

# Determining Marketing Channel Preference: A Case Study of Chocolate Drink's Consumer Preferences

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## Abstract

*Nowadays, e-commerce has become increasingly common among businesses. However, there is still a lack of determining marketing channel preferences between offline and online. Therefore, the company needs to consider the various factors that consumers consider when choosing a particular marketing channel. This study aims to find the marketing channels that consumers consider the most in buying instant chocolate drinks. The research was conducted in Indonesia and used the Analytic Hierarchy Process method to assess and determine the order of priority. The most preferred marketing channel by consumers to get instant chocolate drinks is the modern store. Then followed by the e-marketplace channel and social media channel.*

**Keywords:** AHP, consumer preference, instant chocolate drink, marketing channel

## 1. INTRODUCTION

According to the 2015 National Socioeconomic Survey (SUSENAS) of the Central Statistics Agency, the consumption of instant chocolate drinks per capita per year in Indonesia has grown dramatically since 2011. In 2011, the consumption of instant chocolate drinks in Indonesia is 0.156 per capita per year and increase about 133% to 0.365 per capita per year in 2012. But in 2013, the number was decreasing by 42.7% to 0.209 per capita per year and increase by 37.8% to 0.288 per capita per year in 2014. On average, instant chocolate drink consumption per capita per year in Indonesia has increased by 42% from 2011 to 2014.

To meet this demand, companies that produce instant chocolate drinks need more concern and focus on consumer preference and behavior. Recently, some researchers and marketing professionals are exploring consumer behavior in relation to new purchase channels and channel preferences for specific products (Chocarro, et al., 2013). As we know, today's shopping activities no longer have to be physically going to store but we also can be done through online channels such as e-commerce and social media platform E-Commerce refers to the paperless exchange of business information using electronic data interchange, electronic mail, electronic bulletin boards, electronic funds transfer, the World Wide Web, and other internet-based technologies (Bhalekar, et al., 2014).

E-commerce dan social media's effect on consumer preference and behavior has become an increasingly important topic that is attracting much attention in both industry and academia. During the period 2014 to 2019, the level of transactions through E-commerce in Indonesia increased to 500% in 5 years (KataData.co.id). This increase means that marketing channels through online channel are growing in Indonesian.

However, although e-commerce has become increasingly common among businesses, there is still a lack of determining marketing channel preferences between offline and online. Therefore, the producer or seller needs to know various factors that consumers consider when choosing marketing channels. This is particularly important when considering how to market and sell a specific product, in this case, such as an instant chocolate drink. Understanding that the companies have strategies that would drive consumer preference for a particular marketing channel rather than another is an essential aspect of formulating the design and management of product distribution.

This paper contributes to drawing the factors affecting consumer preference in choosing marketing channels and predicting the alternative channels that will be a trend in future to buy an instant chocolate drink. By knowing the characteristics and alternatives of a consumer preference, a company can decide to market its products effectively and efficiently because the distribution system can be a bridge connecting companies to their consumers.

## 2. MATERIAL AND METHODS

The research was conducted from March to September 2019 with a total of 125 respondents. Respondents were selected using a purposive random sampling technique. Selected respondents were those who stated that they routinely consumed instant chocolate drinks at least once per week. The resulting 125 respondents were tested in terms of the level of consistency. However, in consistency testing by Expert Choice software, only 34 respondents were consistent. Respondents consisted of 65% women and 35% men aged 17-31 years. Determination of age is adjusted to the target consumers of instant chocolate drinks.

We use the analytic hierarchy process (AHP) to determine consumer ratings when comparing some of the choices most desired by consumers in making decisions. This method was chosen because AHP is designed to take advantage of humans' ability to decompose problems into meaningful parts, prioritize the individual parts, and then synthesize the priorities to make a decision (Vargas & Saaty, 2011). AHP can decompose multi-criteria decision-making problems into a hierarchical system to the deepest sub-criteria. The hierarchy becomes a representation of a complex problem and forms it into a structure with several levels where the first level is the goal and then followed by the criteria, sub-criteria, and finally the alternative level.

Based on the guidelines for the preparation of the AHP by Saaty (2016), the following are the steps taken in this research:

- 1) Goal setting. Set the AHP goals to determine marketing channels for an instant chocolate drink.
- 2) Decomposition. Breaking down the goal setting into several levels or hierarchies (categories, criteria, alternatives) consists of elements determined by experts.
- 3) Comparative judgment. Make an assessment that reflects the respondent's knowledge, feelings, or emotions of the relative importance of two elements of the hierarchy presented in a pairwise comparison matrix using a priority scale.
- 4) Synthesis of priority. Synthesize the results of pairwise comparisons to get the priority level of each element of the hierarchy (local priority).
- 5) Logical consistency. Analyzing the level of consistency of pairwise comparison assessments.

