

Implementation of Industry 4.0 in KADIN-assisted MSMEs Bandung

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Abstract

Micro, Small, and Medium Enterprises (MSMEs) as one of the nation's economic pillars are facing major challenges due to the Covid-19 pandemic and inevitable technological advances. The MSME Center assisted by the Bandung Chamber of Commerce is one of the parties affected by the Covid-19 wave that has hit the world and the rising of an online marketplace. The pandemic has forced the MSME actors have limitations in marketing their products due to the closure of tourist attractions where their products are directly marketed. The limited knowledge about technological advances makes it difficult for MSME actors to expand their market share. In order to encourage MSME actors assisted by KADIN to rise, survive and be more advanced, a breakthrough is needed in the marketing of MSME products by utilizing technological advances through providing training in the form of marketing digitalization applications for packaging and branding, risk management, and product quality. By providing this training, MSME actors have additional knowledge that triggers creative ways of thinking in marketing their products digitally. It can be said that this training had a very big impact so it would be better if it was done regularly.

Keywords: MSMEs; Digitalization of Marketing; Application training.

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Introduction

Currently, the concept of Industry 4.0 has been widely adopted by many countries. This is a rather narrow concept compared to the 4th Industrial Revolution which is considered to have a broad impacts on the national economy and society. The industry 4.0 approach is the 4th Industrial Revolution's way to initiate big agendas related to Industry 4.0. One of the main agendas is empowerment of MSMEs that plays an important role in Industry 4.0. With this approach, it is expected that the city government will successfully implement it through collaboration with the Bandung Chamber of Commerce and Industry. This initiative arose from the conditions of the Covid-19 Pandemic that hit the whole world, especially MSME business actors assisted by the Bandung Chamber of Commerce and Industry .

Recently, the word Industry 4.0 has been echoed by many

people. However, until now, many people still do not understand what Industry 4.0 is and how it will contribute to Indonesia's progress. The term Industry 4.0 was first echoed at the Hannover Fair, 4-8 April 2011. The German government used this term to advance the industrial sector to the next level, with the help of technology.

In short, in Industry 4.0, the industry players let the computers connect and communicate with each other to finally make decisions without human involvement. The combination of cyber-physical systems, the Internet of Things (IoT), and the Internet of Systems enables Industry 4.0 to happen and makes smart factories a reality. In Indonesia, the Ministry of Industry strongly encourages the development of Industry 4.0. The Industrial Revolution 4.0 is a transformation effort towards improvement by integrating the online world and production lines in the industry, where all production processes run with the internet as the major support.

According to the Ministry of Cooperatives and SMEs (2018), MSMEs have made a lot of contributions to the economic growth in Indonesia, which can be seen from the contribution of the MSME sector to Gross Domestic Product (GDP) in 2018 which increased 3.26 percent from the previous year's MSME contribution to GDP. Currently, MSMEs take advantage of the processing industry sector in developing their business. Initially, the development of the manufacturing sector in a country will be dominated by small household business activities, and in the next stage, it will be dominated by medium and large business activities (Tambunan, 2002).

MSMEs can have a positive impact, namely by reducing unemployment, eradicating a lot of poverty, and increasing the national and regional economies. On the other hand, its existence also faces many obstacles, some of the weaknesses of MSMEs include low access to funding sources, low skills, low mastery of technology, weak marketing aspects, a business environment, and competition that is not conducive (Syarif et al, 2022).

The cooperation between Community Service activities from Widyatama University with KADIN Bandung is to provide assistance in the form of sharpening the skills of UMKM business actors assisted by KADIN Bandung, namely providing training in the form of digital marketing applications for packaging and branding, risk management and product quality. With this training activity as a form of increasing the knowledge and expertise with a Community Service forum for academics, in this case, the UMKM business actors assisted by KADIN Bandung, it is hoped that it can change the image of MSME products to the next level. In addition, through this activity, the academics can see and study the readiness of MSME business actors for the implementation of Industry 4.0. It can be seen how technology changes in consumer behavior and environment, the effects on business performance, and the readiness of MSME business actors to be able to adapt to this Industry 4.0 environment.

The problem faced by MSME business actors today is dependent on capital production, and lack of creativity. Therefore, it is necessary to increase the ability to use and apply as well as be adaptive to technology for the industry 4.0 environment so that MSME business actors have competence.

