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### Adaptability Resonance Exploitation for Enhancing Firm Performance

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#### ABSTRACT

The literature on social media has been widely disseminated, utilizing a variety of metrics and techniques. This paper aims to examine a novel conceptual model that can help close a gap in the research on social media to improve business performance. The SEM testing method analyses cross-sectional data from 150 Magellan business owners in Magellan, Central Java. It is hoped that adaptability of resonance exploitation can act as a mediator between the effects of social media and market driving on performance, thereby contributing theoretical and practical contributions to the literature in marketing management science and assisting SMEs in formulating strategies to improve company performance through the development of new concepts focused on the exploitation of adaptability's resonance. This study discovered that market driving and the use of social media had a substantial favorable effect on Adaptability Resonance Exploitation. Additionally, a strong positive correlation exists between Market Driving, social media, and Resonance Adaptability Exploitation and Company Performance.

Keywords: market driving, social media, firm performance, adaptability resonance.

### 1. INTRODUCTION

The company's adaptability is increasing due to the help of social media technologies (Ye, Yu, Zheng, & Zheng, 2022). The existence and reputation of a business and business performance can be affected by the phenomena of social media in its function of creating, modifying, and sharing information based on web-based materials in company and product discussions (Foltean, Trif, & Tule, 2018). While the extensive use of ICT combined with powerful processing methods affects the company's competitiveness worldwide (Zu, Diao, & Meng, 2019), the use of social media in the business of SMEs and SMEs should be proportionate. With the requirements of managing MSMEs (Zu et al., 2019). The intensive use of communication and information technology in everyday life and the growth of information and communication media in the workplace affect the performance of specific task characteristics. The growth and development of telecommunications and information technology have significantly impacted various business sectors, including small and medium-sized enterprises (SMEs) (Annisa & Mahendrawathi, 2019). The research was conducted on social media and applied in business using a variety of research methods and findings, including: (Zu, Diao, & Meng, 2019), which concluded that the use of social media could help increase company performance; (Hashash, Zaid, Mokdiya, 2019), who concluded that the use of media

and communication has a detrimental effect on performance. and (Bank, Yazar, and My Travel, 2019), which ended with the adoption of the disparities between the research findings and the events observed, it becomes an essential motive for the researchers to highlight this topic as an interesting topic for discussion in this study. By applying the resource advantage theory of competition to the management of MSMEs, the authors demonstrate how adapting to exploitation may enhance MSME performance and fill in the gaps in previous research findings. As a result, the research question is, "Can this new idea serve as a model for the latest theoretical and practical approaches to bridging research gaps on the impact of social media on business performance. In addition, this research was conducted to ascertain the relationship between social media use and resilience exploit resonance, the impact of the preexisting relationship between resource adaptability exploitation and market leadership, and the relationship between market leadership and company performance.

# 2. LITERATURE REVIEW AND HYPOTHESIS

### 2.1 The Effects of social media, Market Forces, And Competition on Firm Performance

The improvement of business performance through social media occurs because social media is a popular

form of media, both private and public. Indeed, it's capable of increasing engagement to establish a positive relationship, acquire new customers, and manage existing customers, as well as interact and share knowledge, information, and innovation, as well as services and proper marketing, to improve business performance (Song, Wang, Chen, Benitez, & Hu, 2019). Due to the spontaneous, collaborative, agile, adaptable, unstructured, communicative, and informal nature of social media, its use enables businesses and individuals to participate in the fundamental trend of activities and enjoyment (Lacka & Chong, 2016). Additionally, performance improvement can be accomplished by using social media tools and web-based technologies to acquire knowledge for the development of new performanceenhancing products. Facebook, Instagram, Twitter, and LinkedIn are social media platforms that demonstrate advanced information technology by enabling users to engage with one another and convert real-world social interactions into virtual social interactions (Zu et al., 2019). Thus, the first hypothesis (H1) is as follows:

H1: social media has a significant impact on business performance

The reference point for determining the company's performance is the organization's absolute performance, in contrast to the opinions of strategists, who are more prone to focus on the company's relative performance against competitors (Yin, Wang, & Lu, 2019). Efficiency and effectiveness are frequently utilized as the cornerstones of the corporate performance concept. The term "company performance" refers to the ultimate goal of a business, which includes survival and financial efficiency measures such as revenue, company net margins, return on investment, and profitability, as well as effectiveness. Technological advancements make communication with friends, colleagues, family members, and employers faster and more efficient. This is evident in the Arab countries known for oil, as evidenced by the rapid adoption of social media platforms and the revolution in communication and information technology by computers (Alharethi, 2020). According to research conducted by (Lee & Lee 2020), social media technologies within a business affect performance. The same findings were discovered in a study by (Paniagua, Rivelles, & Sapena, 2019), which concluded that social media implementation affects operating income. Utilizing customer segment involvement learning in marketdriven marketing innovations and market-driven marketing innovations can help reduce cash flow volatility by promoting the stability of market-driven operations development and market exploitative engagement learning in cost-saving customer segments (Tang, Zhang, & Peng, 2021). Establishing new and distinct company ecosystems is a critical component of the market-moving value proposition (Jaworski, Kohli, & Sarin, 2020). Companies can produce market driving by making, moving, and educating the market via a product.Customer value is a technique used by market-driven firms to achieve long-term competitive advantage. Individual businesses or groupings by comparable companies with the same mission determination might push a company's foundation (Jaworski et al., 2020). According to a study by (Tang et al., 2021), marketdriven marketing linked to value creation efficacy is more capable of significantly influencing corporate value than market-driven marketing strategies. They are supported by research findings from (Beverland, Ewing, & Jekanyika Matanda, 2006), which indicate that the success of business management is more visible in companies that employ market-driving strategies as opposed to those that are controlled and reliant on changing market conditions and situations. The importance of market driving in exploitation tactics has been demonstrated through the study conducted by (Chen, Li, & Evans, 2012), who discovered that market driving and market-driven interaction with entrepreneurial orientation, which can affect performance. The second hypothesis (H2) is as follows:

