Strengthening the Performance of Micro, Small, and Medium Enterprises (MSMEs) Through Social Media Adoption with Human Resource Competency as Moderation and Implementation of The Penta Helix Model in Facing New Normal Challenges in Jember Regency

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Abstract
The Covid-19 pandemic has had a negative impact on MSMEs, and has encouraged MSMEs to be more creative in trying to maintain and develop their business during the pandemic, especially through the adoption of social media for marketing activities. However, the competence of HR in MSMEs is still an obstacle to the process of adopting social media. The aims of this study were (1) to analyze the role of HR competence in moderating social media adoption on MSME performance, and (2) to analyze the implementation of the pentahelix model in strengthening MSME performance through the role of social media adoption and HR competence in facing the new normal challenges in Jember Regency. The research method used is mixed method research, which combines both quantitative and qualitative research approaches. The sample of this research is 100 SMEs. Quantitative data analysis was carried out using the PLS SEM technique. Qualitative data analysis was carried out with FGDs with stakeholders such as the government represented by the Jember District Office of Cooperatives and MSMEs, the media, the MSME community, academics, and business people. The results of the verification analysis using the SEM analysis technique show that technology has a significant effect on the performance of MSMEs in Jember Regency. Meanwhile, organizational, and environmental variables did not have a significant effect on the performance of MSMEs in Jember Regency. HR competence has a significant effect on the performance of MSMEs in Jember Regency. HR competence does not moderate the effect of technology on the performance of MSMEs in Jember Regency. HR competence does not moderate organizational influence on MSME performance in Jember Regency. HR competence does not moderate the influence of the environment on the performance of MSMEs in Jember Regency. To strengthen the performance of MSMEs through the adoption of social media, all stakeholders have an important role, where the government becomes a facilitator in conducting training and mentoring. With the involvement of academics to conduct research so that market segmentation is more appropriate for marketing through social media. Then businesspeople who have been involved in digital marketing play a role in transferring knowledge, and the role of the media is to strengthen marketing carried out by MSMEs through social media.

Keywords: Social Media, MSMEs Performance, Pentahelix.

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Introduction

Throughout Indonesia's history, Small and Medium Enterprises (SMEs) have been instrumental in effectively stimulating the economy, even amidst the monetary crisis of 1997-1998. During this crisis period, it was solely the SME sector that maintained their business operations as usual. (Sarfiah et al., 2019). SMEs represent a pivotal cornerstone in the Indonesian economy. Currently, their numbers reach 64.2 million, contributing significantly to the GDP, accounting for 61.07%, or approximately 8,573.89 trillion Indonesian Rupiah. The contribution of MSMEs extends to their capability in absorbing 97% of the total existing workforce and being able to gather up to 60.4% of the total investments, signifying their substantial role in Indonesia's economic landscape. (Limanseto, 2021a). East Java Province itself stands as the second-largest province in terms of the number of Micro, Small, and Medium Enterprises (MSMEs) in Indonesia, following Central Java, with a count of 828,482 MSMEs. (BPS, 2022).

Several challenges are faced by MSMEs to ensure business growth. The pandemic has caused many MSMEs to struggle in repaying loans and meeting expenses such as electricity bills, gas, and employee salaries. Some of them even had to resort to employee layoffs. (Limanseto, 2021b). Other challenges experienced by MSMEs include difficulties in obtaining raw materials, funding, declining customer base, as well as hindered distribution and production processes. Due to the pandemic, the majority of MSMEs (82.9%) experienced negative impacts, while only a small portion (5.9%) experienced positive growth. (Katadata insight center, 2020).

The ongoing pandemic has also pushed MSMEs to work harder in running their businesses. With the availability of internet and communication technology, MSMEs are striving to utilize it to the fullest extent possible. Many MSMEs utilize the internet in various ways, including product marketing (60.2%), social media presence (57.8%), promoting goods/services (54.4%), seeking information for business development (44.7%), sourcing/ordering raw materials (35.9%), marketing products via marketplaces (34%), and sending emails or instant messages to customers (27.7%).

Jember Regency stands as one of the regencies with the highest number of MSMEs in East Java. However, the added value of MSMEs in Jember Regency is not the highest, amounting to only Rp 77.102 billion. This value is still below that of Malang City, Gresik, Pasuruan, Sidoarjo, and Surabaya City. This indicates that the significant potential of MSMEs in Jember Regency has yet to reach its optimal performance. (BPS, 2022).

