DIGITAL MARKETING ADOPTION AMONG FOOD PRODUCTS HOME INDUSTRY: A STUDY OF MELINJO CHIPS PRODUCER IN BANTUL

Adopsi Pemasaran Digital Oleh Pelaku Industri Rumah Tangga Produk Makanan: Studi Pengrajin Emping Melinjo di Kabupaten Bantul

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ABSTRACT

This study aims to describe the marketing conditions of the melinjo chips and to determine the perceptions of melinjo chips producers towards the adoption of digital marketing. Data were collected through interviews with 63 producers of the melinjo chips selected using census method from all producers in Pandak District, Bantul Regency, Yogyakarta Special Region. Descriptive analysis and 5-point Likert Scale were used to determine the producers' perception of the adoption of digital marketing in the marketing of melinjo chips. The results showed that in general, the marketing of melinjo chips was mostly using conventional marketing, although some producers have implemented digital marketing. Moreover, the adoption of digital marketing was perceived in neutral category. The neutral perception was due to the fact that although the adoption of digital marketing has positive view such as benefits, and marketing efficiency, there were also obstacles in using it, not providing innovation and low trust in digital marketing technology.

Keywords: digital marketing adoption, chips marketing, home industry, melinjo chips,

INTISARI

Penelitian ini bertujuan untuk mengetahui gambaran kondisi pemasaran pada industry rumah tangga emping melinjo dan mengetahui persepsi pelaku industri rumah tangga emping melinjo terhadap adopsi pemasaran digital. Data dikumpulkan melalui wawancara terhadap 63 pelaku industry rumah tangga emping melinjo yang dipilih secara sensus dari seluruh pengrajin di Kecamatan Pandak, Kabupaten Bantul, Daerah Istimewa Yogyakarta. Analisis deskriptif dan skala Likert 5-point digunakan untuk mengetahui persepsi pengrajin terhadap adopsi pemasaran digital pada pemasaran emping melinjo. Hasil penelitian menunjukkan bahwa secara umum pemasaran emping melinjo sebagian besar masih menggunakan pemasaran secara konvensional, walaupun sudah ada yang menerapkan pemasaran digital. Adapun mengenai persepsi pengrajin terhadap penerapan pemasaran digital termasuk dalam kategori netral. Persepsi netral disebabkan karena meskipun adopsi pemasaran digital memberikan efek positif seperti benefit, dan efisiensi pemasaran, namun juga ditemukan kendala dalam penggunaan, tidak memberikan inovasi dan rendahnya kepercayaan terhadap teknologi pemasaran digital.

Kata kunci: adopsi pemasaran digital, emping melinjo, industry rumah tangga, pemasaran emping.

INTRODUCTION

Agricultural industry is one sector that plays an important role in economic development. In Indonesian economic structure, agroindustry is one of the sectors in the manufacture industry. The contribution of the manufacture sector is quite significant to Indonesia's gross domestic product (GDP), which was contributes of 17.83% in the country's GDP in the second quarter of 2020, a slight increase from the previous period of 17.35% in 2019 (Statisticts Indonesia, 2020).

One of the products from the agricultural industry is melinjo chips. The melinjo chips agroindustry has the potential to be developed with the reason of the large demand as traditional food (Istiyanti & Rina Kamardiani, 2017). In addition, the melinjo chips industry is an alternative business that is expected to be able to provide additional income for Indonesian family.

Melinjo chips is one of the traditional food that are widely consumed and produced in several home industry centers in the Special Region of Yogyakarta, one of which is in Bantul Regency. This can be seen from the data of melinjo chips home industries in Bantul Regency. Data from the Bantul Regency Office of Cooperatives, Small Medium Enterprises and Industry stated that in 2020 there were 159 melinjo chips producers spread across 11 districts. Pandak District is the area with the highest number of producers, namely 73 producers or 45.9% of total producers in Bantul Regency (DISKUKMP Bantul, 2020).

In general, melinjo chips production process in Bantul Regency still uses simple tools and manual processes, that is why the production costs are relatively low and have the potential to be developed (Sriyadi, 2018). However, although the melinjo chips business in Bantul, especially in Pandak District, has the potential to be developed, marketing activities carried out by producers are still involve long supply chain with many marketing institutions, resulting in relatively high marketing costs (Senendar et al., 2019).

The marketing activities of melinjo chips generally involve several marketing institutions which result in a high price margin between prices at the producer and consumer levels (Royfandi & Amri, 2019). Melinjo chips is generally sold to the village middlemen which has limited marketing coverage. Moreover, melinjo chips also competes with other modern processed foods. This could make it difficult for melinjo chips home industry in Pandak District, Bantul Regency to develop due to high marketing costs, low market demand and limited market reach.