**H2**: Market forces have a significant impact on business performance.

## 2.2 Resonance Adaptability Exploitation and Social Media Influence

Advances in technology, such as computerization and internet improvements, force all business players to have the knowledge and adaptability to deploy applications to communicate with clients and create network expansion. The fact that various people use social media for different reasons does not change the fact that it is a credible source of information (Alharethi, 2020). Furthermore, the contemporary era's advent of technology and computerization is a dynamic and pervasive shift requiring a powerful and long-lasting adaptation step. The company's agility and reliability contribute to the strategy's success, as demonstrated by (Jing, Tan, Jiang, & Ma, 2021). Today's businesses must adapt to changing conditions to create optimal products (Yongliang, Hengli, & Deshuai, 2018). According to (Wang, Demerouti, & Le Blanc, 2017) research, a company's ability to adapt and be proactive inside the company provides an advantage in managing employee performance, creating transformational leadership and being used as a strategy to stimulate employee persistence. The company also benefits from the adaption plan when integrated into the sales strategy, and it receives information about various client complaints, conditions, and scenarios (Vaibhav & Sridhar, 2017). As well as the findings of the research (Sony & Mekoth, 2016) that staff adaptation can provide value to companies and consumers because it is part of an essential service component. Third hypothesis (3):

**H3**: social media has a significant impact on resonance adaptability

## 2.3 Exploiting Resonance Adaptability in Firms

The company's agility and reliability contribute to the strategy's success, as demonstrated by (Jing et al., 2021). Today's businesses must adapt to changing situations to create superior products (Yongliang et al., 2018). Also, the company's ability to adapt and be proactive internally, such as employees, provides an advantage in managing employee performance, creating transformational leadership and being used as a strategy to stimulate employee persistence, according to research results from (Wang et al., 2017). The company also benefits from the adaption plan when integrated into the sales strategy, and it receives information about various client complaints, conditions, and scenarios (Vaibhav & Sridhar, 2017). As well as the findings of the research (Sony &

Mekoth, 2016) that the adaptation put into personnel who provide consumer services can create additional advantages for companies and consumers. The fourth is:

- **H4:** Firm performance is affected by resonance adaptability.
- o **H5:** Market-driven resonance adaptability exploitation

### **3. RESEARCH METHOD**

To obtain indirect, the total effect, the probability values, and the standard error, the SEM approach was used t. Indeed, the PLS analysis tool is integrated to examine the relationship between social media, market leadership, and resonance adaptability as a mediating variable on company performance. The study population is SMEs in Magellan, Central Java, with a sample size of 150 SMEs.

### 4. RESULTS

Fitting model results were produced because the values from AVIF and AFVIF are 2.960 and 4.589, respectively, which are less than 5.0, indicating that the results are free from multiple linearities in the exogenous variables and their indices. With a GoF value of 0.905, this study model is known for its predictive capabilities, as the model's prediction inference is quite huge given the number 0.36 (**Table 1**).

	MD	SM	RAE	FP	
Full collinearity	3.216	4.365	4.889	5.883	
R square			0.798	0.836	

Table 1. The VIF Full Collinearity, Squared Of R and Adjusted Squared Test Of R

Table 1 demonstrates the excellent research model with a thumb standardization number of 5.0, indicating that the model in this study is free of vertical bias, lateral collinearity, and the typical technique. Following that, the R squared test on the Resonance Adaptability Exploitation variable reveals a value of 0.798, indicating that the Market Driving and Social Media variables have a combined effect of 79.8 % (**Table 2**). In comparison, the remaining 20.2 % is influenced by variables not included in this study. Adjusted R squared on the impact of Market Driving, social media, and Resonance Adaptability Exploitation variables on Company Performance is 0.836 or 83.6 %, leaving 16.4% for identifying additional variables not included in this research model. The structural model evaluation in this study is classified as safe, as the adjusted R squared value is 0.836, which is greater than 0.25.