The challenges in business development faced by MSMEs in Jember Regency are quite diverse. Based on a survey conducted by the Cooperative and SME Agency as well as the Central Statistics Agency (BPS) in 2020, issues related to capital, marketing, and human resources are the primary constraints experienced by MSMEs in general in East Java. Regarding marketing efforts, MSMEs predominantly focus their marketing activities locally (80%), followed by regionally (18%), and exporting (2%). In other words, despite the utilization of the internet in their business activities, particularly through social media, the performance of MSMEs in Jember Regency has not yet reached its optimal level. This is also related to human resource competency, where knowledge, skills, and abilities play a crucial role in the effectiveness of adopting social media for marketing purposes. Several studies indicate that the ability to operate social media marketing alone may not be sufficient to achieve optimal business performance. Therefore, it requires a deeper understanding, skills, and abilities to effectively utilize social media platforms (Akramiah et al., 2021; Susanto et al., 2021 ; Nurani et al., 2021; Rahmiiaji, 2020).

This is also related to the adoption of social media predominantly undertaken by MSME groups with ages above 40 years. Survei yang dilakukan Dinas Koperasi dan MSMEs Jawa Timur menunjukkan bahwa sebagian besar MSMEs adalah berusia rata-rata 40 tahun/generasi X (59,4%), 30 tahun/generasi Y/milenial (21,9%), 50 tahun/generasi baby boomer (16,4%), dan usia 20 tahun/generasi Z (2,19%). Berdasarkan beberapa penelitian, generasi X cenderung harus berupaya lebih untuk dapat beradaptasi dengan teknologi informasi dalam melakukan pemasaran digital dibandingkan dengan generasi Y dan generasi Z yang cenderung lebih dapat beradaptasi dengan teknologi tersebut dalam pemasaran (Brahmana et al., 2022; Sari, 2021; Septira et al., 2022).

Based on this phenomenon, the research will develop a Model for Strengthening MSME Performance through Social Media Adoption with the Implementation of the Penta Helix Approach in Facing the Challenges of the New Normal.

Literature Review

Social Media Marketing

Social media serves as a platform for consumers to share text, images, audio, and video information with one another, as well as with companies, and vice versa (Siagian et al., 2020). Social media refers to online platforms where users interact and share content. It provides marketers with exceptional opportunities to reach consumers within their social communities and
establish more personalized relationships with them (Kelly et al., 2010). The Technology Organization Environment (TOE) framework is a conceptual framework based on the contexts of technology, organization, and environment. In brief, technology relates to both external and internal aspects of a particular company (Nguyen et al., 2022; Yulisetiarini et al., 2019).

**HR Competency**
Individuals with strong competencies tend to exhibit high levels of self-confidence and are typically capable of self-motivating to effectively undertake and complete their tasks. Human Resource Competency refers to the abilities and characteristics possessed by an individual, including knowledge, skills, and behavioral attitudes, necessary for the execution of their duties within their work environment. The level of competency needed enables one to determine the expected performance level for categories such as good or average. The determination of the threshold competency level needed serves as the basis for selection processes, succession planning, performance evaluation, and human resource development (Prasetyo et al., 2021). To cultivate optimal individual competencies in their respective fields, a comprehensive, measurable, and effective program is essential. This ensures that existing programs are sustainable and can proceed with a clear direction (Priatna et al., 2021).

**Business Performance**
Corporate performance is a concept used to measure the market performance of a product. Every company is interested in assessing the market performance of its products, as it reflects the success of its business in the competitive world. Additionally, corporate performance can be evaluated in two ways: internally and externally. It is a common factor used to measure the impact of a company's strategy. Company strategies are always aimed at achieving good performance, whether it be in terms of corporate performance or financial performance (Benková et al., 2020). Corporate performance is more objective and focused on the profitability and productivity of marketing decisions. To measure business performance, it is explained using three indicators: increased sales, increased profit, and satisfactory growth. Here's the explanation: 1. Increased sales can be measured based on business owners' assessment of the average sales levels over the past three years; 2. Increased profit: Profit or earnings measurement is evaluated based on the average profit level of the company over a certain period; 3. Satisfactory growth: This assesses how satisfied entrepreneurs are with the business growth during a specific period (Lina & Permatasari, 2020; Rizan & Utama, 2020).

**Pentahelix**
Model Pentahelix is based on five types of stakeholders, including academia, communities, business (economy), government, and media. This model is highly beneficial for regional stakeholder issues, where each stakeholder represents various interests of their respective regions. The Pentahelix model expands on the three-helix strategy by involving various elements of civil society or non-profit organizations to realize innovation. (Sudiana et al., 2020). There are several opinions regarding the five actors in the Pentahelix model. However, the Pentahelix model is better known by the concept or formulation ABCGM, which stands for Academician, Business, Community, Government, and Media (Susanti et al., 2021). The key to the success of this innovation lies in strong synergy and commitment among stakeholders in its implementation. The Pentahelix model is highly useful for managing actor-based complexity.