In the current information age, the adoption of information technology in marketing activities could allow products to reach a wider market (Akhmadi, 2020). Digital marketing is one of the applications of information technology in marketing (Mufadhol et al., 2020). One of the information technologies used in digital marketing activities is social media application such as WhatsApp, Instagram, and Facebook. Social media is not only used to communicate but also can be used to promote products and services to a wider range of consumers (Gonte, 2018).

Melinjo chips producers in Pandak District, Bantul Regency, basically already implemented digital marketing by several producers, by employing WhatsApp application. However, several other producers still use conventional marketing or offline method by selling their products through middlemen or retailers.

The process of adopting information and communication technology in marketing activities is influenced by several factors, one of which is age variable (Akhmadi & Fauzan, 2020). Based on age of the adopter, the technology adoption process is grouped into several generations, starting from the Silent Generation which was born in 1928-1945. The next generation is Baby Boomers (born between 1946-1965) and Generation X (born between 1966-1980) who are known as "digital immigrants" or groups that tend to be slow in adopting technology and are less positive about welcoming it. The next generation such as the millennial generation (Gen Y) and generation Z who are known as "digital natives" are considered as a group that is familiar and already familiar with information technology (Magsamen-Conrad & Dillon, 2020).

Based on the facts and above explanation, this paper aims to investigate the profile of the marketing conditions of melinjo chips and the perception of home industry producers of melinjo chips in Pandak District, Bantul Regency on the adoption of digital marketing. Pandak sub-district was chosen as the research location because it is the center of the melinjo emping industry in Bantul Regency, Yogyakarta Special Region. The results of this study are expected to provide insight into the marketing conditions of melinjo chips and the perception of melinjo chips producers on digital marketing adoption which may be used as policy consideration in optimizing information technology in marketing activities for food processed products such as melinjo chips.

RESEARCH METHOD

This study uses a quantitative descriptive method. Descriptive analysis was used to explore the marketing conditions of melinjo chips in Pandak District, Bantul Regency, Special Region of

Yogyakarta. Pandak District was chosen as the research location with consideration as the largest number of melinjo chips producers in Bantul Regency (DISKUKMP Bantul, 2020).

Respondents in this study were selected using census method. Census is a sampling method where all populations are taken as respondents (Suprapto et al., 2017). Based on data from the Department of Cooperatives, SMEs and Industry of Bantul Regency, there are 63 melinjo chips producers in Pandak District spread over three villages, namely Wijirejo Village as many as 38, Triharjo Village 13, and Gilangharjo Village 12.

The data used in this study consist of primary data and secondary data. Primary data is obtained using unstructured interviews which researchers could freely dig up information to the respondents (Bihu, 2020), but still refer to the questionnaire. Primary data obtained from melinjo chips producers consist of personal identity, marketing activities, and producers' perceptions on the digital marketing adoption. The secondary data in this study is the number of melinjo chips producers which was obtained from the Department of Cooperatives, SMEs, and Industry of Bantul Regency.

Furthermore, to determine respondents' perceptions on the digital marketing adoption, this study used a 5-point Likert Scale. There were four variables that were used to examine the perception of melinjo chips producers on digital marketing adoption which include usefulness, compatibility, innovativeness, and future orientation variables. More details about the variables and indicators used to measure producer perceptions are presented in Table 1.

Table 1. Variables and indicators of perceptions of melinjo chips producers on the application of digital marketing.

Variable	Indicator	References
Usefulness	Benefit Easy to use Efficiency Usage accuracy Satisfaction Memorability Productivity	(Lacka & Chong, 2016), (Siamagka et al., 2015),
Compatibility	Cost Effectiveness Interactivity Infrastructure Trust	(Akman, 2017), (Siamagka et al., 2015), (Ainin et al., 2015)
Innovativeness	Creativity Innovativeness IT Usage	(Siamagka et al., 2015), (Buddhi Satyarini, 2016)
Future Orientation	Effective Marketing Skills Market Orientation	(Buddhi Satyarini, 2016)

The perception data is then calculated using table and average score. The score were categorized into 5 criteria consisting of very positive, positive, neutral, negative, and very

negative perceptions (Retnawati, 2015). The measurement of this perception category uses the interval formula:

$$Interval\ Score = \frac{maximum\ score - minimum\ score}{number\ of\ category}$$

$$Interval = \frac{(5-1)}{5} = 0,8$$

The calculation results obtained from this formula can be categorized as the perception of the melinjo chips producers on the adoption of digital marketing. The division of categories can be written as in Table 2.

