TECHNOLOGY ADOPTION STRATEGY OF SOCIAL MEDIA IN MICRO SMALL MEDIUM ENTERPRISES

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ABSTRACT
This study explores the I-T-O-E framework to understand the dominant factors that specifically influence MSME adoption. Micro, Small, and Medium Enterprises (MSMEs) as one of the most affected needs to implement a marketing strategy through social media, due to low costs and ease of reaching consumers on a wider scale. West Java was chosen as the research location because the level of technology adoption in MSMEs is the highest among other big cities. The culinary sector was chosen because it is one of the sectors most affected by the COVID-19 pandemic and is the sub-sector with the lowest use of internet media among other creative economy sub-sectors. The methodology is qualitative, involving interviews with participants (MSMEs in the culinary sub-sector) selected through snowball sampling. The result shows that individual factor holds the most important role in determining social media strategy in MSME. This research is expected to have significant implications for both theory and state public policy in increasing digital interconnection, inclusivity, productivity, and MSME income.

Keywords: social media, ITOE Framework, Micro Small Medium Enterprise.

INTRODUCTION
BPS (2020) conducted a Social Demographic Survey on the Impact of COVID-19 on online shopping behavior in 2020. As a result, 9 out of 10 respondents shopped online and people's shopping patterns changed during the COVID-19 pandemic. As many as 31% of respondents experienced an increase in their online shopping, while only 28% of them experienced a decrease. This needs to be a concern for business actors, especially MSMEs, who have not yet expanded their business on digital platforms and are dependent on physical stores. Many small and medium-scale companies (MSMEs) that have been most affected by this pandemic are still not ready for the acceleration of technology in preparing their strategies for post-Covid-19 conditions.

Albaz et al., (2020); Fine et al., (2020); Kalidas & Rajagopaul, (2020) stated that during times of crisis, MSMEs are often the least resilient due to limited cash reserves, smaller client base, and less capacity to manage commercial pressure from large companies.
MSMEs are expected to be able to take advantage of digital technology in maintaining and developing their business. Research on the factors that influence the adoption of social media by MSMEs is very important because the success of MSMEs in adopting information technology, especially social media can have an impact on the sustainability of MSMEs. In 2021, Muhammad (2021) revealed that the number of MSMEs in Indonesia who have adopted new digital technology is around 59.64% of MSMEs. This is very unfortunate considering the number of users on the Internet reached 196.71 million users in the 2019-2020 (Q2) APJII Survey (APJII, 2020), which is a potential market for business actors.

Tobora (2014) argues that most micro-enterprises are sceptical about adopting technology due to perceived discomfort, anxiety over usage, and management issues. Okundaye (2018) states that some of the obstacles to technology adoption in MSMEs are the lack of infrastructure to support ICT adoption, such as limited power and expensive Internet services, and unreliable and expensive telecommunications.

Thus, the effective use of social media can help because of its affordable costs and broad access can help businesses reach their customers more easily (Ahmad et al., 2018). Social media was chosen because of the very large proportion of social media users out of all available internet media, as reported in a study from the Association of Indonesian Internet Service Providers (APJII, 2020) which found that 51.5% of the reasons a person uses the internet are used for social media.

This further increases the urgency to understand the factors that influence the adoption of social media in MSMEs. Most of the existing studies are causal research that examines causal relationships between variables. There are still few studies in Indonesia that examine technology adoption in SMEs with exploratory purposes using qualitative methods because most previous research was causal research using a quantitative approach (Arifin et al., 2016; Budiono, Fahrizal Lukman,; Sim Kim Lau, Tibben, 2020; J. L. L. Chong & Olesen, 2017; Ramdansyah & Taufik, 2017; Wahid, Fathul and Iswari, 2007).

This research complements existing studies on digital marketing adoption by integrating individual factors within a T-O-E framework. The TOE framework has proven to be quite effective from previous studies (Effendi et al, 2020). To examine important factors in technology adoption in MSMEs, especially micro-enterprises, this study applies a modified form of the Technology-Environment-Organization framework developed by Budiono et.al (2020). The application of the Individual-Technology-Organization-Environment (ITOE) framework is considered appropriate given a large number of micro-SMEs that have one owner-manager and employ less than ten employees. According to Budiono et al (2020), greater elaboration regarding these individual factors through an assessment of the knowledge and attitudes of individual owners-managers will provide more accurate insight.
into the reasons that underlie managers/owners failing to embrace opportunities in utilizing technology.