The development of MSMEs in Indonesia, especially in the challenges of the Industrial Revolution 4.0, requires MSME owners and/or managers to be able to compete. According to Nura'aeni et al (2018), Digitalpreneurship can develop MSMEs by using and maximizing the role of the internet as part of their business media. Especially in the era of broadband technology, where there has been a shift in consumer behavior, from shopping in-person to online shopping behavior (either through e-commerce, social media, or marketplaces) (Hapsoro et al., 2019).

The marketing strategy is adapted to changing times through the use of online system technology, namely social media, and the use of e-commerce (Itasari, et al; 2022). E-commerce is a means to facilitate rapid and sustainable economic growth, as well as opportunities for people who live in rural areas, so e-commerce brings good change (Haji, 2021). Indonesia includes in the top 10 countries (9th position) out of 47 countries that have been analyzed intensively (addicted) to using

social media, there are 170 million Indonesian users who are very active in using social media. Aged 16-64 years, 77 % use social media for shopping (Totoh, 2021).

The era of the internet and social media has become entrenched in the social life of Indonesian society. According to the research conducted by We Are Social, a British media company that collaborates with Hootsuite, the average Indonesian spends three hours and 23 minutes a day accessing social media. From a report entitled "Essential Insights into the Internet, Social Media, Mobile, and E-Commerce Use Around the World" published on January 30, 2018, out of Indonesia's total population of 265.4 million, the active social media users reach 130 million with penetration of 49 %. As many as 120 million Indonesians use mobile devices, such as smartphones or tablets to access social media, with a penetration of 45 percent. Within a week, online activity on social media via smartphones reached 37 percent.

The increasing use of the internet and social media creates the needs, wants, and demands of people very quickly. We Are Social said that YouTube occupies the first position with a percentage of 43 percent, then Facebook, WhatsApp, and Instagram followers in the second to fourth positions in a row. In addition, 41 percent of Indonesian social media users said they often use Facebook, 40 percent often use WhatsApp, and 38 percent said they often access Instagram. While users who claim to frequently access Line are 33 percent, placing them in the fifth position. Globally, the total number of Internet users exceeds four billion users. For social media users, up 13 percent with year-on-year users reaching 3.196 billion.

Based on the data above, MSMEs assisted by the Bandung Chamber of Commerce and Industry have to create marketing strategies that are effective and right on target to make people aware of their existence. Marketing strategy is a channel that enables an organization to formulate specific sources in order to increase sales, have competitive advantages, and deliver value to consumers and stakeholders. The marketing strategy must be determined carefully so that the set of segmentation and targets can be fulfilled. With the background of small and medium entrepreneurs who have limited capital, digital media can be used as an effective and efficient marketing tool. Currently, the digital is running in real-time, so it is an effective time for building consumer awareness and increasing sales.

The internet provides all unlimited information with minimal expenditure (Setyowardhani, Susanti, & Riyanto, 2019). So that we can use the internet usefully and maximally. The social media platforms such as Facebook, YouTube, WhatsApp, Twitter, Instagram, line, and so on are not only used for communication and friendship but can be widely used for business purposes. Thus, social media is a marketing channel to develop business communication to make it runs effectively and efficiently. This business communication is a communication activity achieved by conveying messages to customers (Megawati., Nurhingwahyu, & Krisdianto, 2019). Media plays an important role in developing business communication. Business communication in conveying messages can be done both verbally and non-verbally (Megawati, et al., 2019).

There are a number of problems faced by partners (in this case the MSMEs assisted by the Bandung City Chamber of Commerce and Industry) which have been compiled by mapping partners' marketing strategies during the pandemic and after that have been undertaken. The first problem is product management related to packaging and branding, the second problem is limited capital for promotion, and the third problem is limited knowledge to manage risk management and product quality and make social media a subject to increase interest. In general, social media offers many advantages and opportunities for the industry to attract new customers and maintain relationships with existing customers (Kho, 2008; Siamangka et al., 2015). Social media can also increase collaboration with customers and create innovation (Wang et al., 2016).

Therefore, from these three problems, this community service was made to help partners overcome the problems they faced. This activity is a routine activity every semester so that the courses taught can be implemented in a real way through Community Service (abdimas). It is expected that

with this community service, partners can apply the gained knowledge to help partners in increasing their competitiveness in welcoming the industrial revolution 4.0.

Research conducted on Product Quality, Packaging, and Brands on Customer Satisfaction states that brands can be added value to the product itself, because if the product has a good brand image, it can attract consumers to visit or return to buy the product itself (Pesoth, 2015).