Table 2. Score and Category Perceptions of Melinjo Chips Producers on Digital Marketing Adoption

Score	Category
1,00 - 1,80	Very Negative
1,81 – 2,60	Negative
2,61 – 3,40	Netral
3,41 – 4,20	Positive
4,21 – 5,00	Very Positive

Sources: Diani et al., (2017), (Wicaksono et al., 2018)

The perception of the melinjo chips producers on the application of online marketing is measured using a Likert scale by giving a score of 1 (very negative), 2 (negative), 3 (neutral), 4 (positive), and 5 (very positive). All scores of respondent are added up into one total score to get the achievement score of the perception of the melinjo chips producers on the adoption of digital marketing.

RESULT AND DISCUSSION

Demographic Characteristic of Producer and Marketing of Melinjo Chips

The marketing conditions of melinjo chips in Pandak District, Bantul Regency can be seen from the demographic characteristic of producers and marketing activities carried out. Understanding the profile of melinjo chips producers can be used to explore their perceptions of digital marketing adoption in melinjo chips marketing activities. While the marketing activities are seen from the marketing method, market coverage and other activities related to the marketing of melinjo chips.

Based on the demographic characteristics of melinjo chips producers as presented in Table 3, it shows that the majority of melinjo chips producers are female, as much as 62 people, while only 1 male producer. Melinjo chips production businesses generally involve more women than men, which is indicated by the large allocation of women's working time compared to men (Nalinda, 2020). This is partly because female producers

spend more time at home and have more free time in producing melinjo chips than male producers.

Table 3. Demographic Characteristics of Respondents

No	Variable	Range	Respondent	
			Number	%
1	Gender	Male	62	98,41%
		Female	1	1,59%
2	Age	15-25 Year	0	0,00%
		26-40 Year	14	22,22%
		41-90 Year	49	77,78%
3	Education	No school	11	17,46%
		Elementary	30	47,62%
		Junior High School	15	23,81%
		Senior High School	6	9,52%
		Graduate	1	1,59%
4	Trade Experience	2 - 10 Year	21	33,33%
		11 – 19 Year	10	15,87%
		20 – 28 Year	23	36,51%
		28-38 Year	9	14,29%

source: processed data

Furthermore, based on age characteristic, the majority of melinjo chips producers, as many as 49 people or 77.78% categorized as Baby Boomers and Generation X, namely those between 41-90 years old. While for producers with an age range of 26-40 years or millennial generation, there were 14 people or 22.22% and there were no producers who are younger than that. In the context of technology adoption, Baby Boomers and Generation X were well-known as "digital immigrants" who tend to find it difficult to adopt new technology (Wang et al., 2017). Apart from that, the older generation also tends not to dare to take a risks in doing business (Yektiningsih et al., 2019). This finding is important to note considering the adoption of digital marketing will be faced with new technology which is challenging to adopt it.

Moreover, based on education factor, the majority of melinjo chips producers as much as 30 people or 47.62% having only elementary school education and there are even 11 people or 17.46 percent with no education background. Only 15 people or 23.81% have junior high school education and the rest 6 are senior high school and 1 producer was graduated from university. This data shows that the majority of melinjo chips producers have low educational background. The low level of education is

important to note since the higher education a person tends to be easier to accept and adopt new technology (Zheng et al., 2019).

The last characteristic of melinjo chips producers was business experience. The experience on production of melinjo chips shows how long the producers involved on producing melinjo chips. Table 3 shows that the majority of melinjo chips producers (36.51%) have been running in the business between 20-28 years. There are even 9 people or 14.29% who have been in this business for 35 years. Business experience is a supporting factor in the adoption of new technologies (Romero & Martínez-Román, 2015).

Moreover, regarding the marketing conditions of melinjo chips, the majority of producers still use traditional offline marketing, by selling to intermediary traders who are then sold to the market and final consumers. Although a small number have used online marketing, for example through WhatsApp, it is still far from ideal due to the lack of knowledge about the use of technology in marketing.

Offline marketing is carried out by producers by selling melinjo chips to middlemen or sell the products directly to the market or to final consumers. Melinjo chips direct sales to the middlemen due to the producers need instant money to purchase raw materials which used in the production. This finding is different from previous research conducted by Royfandi & Amri, (2019) where middlemen who purchase melinjo chips from producers or collectors.

Middlemen tend to purchase any amount of melinjo chips without any limitation. However, the prices offered by middlemen were usually low so that the producers obtained less profit compare when being sold directly to the market or final consumers. In sales to the market, producers usually already have regular traders and the prices offered are high because these traders sell them directly to final consumers. However, not every time these traders can buy products with a fixed amount every day.

Perception of Melinjo Chips Producers on Digital Marketing Adoption

The perception of melinjo chips producers on digital marketing adoption is measured using several variables. This study refers to four variables that shape the perception of melinjo chips producers, namely usefulness, compatibility, innovativeness, and future orientation. Furthermore, each variable was measured using a 5-point Likert Scale. The results of the perception scores of each variable can be seen in Table 4.