This study takes a case study approach by studying the adoption of social media in MSMEs in West Java. According to the latest survey from the Indonesian Ministry of Cooperatives, Small, Medium, and Micro Enterprises (2018), 98.68% of SMEs in Indonesia are micro businesses. West Java is one of the provinces included in the list of the top 10 provinces with the lowest digital divide index in Indonesia (Aryanti, 2016). This research focuses on SMEs in the culinary sub-sector. The culinary sub-sector is part of the creative industry which makes the largest contribution to the national economy but has a low percentage in terms of internet usage (Bekraf, 2018).

Budiono et al (2020) confirm the validity of the ITOE framework for research context and the results also show that individual constructs have a positive effect on organizational constructs in predicting e-marketplace adoption. The suitability of the ITOE framework for further application to other locations in Indonesia when investigating e-marketplace adoption by SMEs has been validated. Eze et al (2021) use a qualitative approach with the TOE framework to provide an understanding of the dominant factors that specifically influence MSME adoption. Meske & Stieglitz (2013) examines the adoption, use, and benefits of social media in SMEs and the potential concerns that could prevent the wider adoption of social media in SMEs. The result indicates that SMEs are starting to use social media internally (eg, wikis, blogs) to support collaboration among employees and to improve knowledge management. However, SMEs still face the problem of managing adoption and identifying relevant business values.

Based on the problem phenomena found in the previous literature, this research was conducted with the aim to describe the strategy implemented by the Culinary sub-sector MSMEs in West Java in adopting social media and explaining the impact of Individual, Technological, Organizational, and Environmental (ITOE) factors on the adoption of social media by culinary sub-sector MSMEs in West Java.

METHOD

In this study, researchers used qualitative methods. Qualitative research according to Mulyana (2008) is research with interpretive characteristics that involve many methods in examining the research problem. This research places humans as dynamic creatures and considers human life that is always changing. Examining things that are in their natural environment, trying to understand or interpret phenomena based on the meanings that people give to these things (Denzin and Lincon in Mulyana, 2008).

The approach uses case studies to reveal and analyze the adoption of social media in MSMEs in West Java. Case studies according to Yin (2013), seek to describe individual differences or unique variations of a problem. A case can be a person, event, program,
critical/unique incident, or community by trying to describe the unit in depth, detail, context, and holistically. For this reason, it is generally said that case studies are more appropriate for research related to how and why.

The researcher selected informants according to the research objectives, while the informants for this research were SMEs in the culinary sub-sector in West Java province. Sampling conditions are based on MSMEs using social media in the last 5 years. By applying the snowball technique, in the initial session, the participants helped the researcher to contact other people who took part in the interview process. This session was conducted to find out the existing situation of SMMT adoption by MSMEs so that they have an unrestricted opinion.

RESULTS AND DISCUSSION

This research uses ITOE Framework as the basis for questions in a semi-structured interview. The result is in accordance with the theory and previous literature from Budiono (2020) who validated the relevance of ITOE in technology adoption in SMEs. The study was conducted with three informants who are owners of local culinary outlets in West Java who use social media in the last three years. These three informants provide information on the company profile, influencing factors in technology adoption, especially in social media, and social media marketing strategy, as well as benefits and challenges in adopting social media marketing.

Table 1. Profile of Informants

<table>
<thead>
<tr>
<th>Informant</th>
<th>Length of Use Social Media for Business</th>
<th>Social Media</th>
<th>Business Scope</th>
<th>Academic Background</th>
</tr>
</thead>
<tbody>
<tr>
<td>Informant 1</td>
<td>5 years</td>
<td>Tiktok, Instagram, Facebook</td>
<td>1 outlet, more focus on online selling</td>
<td>High School</td>
</tr>
<tr>
<td>Informant 2</td>
<td>3 years</td>
<td>Instagram, Facebook</td>
<td>7 outlets, more focus on offline selling</td>
<td>High School</td>
</tr>
<tr>
<td>Informant 3</td>
<td>20 years</td>
<td>Tiktok, Instagram, Facebook</td>
<td>3 outlets, focus on online and offline selling</td>
<td></td>
</tr>
</tbody>
</table>

STRATEGY ADOPTION OF SOCIAL MEDIA

Strategy adoption of social media on small and medium enterprises, which derived from three informants are described below:

Informant 1 stated that social media adoption is conducted step by step. The promotion first started by spreading and socializing the business to residents and close neighbors through word of mouth, then started by making brochures from the first outreach to the community,
campus, schools, and business areas, then developed using social media through Facebook and Instagram. In addition, in adopting social media, informant 1 uses a special account with an admin who manages it. Initially, it started with social media using a personal account from private owners, but right now along with the need to improve professional performance, the business needs people who are real experts who run social media. Besides, in developing the social media, at first, he uses free features (account) then develop into a premium account to get more benefits like a better reach to more consumers.