To set up the hierarchy, we were obtained from previous studies which were tested by experts with content validity tests. There are no formal rules about the number of experts required to test an instrument (Almanasreh, et al., 2019). However, researchers recommend between three to twenty members of an expert panel (Gable, et al., 2013). This test involved three experts, consisting of two experts in marketing and one expert from the company. Content validity testing was carried out to determine the elements used in compiling the decision-making hierarchy. Content validity is a multi-stage process that can estimate the level of expert agreement on the instruments (Newman, et al., 2013). Content validity testing is carried out by three experts who consist of two expert practitioners in the field of marketing and one expert from practitioners.

In this study, respondent compare in pairs the elements in making a purchase decision. After making a pairwise comparison of various elements in decision making, it can produce the biggest weight which is the priority most desired by consumers. Things that must be considered in the use of AHP is the level of consistency of the results of the decisions obtained. The validity up to the tolerance limit for the inconsistencies of various criteria and alternatives chosen by decision-makers. A consistency ratio of less than 0.2 is considered suitable in AHP method, and its consistency is considered moderate (Saaty, 2008). However, the usual consistency ratio (CR) level is below 10%. But according to Ho et.al (2005), they argue that the consistency ratio can be accepted if the value is less than 0.1 although the ratio value less than 0.2 is considered tolerable the consistency is considered moderate. If the resulting CR value is less than the limit used, it can be said that the decision obtained is not consistent.

## 3. RESULTS AND DISCUSSION

### 3.1 Decomposition of Problem

There are two attitudes related to consumer preferences that are more like and or at the same likely. Channels that can accommodate the most important attributes prioritized by consumers will certainly make consumers tend to choose to buy and get the products they want on the channel. Based

on expert judgment on Table 1, there are three alternatives that were critical in consumer decision-making regarding where to buy instant chocolate drinks. That is, choosing to buy directly at modern stores, through e-marketplaces, or through social media.

Table 1. Expert Judgment on Alternative Channel

Marketing channels	Alternative channels	Expert Judgment
Offline channel	Modern store	Relevant
	Traditional store	Not relevant
	Gift store	Not relevant
Online channel	e-marketplace	Relevant
	Social Media	Relevant

Each alternative was evaluated based on three categories and seven criteria. Each category and criteria of consumer decision-making can be explained as follows:

1) Product

This category consists of quality, variety, and price. Quality is defined as an assessment of consumers of the quality of products that exist in an alternative channel of purchase (Chiang, et al., 2010). Variation is interpreted as a consumer rating of a list of sizes and types of products offered at an alternative channel of purchase (Sellers-Rubio & Mas-Ruiz, 2010). The product variety is an important factor when making purchase decisions (Zaffou, et al., 2011). The price, in this case, is interpreted as a consumer assessment of the price of the product, including shipping and handling costs, or service costs when making a purchase (Chiang, et al., 2010).

2) Service

This category consists of the convenience of purchase transactions and post-purchase warranties. The convenience of a purchase transaction, in this case, is interpreted as a consumer assessment of the services that can be provided at a channel of purchase and related to the assistance from the seller during the purchase (Jo Black, et al., 2002). Post-purchase guarantees are interpreted by consumers' assessment of the services that can be provided by marketing channels as related to refund regulations in the return of goods, warranties, and other post-purchase services (Sellers-Rubio & Mas-Ruiz, 2010).

3) Accessibility

This category consists of affordability and availability of products, as well as easy access to information. Affordability and availability of products, in this case, is interpreted as a consumer assessment of the range of product positions in the market and geographical reach (Cravens & Piercy, 2006). Easy access to information can be interpreted by consumers' assessments regarding easy access to information on prices, availability, and characteristics of a channel of purchase as part of a product evaluation (Sellers-Rubio & Mas-Ruiz, 2010).

The hierarchical structure in the process of selecting the channel to buy instant chocolate drink is shown in Figure 1.