The brand will not significantly affect customer satisfaction, but a good brand image can influence or increase customer purchase intention (Fianto et al., 2016; Yuvita, 2021). In addition, packaging has a significant influence on customer satisfaction (Antari & Wulandari, 2019). It means that an increase or decrease in packaging will greatly affect the increase or decrease in customer satisfaction. Because of good packaging can provide its own satisfaction to customers, it's due to the better the product packaging comes the better the quality product.

Other research was also conducted in a paper entitled Marketing Strategies through Instagram Social Media stating that there was an increase in sales using Instagram because of their powerful way to promote products and services through internet marketing (Untari & Marketing with social media and Strengthening Identity Through Packaging Branding Fajariana, 2018). Although the using method is simple, it has an extraordinary effect.

Based on an analysis of partners' conditions and problems faced by partners, the abdimas team focuses on helping partners use social media to expand their market share, create brands or business logos as branding in strengthening business identity which will be implemented in product packaging, improve product quality, and carry out financial analysis as a monitoring business with the implementation of risk management.

Research Method

There are stages of implementing community service activities carried out by the team, namely: 1) Surveys and Interviews. The team conducted a survey of several assisted MSMEs to find out the symptoms of problems that tended to occur, then from several potential partners who had been surveyed, an interview was carried out to select which partner was most suitable to raise the theme of the existing problems; 2) Dissemination of community service activities. UMKM assisted by KADIN in Bandung city (partners) has a large and varied number of businesses, and there are several partners who are interested in training participating but have not had time to interview, so the community service team conducts outreach first; 3) Training. The training activities carried out by the abdimas team consist of several interaction segments, namely: Presentation, the abdimas team conducted a presentation on packaging, branding, product quality, and scientific and theoretical risk management so that it can be implemented in real terms in the 4.0 industrial revolution environment. Mentoring; the interaction of questions and answers and the use of applications carried out by the community service team (students and lecturers) with partners are carried out one by one, meaning that team members interact directly with partners consisting of several groups according to their classification. Evaluation and Monitoring; the abdimas team evaluates and monitors partners from what has been described regarding the implementation of the application.

Results & Discussion

There are 15 MSMEs assisted by KADIN in Bandung who took part in this community service activity. The MSMEs are engaged in the culinary, service, and handicraft sectors. With this community service, partners are able to increase product competitiveness in terms of product quality and packaging. This training is assisted by students in providing intensive training for the use of social media. Presentations by the team of lecturers provided additional insight to businesses regarding packaging, branding, product quality, and risk management as well as additional information for creative content, as well as an introduction to customer characteristics and behavior. The students

also presented the results of social media management and its effectiveness; for the insights could be seen on social media for KADIN-assisted MSME actors who had been given creative content training methods.

Increasing the ability of SME business actors will have a major impact on the national economy, based on its large number and involving a large number of residents (Syarif et al, 2022). Partners carry out risk management related to quality, packaging, and branding as well as carry out product promotions effectively and efficiently due to limited promotion costs. In addition, the goal of this community service is to increase the ability of partner businesses to use social media and create creative content for increasing the public knowledge of products and increasing sales. Several things have been done are: (1) partners are given guidelines modules for using social media including Instagram, Facebook, Blogspot, YouTube, and Twitter, (2) partners get accounts on several social media along with some content to use as promotional media, and (3) partners receive training/mentoring to use social media and create promotional content.

Conclusions

The implementation of this community service activity has been going quite well because of the collaboration between implementers, namely lecturers and students and supported by the involvement of partners. In general, packaging, branding, product quality, risk management, and additional creative content, as well as the introduction of customer characteristics and behavior offer many advantages and opportunities for the industry to attract new customers and maintain relationships with existing customers (Kho, 2008; Siamangka et al., 2018). Social media can also increase collaboration with customers and create innovation (Wang et al., 2016). The goals carried out by this community service team appear to have been realized, one of them is the rising from post-pandemic conditions. By providing training through creative social media content, it seems that the knowledge of the social media account holders has started to increase so that they are motivated to continue to be creative. Through knowledge of risk management, actors can be more careful in managing their marketing. With increased insight, the purpose of product branding begins to expand.

Thus, the service team has suggestions that mentoring activities like this will be better if carried out continuously and periodically so that partners are able to run their businesses actively and independently.

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