As quoted from Informant 2: “Yes, first, before going to social media, let's socialize it first, especially from the local residents! close neighbors! Well after that ee maybe this is a trip huh! It's a trip, we made brochures from the first outreach to the community, and neighbors, then we made brochures and distributed them to campuses, to schools, to shops, we targeted employees, so far, thank God, we are using social media. Maybe someone from ee Instagram, ee Facebook and many more”. Added by Informant 1: Almost all of them are admins and managers who run ee who manage all ee operations in this company ee. The owner is the one who reports the most”

Regarding the selection of social media used for business purposes, informant 1 used both Facebook and Instagram. He stated that Instagram is effective for promotion purposes meanwhile Facebook is more into communication media where customers give critiques and suggestions. This feedback helps him to improve his business either in service or product improvement.

Informant 1 stated that social media adoption started by promoting through Blackberry messenger on her personal account by posting a picture of the product in her profile picture then start promoting on Facebook and Instagram, WhatsApp, and now trying the hype to TikTok.

As quoted from Informant 1:” because I'm an ordinary housewife, I started from an ordinary household, I have to take care of my children, I have to take care of my husband, I have to take care of the house, so how do I share to be able to stay uh what... ee commitment to my business. Well, in the end, I maximize this social media, that's it. I maximize this social media by means of Instagram, and Facebook. Instagram, Facebook and so what.. ee WA like that.

Informant 3 stated that social media adoption started with the presence in Google Maps and Google Business. People realized her business through Google and she was aware with the benefit gained by having a business presence online. Then, when she want to launch nre product she initiated building a team for social media to build a campaign in promoting the new product in Instagram.

INFLUENCING FACTORS OF TECHNOLOGY ADOPTION IN SMES
After conducting interviews with three informants who are active on social media in promoting their business, we developed an understanding of factors that influence businesses in adopting technology, especially social media. Several theory has discussed the adoption of technology in individual and/or organizational level, including TAM, TPB, UTAUT, and TOE. The technology-organization-environment (TOE) model is described in Tornatzky and Fleischer's The Processes of Technological Innovation (1990). This book describes the entire innovation process - from development.

Along with the development of current technological advancement and changes in social behavior in the community, The ITOE Model was developed by Budiono et al. (2020), based on the limitations of the TOE framework. The TOE framework examines technological, organizational, and environmental factors that influence technology adoption, but some literature has shown that individuals in organizations can significantly influence e-commerce technology adoption, especially in small-scale organizations (Awa et al., 2015; Awa et al., 2017; Gangwar et al., 2015).

Informant 1 and 2 informed that factors that influence the adoption of social media in his business are competitors and motivation to succeed and develop his business. The motivation to succeed allows him to adopt social media and utilize the opportunity.

As quoted from Informant 2: “The first is everyone... every human/individual must be active, right? from social media. Yes, maybe somewhere there is a gap, once there is a chance, we will ee what is it called ee promoting our products, isn't that right! to the general public, isn't it! So, for example, the average population, uh, don't talk about the whole country, okay? It's only in Bandung, that's for sure holding an Android or cellphone, right! So, let's take advantage of opportunities, right?”

This is also in line with the statement from Informant 3 who informed that a factor that influences the adoption of social media is motivation to succeed and develop her business. She realized the potential benefit gained from social media and thus commit to starting to focus on developing social media for her business.

**INDIVIDUAL FACTORS**

Individual factors include user acceptance, trust in technology, and digital literacy. These factors have proven to be influential in technology adoption in developing countries, including Indonesia (Awa et al., 2015; Cui et al., 2020; Beige & Abdi, 2015; Gengatharen & Standing, 2005; Puspitasari & Ishii, 2016; Sfenrianto et al., 2018).

Regarding trust in technology, all informants feel secure and safe using social media if they are aware of the risk associated with it and are careful in sharing data and information on social media. Regarding user acceptance and digital literacy, all informants are familiar with and feel at ease with social media as they use it for personal before using it for business.
Since they feel safe, familiar, and at ease with using social media, it smoothens the adoption process of social media for their business.

TECHNOLOGICAL FACTORS

The technological context includes all technologies that are relevant to the company, both technologies that are already used in the company and those that are available on the market but are not currently used (Baker, 2012). For the technological context, the relative advantage and compatibility of the adopted technology are identified as important variables influencing the use of marketplaces and social media.