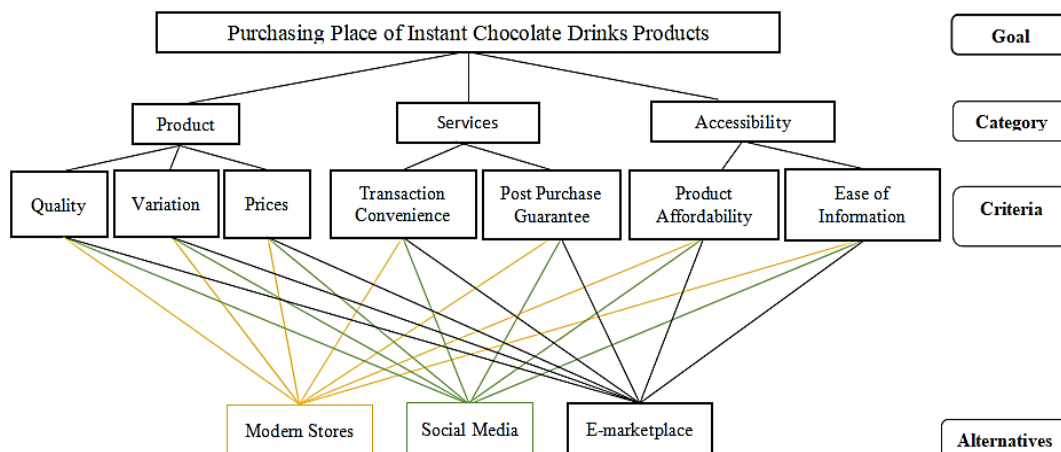


Figure 1. AHP of Marketing Channel Preference

### 3.2 Synthesis of Priority

According to (Levin , et al., 2005), consumers' preferences when deciding to shop for certain products either online or offline will vary depending on which channel consumers feel they can evaluate the attributes that they think are important. The concept of preferences is related to the ability of the consumers in prioritizing their choices in order to make decisions (Salvatore, 2014). In evaluating the criteria, consumers made an assessment by comparing in pairs so that the results obtained by the criteria became the priority in determining where they buy chocolate drink. The results of weighting at other levels will have different values. In the results of category level weighting, the weight value of local and global priority has the same value because the location of the category level in the decision-making hierarchy is just below the goal level, so the values of both will be the same.

From the results of data processing in Table 2, the category was the most considered by consumers in selecting the first channel is the accessibility, then the product, and finally the service provided. The next step is to determine the priority criteria for each category. In terms of criteria, as stated in Table 3, in choosing channels to purchase instant chocolate drinks, the most considered aspects by consumers with the greatest weight is the product affordability to various regions. This shows that when a company wants to decide to distribute chocolate drink, then they must reach consumers in various regions.

Table 2. Consumer's Preference on Category Level

Rank	Categories	Priority Weight
1	Accessibility	0.461
2	Product	0.285
3	Services	0.254

Table 3. Consumer's Preference on Criteria Level

Rank	Criteria	Priority Weight
1	Product Affordability	0.269
2	Ease of Information Access	0.192
3	Transaction Convenience	0.137
4	Product Quality	0.125
5	Product Prices	0.117
6	Post Purchase Guarantee	0.117
7	Product Variety	0.043

Furthermore, the criteria prioritized by consumers in selecting marketing channels for instant chocolate drinks is the criteria for easy access to information related to the products. That is, companies must be able to provide complete information related to the products offered. This is useful for consumers in deciding whether to buy the product or not. Before buying, of course, consumers will evaluate the product, and one of the easiest channels to evaluate the product is to pay attention to detailed information about the product. And the third criterion most prioritized by consumers is the comfort criteria in purchasing transactions. From these results, it can be seen that the convenience aspect when making a purchase transaction is an aspect that is most considered by consumers. Therefore, companies need to distribute their products through channels that can provide excellent service so that they can make their customers feel comfortable.

The fourth priority is product quality. This confirms that quality is not the most important thing according to consumers (Wahyudin, et al., 2020), even though quality still has a place in selecting marketing channels for instant chocolate drinks. The fifth priority are price product and post purchase guarantee. This result is in line with research was conducted by Rahardjo (2016) that the factors were consumers consider in purchasing food products (frozen and instant) are including taste, price, packaging, and brand. That was shows that the price are also the main factors for consumers in buying chocolate products.