**Method**

**Location**
The research is conducted in Jember Regency by distributing questionnaires to MSMEs.

**Data Collection**
The population in this study consists of MSME players in Jember Regency who are part of MSME communities or groups in Jember Regency. The sample comprises a subset of the population that exhibits certain characteristics or conditions to be investigated (Sugiyono, 2013). The sampling technique employed in this research is purposive sampling. The sample size for this study is 100 respondents. The research informants consist of academics, government officials, community representatives, business owners, and media representatives.

**Methodology**
This study is a mixed method research, which involves combining two forms of research approaches: quantitative and qualitative. The mixed method research, or mixed-methods research, aims to obtain more comprehensive, valid, reliable, and objective data by combining these two research approaches (Tashakkori & Creswell, 2007). In this study, the researcher utilizes a sequential explanatory design. Sequential explanatory design is a combination research method that sequentially integrates quantitative and qualitative research methods. In this approach, the first stage of the research is conducted using quantitative methods, followed by a second stage using qualitative methods. (Sugiyono, 2013).

The analysis technique employed is Structural Equation Modeling (SEM) based on component or variance, commonly known as Partial Least Squares (PLS).
Structural Equation Modeling (SEM) analysis is a statistical technique used to test and validate the model of relationships among complex variables within a framework, taking into account the influence of latent and observed variables (Raykov & Marcoulides, 2012). Furthermore, analysis is conducted using qualitative techniques with source triangulation to deepen the findings of quantitative analysis.

Result and Discussion

Result

Convergent validity is a test of construct validity. An indicator is considered to have good validity if it has a loading factor value greater than 0.70. Based on the estimation results using the SmartPLS 3 application program, the model testing output is obtained as follows.

Based on the model testing results shown in Figure 1, it is obtained that all manifest variables have loading factor values greater than 0.70. Thus, the SEM-PLS model is considered to have good construct validity.

The evaluation of the inner model involves analyzing the results of the relationships between constructs. The inner model testing consists of R-square, f-square, Q-square predictive relevance, and hypothesis testing. From the analysis results, it is known that the R-Square for the variable MSMES Performance (Z) is 0.945, which means that technology, organization, and environment simultaneously affect MSMES performance by 94.5%, while the remaining 5.5% is influenced by other variables not examined in this study. Next, let's examine the f Square value. A f Square value of 0.02 indicates a small rating, an Effect Size of 0.15 indicates a medium rating, and an Effect Size of 0.35 indicates a large rating (Yamin & Kurniawan, 2011). Based on the testing results with SmartPLS 3, the obtained f Square results are as follows.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Effect Size</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technology (X1)</td>
<td>0.299</td>
<td>Moderate</td>
</tr>
<tr>
<td>Organization (X2)</td>
<td>0.002</td>
<td>Small</td>
</tr>
<tr>
<td>Environment (X3)</td>
<td>0.008</td>
<td>Small</td>
</tr>
<tr>
<td>HR Competency (Y)</td>
<td>0.241</td>
<td>Moderate</td>
</tr>
<tr>
<td>Technology * HR Competency</td>
<td>0.001</td>
<td>Small</td>
</tr>
<tr>
<td>Organization * HR Competency</td>
<td>0.011</td>
<td>Small</td>
</tr>
<tr>
<td>Environment * HR Competency</td>
<td>0.002</td>
<td>Small</td>
</tr>
</tbody>
</table>

Source: Data Process (2022)

The significance value (t-value)

Based on the test results, the obtained t-values are shown in Figure 2. Subsequently, the t-values are used to conduct hypothesis testing. The first research hypothesis states: “technology significantly influences the performance of MSMEs in Jember Regency”. The Original Sample (O) value of 0.597 indicates that the direction of influence from technology to the performance of MSMEs is positive or in the same direction, meaning that the better the use of technology, the better the performance of MSMEs. The influence of technology on the performance of MSMEs is significant, with a t-statistic value of 3.351, which is greater than the t-table value of 1.96. Additionally, the p-value of 0.001 is smaller than the alpha of 5% (0.05). Therefore, the null hypothesis (H0) is rejected, indicating that technology significantly influences the performance of MSMEs in Jember Regency.

