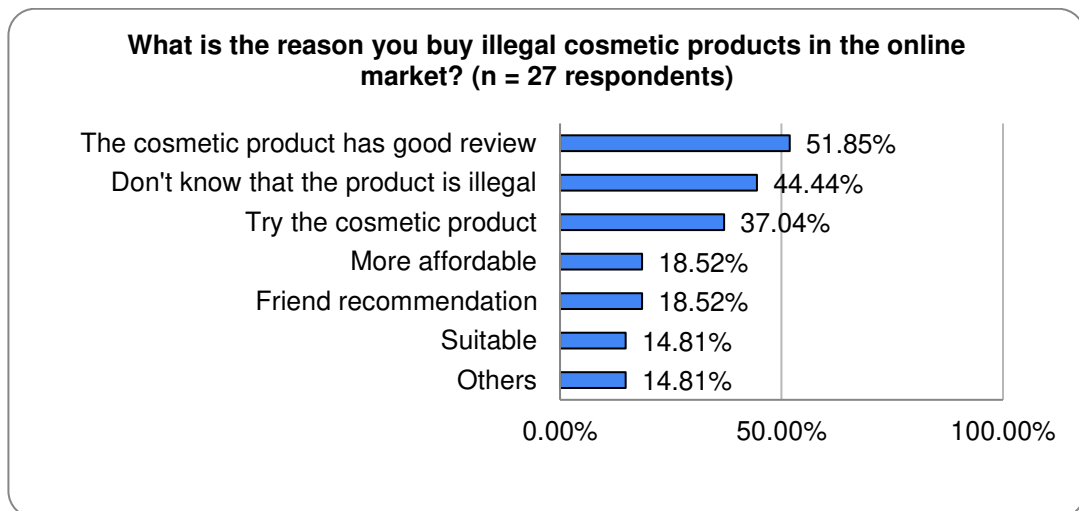


Figure 2. Consumer's reason who decides to buy after they have seen illegal cosmetic products in the online marketplace



The results of interviews related to illegal cosmetic circulation in the online marketplace

Interviews were undertaken to get information on the factors that cause the occurrence of illegal cosmetic circulation in the Indonesian online marketplace. From the results of the interview, seven main factors are causing illegal cosmetic circulation (See **Table 1**).

Table 1. Factors causing illegal cosmetic circulation in the online marketplace from the interview

	Causative factors	Frequencies	Percentage
Online marketplace (Place)			
1	Less controlled environment	7	11.7%
2	Lack of supervision in marketplace ^{a)}	8	13.3%
Illegal cosmetic seller (Offender)			
3	Seller's opportunity to sell illegal cosmetic product	13	21.7%
4	Seller's motive	4	6.7%
5	Seller's lack of awareness of cosmetic legality ^{b)}	6	10%
Cosmetic consumer (Target)			
6	Consumer's lack of awareness of cosmetic legality ^{c)}	18	30%
7	Difficulty in identifying the legality of cosmetic products ^{d)}	4	6.7%

Notes:

- a) Factor consists of Lack of illegal cosmetic surveillance (3) and Difficulty in illegal cosmetic screening (5)
- b) Lack of illegal cosmetic knowledge (5) and Different regulation on cosmetics in several countries (1)
- c) Limited purchasing power (2), Culture and behavior (4), Consumer's perception of beauty (1), and Lack of illegal cosmetic knowledge (11)
- d) Lack of information regarding the distribution permit number in the marketplace (2) and Similar names of cosmetic product variations (2)

The results of the observation on the practice of selling illegal cosmetics

Based on observation on three online marketplaces: Shopee, Tokopedia, and Bukalapak, illegal cosmetic products, such as HN Cream and Temulawak Cream, are still sold in the marketplace. Every marketplace has included a prohibition on selling products that violate the terms and conditions. The report product feature is also available. However, the information about distribution permit number (notification) has not become a required criterion on the product page-sellers who are aware of cosmetic legality post the distribution permit number in the product description.

DISCUSSION

The discussion using the problem analysis triangle is conducted through understanding three factors' conditions: the target or victim, which is influenced by a guardian; the offender, which is influenced by the handler; and the place, which is influenced by the manager.