Based on Table 4, the perception of melinjo chips producers on the usefulness variable as indicated by the indicators of benefit, easy to use, efficiency, accuracy of use, satisfaction, memorability, and productivity obtained an average score of 3.02. The benefit indicator got the highest score of 3.82 while the lowest score was 2.57 for the indicator of accuracy of use.

The producer's perception of the usefulness variable was in neutral category. It can be explained in detail by looking at the indicators that make up this variable. Two of these seven indicators, namely benefit and efficiency, were perceived as positive. However, the other three variables, namely easy to use, usage accuracy and memorability, are perceived negatively. Meanwhile, the productivity variable is perceived as neutral. It can be concluded that the application of digital marketing of melinjo chips was perceived between positive and negative since although it has benefits and may increase marketing efficiency, sometimes it is not easy to practice, and the results are not satisfactory. In addition, the application of digital marketing also requires investment in device and knowledge to practice it which in small-scale businesses generally does not pay much attention to (Taiminen & Karjaluoto, 2015).

Table 4. Perceptions of Melinjo Chips Producer on Digital Marketing Adoption.

Variable	Indicator	Score	Average Score	Category
Usefullness	Benefit	3.82		
	Easy to use	2.87		
	Efficiency	3.51		
	Usage accuracy	2.57	3.02	Neutral
	Satisfaction	2.58		
	Memorability	2.60		
	Productivity	3.23		
Compatibility	Cost Effectiveness	3.35		
	Interactivity	3.16	3.22	Neutral
	Infrastructure	3.81		
	Trust	2.58		
Innovativeness	Creativity	2.60		
	Innovativeness	2.81	2.61	Neutral
	IT Usage	2.42		
Market Orientation	Effective Marketing	3.28		
	Skills	2.73	2.99	Neutral
	Market Orientation	2.95		

source: processed data

Furthermore, the compatibility variable as explained by the indicators of cost effectiveness, interactivity, infrastructure, and trust obtains an average score of 3.22. The infrastructure indicator shows a positive perception with the highest score of 3.81, on the other hand the trust indicator shows a negative perception with a score of 2.58. The indicators of cost effectiveness and interactivity are perceived as neutral. In general, the

compatibility variable shows a neutral perception. The most important finding of this study was the low or negative trust factor. This was a concern since the trust factor, for example in the technological devices, was an important factor that can support technology adoption (Ritz et al., 2019).

Next, the perception of melinjo chips producers on the variables of innovativeness which were indicated by indicator of creativity, innovativeness, and IT usage showed an average score of 2.61. The innovativeness indicator obtained the highest score, namely 2.81 or neutral perception, while the creativity indicator and IT usage showed a score of 2.60 and 2.42 which were included in the negative category. These results indicate that in general the adoption of digital marketing was not considered affect the innovation and creativity on the marketing of melinjo chips. Theoretically, the adoption of digital marketing could increase business innovation (Noyola-Medina et al., 2018). The negative effect of digital marketing adoption on innovation could be reduced by increasing attitude toward technology (Jahanmir & Cavadas, 2018).

Finally, the future orientation variable which consists of three indicators, namely effective marketing, skills, and market orientation, shows an average score of 2.99 or a neutral category. In detail, the effective marketing indicator shows the highest score 3.28. Digital marketing is indeed to increase marketing effectiveness (Afifah et al., 2018). However, the skills indicator shows the lowest score, which was 2.73. In conclusion, the producer's future orientation variable prove that the adoption of digital marketing is perceived between positive and negative towards the future of melinjo chips marketing.

Based on the scores and four variables of perception, namely usefulness, compatibility, innovativeness, and future orientation, all of them show a neutral category which was in the range between positive and negative perception. The adoption of digital marketing in melinjo chips marketing activities, although it is perceived positively since it could provide benefits, increase efficiency, and the existence of technology infrastructure, but also perceived as difficult in its use, does not provide innovation and low trust in digital marketing technology.

CONCLUSION AND RECOMMENDATION

Conclusion

Most of the melinjo chips marketing still uses conventional (offline) marketing, although some producers have implemented digital marketing. This is understandable considering that the

majority of melinjo chips producers come from Baby Boomers and Generation X with only primary school educational background.

The perception of melinjo chips producers on the adoption of digital marketing is in the neutral category or between positive and negative. This Neutral perception is due to the fact that although the adoption of digital marketing has positive effects such as benefits, cost effectiveness and marketing effectiveness, there are also obstacles in its use, not providing innovation and low trust in digital marketing technology.

Recommendation

Efforts are needed to improve the adoption of digital marketing among melinjo chips producers by using information technology devices that are technologically easy to use and trusted by producers. And It is necessary to conduct training from digital marketing practitioners in order to provide a practical overview and benefits of digital marketing for the marketing of melinjo chips.

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