The second research hypothesis states: “Organization significantly influences the performance of MSMEs in Jember Regency”. The Original Sample (O) value of
0.035 indicates that the direction of influence from organization to the performance of MSMEs is positive or in the same direction, meaning that the better the organization, the better the performance of MSMEs. However, the influence of organization on the performance of MSMEs is not significant, with a t-statistic value of 0.168, which is smaller than the t-table value of 1.96. Additionally, the p-value of 0.867 is greater than the alpha of 5% (0.05). Therefore, the null hypothesis (H0) is accepted, indicating that organization does not significantly influence the performance of MSMEs in Jember Regency.

The third research hypothesis states: “Environment significantly influences the performance of MSMEs in Jember Regency”. The Original Sample (O) value of -0.094 indicates that the direction of influence from the environment to the performance of MSMEs is negative or opposite, meaning that the better the environment, the lower the performance of MSMEs. However, the influence of the environment on the performance of MSMEs is not significant, with a t-statistic value of 0.465, which is smaller than the t-table value of 1.96. Additionally, the p-value of 0.642 is greater than the alpha of 5% (0.05). Therefore, the null hypothesis (H0) is accepted, indicating that the environment does not significantly influence the performance of MSMEs in Jember Regency.

The fourth research hypothesis states: “Human Resource Competency significantly influences the performance of MSMEs in Jember Regency”. The Original Sample (O) value of 0.460 indicates that the direction of influence from human resource competency to the performance of MSMEs is positive or in the same direction, meaning that the better the human resource competency, the better the performance of MSMEs. The influence of human resource competency on the performance of MSMEs is significant, with a t-statistic value of 3.900, which is greater than the t-table value of 1.96. Additionally, the p-value of 0.000 is smaller than the alpha of 5% (0.05). Therefore, the null hypothesis (H0) is rejected, indicating that human resource competency significantly influences the performance of MSMEs in Jember Regency.

The fifth research hypothesis states: “Human Resource Competency moderates the influence of technology on the performance of MSMEs in Jember Regency”. The Original Sample (O) value of 0.026 indicates that human resource competency weakens the influence of technology on the performance of MSMEs in Jember Regency. However, the moderating effect of human resource competency on the influence of technology on the performance of MSMEs is not significant, with a t-statistic value of 0.154, which is smaller than the t-table value of 1.96. Additionally, the p-value of 0.878 is greater than the alpha of 5% (0.05). Therefore, the null hypothesis (H0) is accepted, indicating that human resource competency does not moderate the influence of technology on the performance of MSMEs in Jember Regency.

The sixth research hypothesis states: “Human Resource Competency moderates the influence of organization on the performance of MSMEs in Jember Regency”. The Original Sample (O) value of -0.077 indicates that human resource competency weakens the influence of organization on the performance of MSMEs in Jember Regency. However, the moderating effect of human resource competency on the influence of organization on the performance of MSMEs is not significant, with a t-statistic value of 0.329, which is smaller than the t-table value of 1.96. Additionally, the p-value of 0.742 is greater than the alpha of 5% (0.05). Therefore, the null hypothesis (H0) is accepted, indicating that human resource competency does not moderate the influence of organization on the performance of MSMEs in Jember Regency.

The seventh research hypothesis states: “Human Resource Competency moderates the influence of environment on the performance of MSMEs in Jember Regency”. The Original Sample (O) value of 0.054 indicates that human resource competency strengthens the influence of environment on the performance of MSMEs in Jember Regency. However, the moderating effect of human resource competency on the influence of environment on the performance of MSMEs is not significant, with a t-statistic value of 0.278, which is smaller than the t-table value of 1.96. Additionally, the p-value of 0.781 is greater than the alpha of 5% (0.05). Therefore, the null hypothesis (H0) is accepted, indicating that human resource competency does not moderate the influence of environment on the performance of MSMEs in Jember Regency.

Discussion

The results of the analysis indicate that technology significantly influences the performance of MSMEs in Jember Regency, while organization and environment do not exhibit significant effects on MSME performance in the same region. Additionally, human resource competency significantly affects the performance of MSMEs in Jember Regency. However, human resource competency does not moderate the impact of technology, organization, or environment on MSME performance in the region. These findings are consistent with prior research, highlighting the pivotal roles of technology and human resource competency in enhancing MSME performance (Fakhreldin et al., 2020; Firdaus & Fahrizal, 2021; Wiyana et al., 2023)

In other words, the analysis results demonstrate that only technology and competency directly influence the performance of MSMEs in Jember Regency. However,
human resource competency does not moderate the impact of technology on MSME performance. This explains that the respondents are confident that the existing technology can enhance the performance of MSMEs. Respondents also believe that their competencies can improve MSME performance. However, the presence of technology has not been optimally utilized by respondents with their existing competencies, thus failing to enhance MSME performance. Previous research findings indicate that constraints such as inadequate resources or access to adequate training can hinder the ability of human resources to optimize technology in business operations. These factors may cause technology not to have a significant impact on MSME performance, even when human resources have competency, because its utilization has not been fully optimized in their business context (Bashir & Venkatakrishnan, 2022; Sanusi & Roostika, 2023; Willian et al., 2021).