The Target

The target or victim in terms of illegal cosmetic circulation in the online marketplace is the consumer who buys the cosmetic product in the online marketplace, while guardians who control the target could be the beauty community (including key opinion leader), cosmetic notification holder, and Indonesian FDA which influence consumer to buy or

not to buy illegal cosmetic products. The demand for illegal cosmetics from consumers is caused by consumers' lack of awareness of cosmetic legality and difficulty in identifying the legality of a cosmetic product. An illegal cosmetic product has safety and quality issues. Based on Indonesian FDA supervision, illegal cosmetic was produced in the production facility, which unmeet the Good Manufacturing Practices on Cosmetic requirements. This condition indicates that the illegal cosmetic's quality is not guaranteed. Based on Indonesian FDA public warning release No. HM.01.1.2.10.21.49 on October 13, 2021, illegal cosmetics consist of hazardous ingredients, e.g., mercury, hydroquinone, lead, and Rhodamin B, which can cause negative consequences on health. Sumiyani et al. (2020) found illegal cosmetic products (lipstick) sold in Surabaya containing Rhodamin B.

Consumers who have lack awareness of cosmetic legality tend to ignore the safety and quality issues if the product has a good review, has a more affordable price, is suitable for them, or they have recommendations about the product. Indonesian cosmetic consumers, especially Generation Y and Z, have high spending on beauty products and consider product reviews on the internet, the safety of products, and affordable prices in choosing beauty products (ZAP, 2020). Online consumers who do not know which cosmetic product is illegal and curious to try also make online consumers vulnerable to being tempted to buy illegal cosmetics. The consumer has a lack of awareness on cosmetic legality caused by limited purchasing power, culture, and behavior, consumer's perception of beauty, and lack of illegal cosmetic knowledge. The difficulty in identifying the legality of the cosmetic products also caused the illegal cosmetic demand from consumers. This situation is caused by a lack of information regarding the distribution permit number in the marketplace and a lot of cosmetic product variations which has similar names. It is not easy to distinguish between illegal and legal products without a distribution permit number information. The guardians need to control the demand for illegal cosmetic products in the online marketplace by improving the consumer's awareness of cosmetic legality and developing an effective system to identify the legality of cosmetic products.

The Offender

The offender in terms of illegal cosmetic circulation in the online marketplace is the seller who provides illegal cosmetic products. The handlers which control the seller could be the cosmetic producer and cosmetic distributor who provide legal cosmetic products for the sellers or crime organizations who provide illegal cosmetic products for sellers. Another handler of sellers in the online marketplace is the online marketplace provider and Indonesian FDA, which influences which product can be sold. The supply of illegal cosmetic products in the online marketplace was caused by the seller's lack of awareness on cosmetic legality, which affected by the lack of illegal cosmetic knowledge and different regulation on cosmetics in several countries; seller's opportunity to sell illegal cosmetic products; and seller's motive to gain profit. The handlers need to control the supply of illegal cosmetic products in the online marketplace by improving the seller's awareness of cosmetic legality and reducing the seller's opportunity to sell illegal cosmetic products.

The Place

The place in terms of illegal cosmetic circulation in the online marketplace is the online marketplace. The online marketplace provides a platform for consumers and sellers. The managers who control the online marketplace are online marketplace providers and regulators, which in terms of cosmetic circulation are the Ministry of Trade, Ministry of Communication and Informatics, and Indonesian FDA. Controls in the form of terms and conditions to obey the rule have been carried out, and law enforcement in the form of product's links takedown has been carried out routinely, but there are still many illegal

cosmetic products sold in online marketplace. The online marketplace is a new thing in Indonesia. Currently, the online marketplace is developing to digitize previously conventional businesses to provide a wider reach with easier and cheaper operations for users, both seller, and consumer. This condition makes the online marketplace still less tightly regulated. The limited resources of supervisors cause a lack of illegal cosmetic supervision, which is exacerbated by the difficulty in illegal cosmetic screening. Cosmetic screening is much more difficult than prescription drugs screening. The managers need to control the online marketplace condition by strengthening cosmetic supervision and tightening the marketplace environment.

CONCLUSION

The factors are causing the illegal cosmetic circulation consists of consumer's lack of awareness of cosmetic legality and difficulty in identifying the legality of cosmetic products, which related to demand from the consumer; seller's opportunity to sell illegal cosmetic products, seller's motive, and seller's lack of awareness of cosmetic legality, which related to supply from the seller; and lack of supervision in the marketplace and less controlled environment, which related to the marketplace. The result of the study can be used as a basis for the Indonesian FDA to develop a comprehensive strategy to prevent illegal cosmetic circulation in the Indonesian online marketplace in protecting Indonesian cosmetic consumers and businesses.