Regarding the relative advantage and compatibility of social media (Instagram & Facebook), all informants agreed that the use of social media helps to increase better awareness and better reach of consumers. In addition, social media is also compatible with almost all devices used, either laptops or smartphones and in smartphones or android.

ORGANISATION FACTORS

Organizational factors are defined as “internal influences that impact e-commerce adoption” (Maryeni et al., 2012). The perception of MSMEs, (Ndayizigamiye et al., 2019; OECD, 2020; Poorangi et al., 2013) shows that support from top management and compatibility are factors that influence technology adoption. (Janom et al., 2014) suggested that the factors that influence technology adoption are top management support, organizational readiness, and external influences. Besides that, organizational culture also influences innovation as stated by W Nickels et al (2010) that if the corporate culture is not open to new innovations, then the adaptation and use of electronic commerce will be a barrier. (Rahayu & Day, 2015) found that perceived benefits, technology readiness, the creativity of MSME owners, owner IT skills, and experience are factors that determine the adoption of e-commerce by MSMEs in Indonesia.

This research undertakes interviews with informants from micro and small-scale enterprises, the result found that the creativity of MSMEs owners in utilizing opportunities to use social media is a determinant in organization factors. Yet, as the interviewee are all in micro and small-scale enterprises, most decisions are made by owners. However, as the creativity of MSMEs owners holds an important role in social media adoption, even though they are not experts in social media marketing or have not participated in social media workshops, all informants use experts in operating the social media account and in handling the social media promotion.

ENVIRONMENTAL FACTORS

Environmental factors cover all aspects outside the company and have a considerable influence on E-commerce adaptation. These factors are government, business partners, nature and natural disasters, technological infrastructure, culture, consumer characteristics, and political instability.
In this research, informant 2 informed that government support contributes to the success of social media adoption in his business. The government in Bandung encourages the use of internet promotion and socializes campaigns to decrease the use of advertisements through banners and billboards.

Ajmal and Mohd Yasin (2012) have shown in their research that there is a positive relationship between government support and e-commerce adaptation and that “government support is needed for E-commerce adaptation because the government can simplify directives and arrangements and provide technical infrastructure for E-commerce adaptation in SMEs”. In addition, some natural disasters such as earthquakes and floods can have a very negative impact on e-commerce adoption as such disasters can wipe out a country's entire ICT infrastructure.

**BENEFIT AND CHALLENGES**

Results from interviews with three informants said that there are numerous benefits and challenges in adopting social media. Benefits include being viral which contributes to brand awareness, and higher sales from a more aggressive social media strategy.

As quoted from Informant 2: “3 years ago, yes, thank God, it turns out that there are several media that we have tried, but starting with socialization, ee, making flyers or making brochures printed on social media, that's fast! it turns out that in terms of ee the increase in turnover is also quite an increase huh! go up! from the increase in social media”.

Regarding the challenges faced in adopting social media, informant 1 stated that the challenge in business is always there starting from the very beginning, from word-of-mouth marketing, brochure, and now to social media marketing. In social media marketing, businesses need to adapt to technology, need to learn how to promote and understand the technical aspects. Besides, the cost of hiring experts in social media marketing is another challenge in adopting social media for businesses.

**CONCLUSION**

In adopting social media-based marketing technology, MSMEs in West Java are gradually starting from the manual (word of mouth, flyers, outreach to the surrounding environment) to developing marketing on digital platforms from free to paid features, from using their own accounts to hiring admins. Facebook and Instagram are social media commonly used by MSMEs in West Java to market their products and manage customer relationships. For MSMEs, individual, technological, and external factors are factors that play an important role in adopting social media because many MSMEs still hold their social media accounts personally, the ease of using social media, and the orientation to move forward in the mirror from competitors. MSME actors realize that currently, information technology is the main capital in doing business, so they adopt social media to keep up with the times so they can reap the benefits of social media for their business.
RECOMMENDATION

MSMEs are expected to consistently manage social media accounts to manage relationships with customers. Closeness with customers can be built through posting on social media with the status feature on Facebook, feeds on Instagram, and using the live feature on both Facebook and Instagram. MSMEs can build branding through posts, feeds, and personas that are displayed live.

For further research related to the adoption of social media-based marketing technology in MSMEs, it is hoped that they can dig up more information from sources in different industries, as well as triangulate data or sources to increase data credibility.

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REFERENCE


Albaz, A., Mansour, T., Rida, T., & Schubert, J. 2020. Setting up small and medium-size enterprises for restart and recovery


Kemendag. 2007. *Studi Sektor Akomodasi dan Makanan Indonesia.* Kementerian Perdagangan Republik Indonesia


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