### 3.3 Decision Making Analysis

The alternative channels to buy instant chocolate drink include offline and online. Based on the results of expert testing, Researchers use three alternative purchase channels that will become consumer preferences: modern stores, e-marketplaces, and social media. In Table 4, it can be seen that in general respondents tend to choose modern stores as the priority to get instant chocolate drinks products with a weight percentage of 42.6%. This is consistent with the results of research conducted by Lihra & Graf (2009) that consumers consider physical stores to be the most reliable, effective, and easiest source of information because consumers have the opportunity to see and touch the product directly.

At the evaluation stage, consumers might want to see and touch the product and obtain more detailed information about options, product quality, and other issues that are considered important. According to recent research (Rajamma, et al., 2007), physical stores have an advantage in the dimension of goods, where available products and services can be owned immediately by consumers. Moreover, consumers can easily see the quality and variety of products sold. When consumers buy products through modern stores, they can directly assess the quality of products to be purchased. This provides a guarantee of product quality. This was also conveyed by Chiang et al. (2010) that consumers assess the quality of products at alternative places of purchase. Therefore, modern stores are the first priority. The second priority is the e-marketplace channel. The last priority is the social media channel.

Table 4. Consumer's Preference on Marketing Channels

Rank	Alternative	Priority Weight
1	Modern Store	0.426
2	E-marketplace	0.334
3	Social Media	0.240

Furthermore, respondents chose e-marketplace as the second priority to buy instant chocolate drinks products with a percentage of 33.4%. During the entire purchasing process, the internet plays a role that cannot be ignored and is expected to be increasingly important in the future. According to Wahyudin and Azali (2020), online shopping has become consumers' habit in terms of selling and purchasing products, including food and beverages. While the last priority sequence is social media channels with a percentage weighting of 24%. So, it can be seen that the majority of consumers choose a modern store to get instant chocolate drinks products.

The company has the choice to market its products online either through e-commerce with electronic media marketplaces or through social media. Currently, the use of social media is widely used by entrepreneurs in managing their marketing activities (Misirlis & Vlachopoulou, 2018). Social media on the other hand, according to (Kaplan & Haenlein, 2010), is a group of Internet-based applications that are built based on the ideology and basics of Web 2.0 technology, and which allow the creation and exchange of content created by users. Social media is a web and is increasingly more mobile forming interactive social platforms of predominantly consumer and brand-generated content (Kumar, et al., 2016). Users can create, share, modify and discuss using different types of platforms like Facebook, Twitter, Instagram (Kaplan & Haenlein, 2010). Based on research conducted across cross-segment respondents (Jo Black, et al., 2002), some consider that online-based channels on the Internet harm the social level, even though there are values that are obtained individually. In addition, many respondents believe that channels with an Internet base are less secure for payment transactions than mobile phones or ATMs (Automated Teller Machines).

### 4. CONCLUSIONS

Based on the expert judgment, three alternatives channel were critical in consumer decision-making regarding where to buy instant chocolate drinks, namely modern store, e-marketplace, and social media. Most of consumers decide to choose a modern store channel to get instant chocolate drinks products. It because of modern store channel offers advantages in quality, variety, price, and convenience in purchase transactions, post-purchase guarantees, and product affordability in various regions. When the consumer is easy to find a modern store in their environment, then to get an instant

chocolate drink, consumers prefer to buy through a modern store. Although e-marketplace channels can potentially reach more regions, however modern stores are considered more accessible by consumers. Even so, a company needs to continue to distribute its products through online-based channels such as e-marketplaces and social media due to the difference in priority weights. These differences are not large among the three alternative choices: modern stores have a weighting percentage of 42.6%; the e-marketplace has 33.4%, and social media has 24%. This indicates that consumers also consider getting instant chocolate drink from e-marketplace channels and social media.