Based on the interview results with the respondents, including academics, government officials, entrepreneurs, community members, and media representatives, it is evident that they share the same view. They believe that the existing information technology holds significant potential for MSMEs to enhance their business capacity, including increasing sales volume and expanding the customer base they can reach. However, according to government officials, MSMEs in Jember Regency are now increasingly aware of the potential of marketing through social media. This sentiment is echoed by business owners who often observe MSME products being promoted on social media platforms. However, concerning the utilization of social media, according to the perspective of the media, particularly celebrity endorsers, it is explained that not many MSME players understand how to advertise on social media. The role of celebrity endorsers is crucial in influencing consumer perceptions of a product or brand. The presence of celebrities can enhance brand image, attract consumer attention, and increase trust in the product (Ahmad et al., 2019; Chan et al., 2021).

This occurs, according to academics, due to the limited knowledge among MSMEs practitioners regarding how to make contacts and operate promotions on social media. Furthermore, MSMEs still lack confidence that promoting on social media can effectively impact their business performance. Successful entrepreneurs who have utilized social media explain that the MSME market is now reachable through social media, with many platforms available. As a result, sales and customer numbers can increase, extending beyond regional boundaries around Jember or East Java, and even encompassing sales in other areas and even overseas. This is especially true for Jember, given its strategic location near Bali, which serves as the international gateway to Indonesia. Regarding the ability to pay or allocate funds for promotions, business owners explain that they have sufficient financial capacity, especially when it comes to conducting promotions on social media platforms. However, the challenge faced revolves around the absence of sufficient understanding to execute promotional activities. As per insights from media and business figures, within the realm of digital marketing, two prevalent approaches to promotion include celebrity endorsements on social media and leveraging paid promotional functionalities offered across all social media channels. Previous research also elucidates that paid promotions on social media have the potential to enhance exposure and purchase conversions (Chawla & Chodak, 2021; Jarrar et al., 2020). However, according
to academics, this poses a challenge for business owners due to payment methods that utilize digital payment tools such as debit transfers or credit cards.

Thus, it can be understood that SMEs have a good understanding that social media can be used to market and grow their business, but they lack adequate skills to leverage it. On the other hand, SMEs have the financial capability to market their products on social media. Therefore, in the formation of the Model Strengthening MSMES Performance Through Social Media Adoption with Human Resource Competence as Moderation and Implementation of Penta Helix in Facing the Challenges of the New Normal in Jember Regency, each stakeholder has an important role for the interests of SMEs. The government, as a policy maker, can act as a mediator between SMEs and stakeholders to facilitate increased utilization of social media for SMEs (Wulandari et al., 2020). This can be achieved by organizing regular training sessions. Academics can play a role in assisting SMEs so that target markets through social media marketing can be more accurate, through market research assistance, thereby creating appropriate marketing strategies (Bruce et al., 2023).

The role of successful entrepreneurs who have run their businesses through social media is to act as mentors for other SMEs, to leverage the knowledge and experience they have gained in operating businesses through social media. This includes technical aspects of marketing methods on various social media platforms, as well as payment methods on social media, which have been challenges for SMEs. For the media, specifically celebrity endorsers, they play a crucial role in strengthening promotions for SMEs. With collaboration from all stakeholders, facilitated by the government, SMEs can create opportunities to enhance their business performance through the adoption of social media. Social media adoption is essential for SMEs as it opens up extensive marketing opportunities, enhances visibility, connects with customers, and expands market reach (Kumar & Nanda, 2023; Sinha & Fukey, 2021).

**Conclusion and Implication**

Based on the discussion results, it can be concluded that:
(1) Technology significantly influences SME performance in Jember Regency, while organization and environment do not. Human resource competence significantly affects SME performance, but it does not moderate the influence of technology, organization, or environment on SME performance there. (2) All stakeholders play important roles, with the government acting as a facilitator for training and mentoring, involvement of academia in conducting research for more accurate market segmentation for social media marketing, business owners who have been involved in digital marketing transferring knowledge, and the media strengthening the marketing efforts conducted by SMEs through social media.

**Bibliography**