LIMITATION

The focus of this study is online illegal cosmetic circulation in the Indonesian online marketplace.

ACKNOWLEDGMENT

This study is based on research conducted on a project funded by the Indonesian FDA Program with additional support from respondents of consumer surveys and interviews.

DECLARATION OF CONFLICTING INTERESTS

Edi Priyo Yuniarto is employee of Indonesian FDA who is studying in SBM Institut Teknologi Bandung. However, the interpretations of the analysis are solely those of authors and do not necessarily reflect the views and opinions of the Indonesian FDA.

REFERENCES

- ASU Center for Problem-Oriented Policing (2021). The Problem Analysis Triangle. Arizona State University. <https://popcenter.asu.edu/content/problem-analysis-triangle-0>
- Beckwith, G. & Villena, K. (2021). Beauty in Recovery: Going Green and Clean. Euromonitor International. https://go.euromonitor.com/webinar-bpc-210622-beauty_state_of_play.html?
- BPS-Statistics Indonesia (2021). Hasil Sensus Penduduk 2020. Berita Resmi Statistik No. 7/01/Th. XXIV, January 21. <https://www.bps.go.id/pressrelease/2021/01/21/1854/hasil-sensus-penduduk-2020.html>
- Clarke, R.V. & Eck, J.E. (2016). Crime Analysis for Problem solvers in 60 small steps. Washington DC: Office of Community Oriented Policing Services. <https://cops.usdoj.gov/RIC/Publications/cops-w0047-pub.pdf>
- Corcoran, J., Zahnow, R., & Higgs, G. (2016). Using routine activity theory to inform a conceptual understanding of the geography of fire events. *Geoforum*, 75, 180-185. <https://doi.org/10.1016/j.geoforum.2016.07.015>

- Gerstell, E., Marchessou, S., & Schmidt, J. (2020). How Covid-19 is changing the world of beauty. Consumer Packaged Goods Practice. McKinsey&Company.How-COVID-19-is-changing-the-world-of-beauty-vF.pdf.
- Indonesian FDA (2021). Annual Report of Indonesian FDA Year 2020
- Hanif, F. & Sunitiyoso, Y. (2021) Analysis of the occurrence of repeated BPK audit findings in the financial statements of a government institution. *Journal of International Conference Proceedings*, 4(2), 161-169. <https://doi.org/10.32535/jicp.v4i2.1236>
- Hikmatiyar, A.F. & Anggoro, Y. (2021) Policy evaluation on food safety regulation: study case on risk management program on food safety in Indonesia. *Journal of International Conference Proceedings*, 4(2), 317-325. <https://doi.org/10.32535/jicp.v4i2.1255>
- Porter, L. E. & Graycar, A. (2016). Hotspots of corruption: Applying a problem-oriented policing approach to preventing corruption in the public sector. *Security Journal*, 29, 423-441. <https://doi.org/10.1057/sj.2013.38>
- Simon Kemp (2021a). Digital 2021. <https://wearesocial.com/digital-2021>
- Simon Kemp (2021b). Digital 2021: Indonesia. <https://datareportal.com/reports/digital-2021-indonesia>
- Statista (2021a). Indonesia: revenue of beauty & personal care 2017-2025. <https://www.statista.com/forecasts/1220238/indonesia-revenue-beauty-and-personal-care-market>.
- Statista (2021b). Indonesia: distribution of sales channels for beauty and personal care 2017-2025. <https://www.statista.com/forecasts/1206462/indonesia-sales-distribution-beauty-and-personal-care-market>.
- Sumiyani, R., Diatmika, I.K.C., Muslimah, N.H., & Rachmaniah, O. (2021). Analysis of Red Colorants and Heavy Metals in Lipstick at Traditional Market in Surabaya. *IOP Conference Series Material Science and Engineering*. <https://doi.org/10.1088/1757-899X/1053/1/012083>
- ZAP (2020). ZAP Beauty Index 2020. Jakarta: PT Zulu Alpha Papa. <https://zapclinic.com/zapbeautyindex/2020>