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## REFERENCES

- Almanasreh , E., Moles, R. & Chen, T., 2019. Evaluation of Methods Used for Estimating Content Validity. *Research in Social and Administrative Pharmacy*, 15(2), pp. 214-221.
- Bhalekar, P., Ingle, S. & Pathak, K., 2014. The Study of E-commerce. *Asian Journal of Computer Science and Information Technology*, 4(3), pp. 25-27.
- Chiang, Wei-yu, K. & Zhen, L., 2010. An Analytic Hierarchy Process Approach to Assessing Consumer's Distribution Channel Preferences. *International Journal of Retail and Distribution Management*, 38(2), pp. 78-96.
- Chocarro, R., Cortinas, M. & Villanueva, M., 2013. Electronic Commerce Research and Applications Situational Variables in Online Versus Offline Channel Choice. *Electronic Commerce Research and Applications*, 12(5), pp. 347-361.
- Cravens, D. & Piercy, N., 2006. *Strategic Marketing*. New York: McGraw-Hill.
- Creative Decision Foundation Salvatore, D., 2014. *Ekonomi Internasional*. 2nd Edition ed. Jakarta: Salemba Empat.
- Gable, R., McCoach, D. & Madura, J., 2013. *Instrument Development in The Affective Domain: Measuring Attitudes and Values in Corporate and School Settings*. 3rd Edition ed. Berlin: Springer.
- Ho Daniel, Newell, G. & Walker, A., 2005. The Importance of Property-specific Attributes in Assessing CBD Office Building Quality. *Journal of Property & Investment*, Volume 23, pp. 424-444.
- Jo Black, N., Lockett, A., Ennew C., Winklhofer, H, McKechnie, S., 2002. Modelling Consumer Choice of Distribution Channels: An Illustration from Financial Services. *International Journal of Bank Marketing* , 20(4), pp. 161-173.
- Kaplan, A. & Haenlein, M., 2010. Users of the World, unite! The Challenges and Opportunities of Social Media. *Business Horizons*, 53(1), pp. 59-68.
- Kumar, A., Bezawada, R., Rishika, R., Janakiraman, R., & Kannan, P.K., 2016. From Social to Sale: The Effects of Firm-generated Content in Social Media on Customer Behavior. *Journal of Marketing*, 80(1), pp. 7-25.
- Levin , A., Levin, I. & Weller, J., 2005. A Multi-Attribute Analysis of Preferences for Online and Offline Shopping: Differences Across Products, Consumers, and Shopping Stages. *Journal of Electronic Commerce Research* , 6(4), pp. 281-290.
- Lihra, T. & Graf, R., 2009. Multi-channel Communication and Consumer Choice in The Household Furniture Buying Process. *Direct Marketing: An International Journal* , 1(3), pp. 146-160.
- Misirlis, N. & Vlachopoulou, M., 2018. Social Media Metrics and Analytics in Marketing-S3M: A Mapping Literature Review. *International Journal of Information Management*, 38(1), pp. 270-276.
- Newman, I., Lim, J. & Pineda, F., 2013. Content Validity Using A Mixed Methods Approach: Its Application and Development Through the Use of a Table of Specifications Methodology. *Journal of Mixed Methods Research*, 7(3), pp. 243-260.
- Rahardjo, C., 2016. Factors that Become Consumer Preferences in Buying Frozen Food Products. *Journal of Management and Business Start-Ups*, 1(1), pp. 32-43.
- Rajamma, R., Paswan, A. & Ganesh, G., 2007. Services Purchased at Brick and Mortar Versus Online Stores, and Shopping Motivation. *Journal of Services Marketing* , 21(3), pp. 200-212.
- Saaty, R., 2016. *Decision Making in Complex Environments*. Pittsburgh: s.n.
- Saaty, T., 2008. Decision Making with The Analytic Hierarchy Process. *International Journal of Services Sciences*, 1(1), pp. 83-98.

- Salvatore, D., 2014. *Ekonomi Internasional*. 2nd Edition ed. Jakarta: Salemba Empat.
- Sarkar, R. & Das, D., 2017. Online Shopping vs Offline Shopping: A Comparative Study. *International Journal of Scientific Research in Science and Technology*, 3(1), pp. 1367-1368.
- Sellers-Rubio, R. & Mas-Ruiz, F., 2010. Economic Efficiency in Supermarkets: Evidence in Spain. *International Journal of Retail & Distribution Management*, 34(2), pp. 155-171.
- Vargas, L. & Saaty, T., 2011. In: Assad A., Gass S. (eds) Profiles in Operations Research. *International Series in Operations Research & Management Science*, 147(Springer, Boston, MA).
- Wahyudin, M. & Azali, F., 2020. Consumer Shopping Behavior Through Online Store for Food and Beverages. *IOP Conference Series: Earth Environment Science*, 425(1), p. 012026.
- Wahyudin, M., Wagiman & Khulsum, V., 2020. Analytical Hierarchy Process of Instant Chocolate Drink Development based-on Consumer Preferences. *Agroindustrial Journal*, 7(2), pp. 492-495.
- Zaffou, Madiha & Chidmi, B., 2011. The Effect of Variety Offering on Demand and Supermarket Competition: Yogurt in the Houston Metropolitan Area. *Innovative Marketing*, Volume 3, pp. 8-18.