Table 2.	Coefficient	of Path an	nd Results of	of P-Value
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Path	Coefficient	P-value
MD →RAE	0.500	<0.001***
$SM \rightarrow RAE$	0.475	< 0.001***
$MD \rightarrow FP$	0.217	0.003***
$SM \rightarrow FP$	0.503	<0.001***
$RAE \rightarrow FP$	0.268	<0.001***

MD →RAE	0.134	0.009***
→FP SM →RAE →FP	0.128	0.012***

Table 2 represents the result of the path coefficient model equation test. The P-value indicates a significant positive effect on RAE. This value is indicated by the MD coefficient (0.500). A probability value of 0.001 proves that the test for Hypothesis 1 is acceptable. Hypothesis test II shows that the SM variable has a positive and significant effect on RAE, as indicated by the RAE coefficient of 0. The same result was achieved, namely, that there is a positive and significant effect of the MD variable on the FP variable as evidenced by the coefficient 0.217 and the p-value 0.003, which indicates Support Hypothesis 3. The result obtained from the variable SM proves the efficiency of hypothesis H4. The pfactor -0.503 and the p-value 0.001 proved to be acceptable. Then, when the RAE variant was tested for FP, a coefficient of 0.268 and a p-value of 0.001 were obtained, supporting the fifth hypothesis. Regarding the obtained test results showing an indirect effect of 2 with two test pathways, it was determined that RAE could mediate the effects of MD and SM variables on FP, which means that this hypothesis is supported. The outcome of the comprehensive search model test is depicted in **Figure 1.** It summarizes the causal relationship between the variables, focusing on the MD and SM variables. The FP variable serves as the dependent variable by bridging the RAE variable and the FP variable.

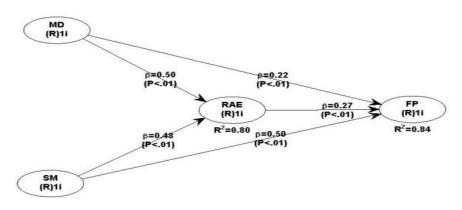


Fig. 1. WarpPLS 5.0 data processing results on the complete research model

### **5. CONCLUSION**

This paper applied resonance exploitation to investigate the role of social media and marketmoving strategies in enhancing company performance. According to the findings, the use of social media and market-moving methods of companies can increase the resonance of the company's adaptive capacity. The results obtained show that by using appropriate social media tools, such as expanding the company's response and strategy to become a market driver, the company's performance can be improved.

The practical implications of this research include:

- Providing alternative strategies for MSME companies to improve performance.
- Deepening the body of knowledge from the sizeable theoretical model of this research.

• Providing additional literature on the use of social media to improve company performance.

One limitation of the study is that it only included SME and SME actors in its research sample, which encourages future research into the use of social media in larger organizations with a broader operational scope. Furthermore, the narrow focus of the research component allows future research to compare results and expand scientific contributions—variables for analyzing the use of social media in improving organizational performance.

#### REFERENCES

1. Ahmad, N. S., Musa, R., & Harun, M. H. M. (2016). The Impact of Social Media Content Marketing (SMCM) towards Brand Health. Procedia Economics and Finance, 37, 331-336. doi: 10.1016/s2212-5671(16)30133-2

- 2.Alharethi, M. (2020). Is Social Media a Reliable Source for Information? An Examination of Social Media Use among Saudi Journalist. Arkansas State University.
- 3.Bai, L., Yan, X., & Yu, G. (2019). Impact of CEO media appearance on corporate performance in social media. The North American Journal of Economics and Finance, 50, 100996.
- 4.Barger, V., Peltier, J. W., & Schultz, D. E. (2016). Social media and consumer engagement: a review and research agenda. Journal of Research in Interactive Marketing, 10(4), 268-287. doi: 10.1108/JRIM-06-2016-0065
- 5.Beverland, M. B., Ewing, M. T., & Jekanyika Matanda, M. (2006). Driving-market or marketdriven? A case study analysis of the new product development practices of Chinese business-tobusiness firms. Industrial Marketing Management, 35(3), 383-393. doi: 10.1016/j.indmarman.2005.02.008
- 6.Charoensukmongkol, P., & Sasatanun, P. (2017). Social media use for CRM and business performance satisfaction: The moderating roles of social skills and social media sales intensity. Asia Pacific Management Review, 22(1), 25-34. doi: 10.1016/j.apmrv.2016.10.005
- 7.Chen, Y.-C., Li, P.-C., & Evans, K. R. (2012). Effects of interaction and entrepreneurial orientation on organizational performance: Insights into market driven and market driving. Industrial Marketing Management, 41(6), 1019-1034.
- 8.de Zubielqui, G. C., Fryges, H., & Jones, J. (2019). Social media, open innovation & HRM: Implications for performance. Technological Forecasting and Social Change, 144, 334-347.
- 9.Dimitrios, K., & Evangelos, P. (2015). The impact of innovation capability on the performance of manufacturing companies: The Greek case. Journal of Manufacturing Technology Management, 26(1), 104-130. doi: 10.1108/JMTM-12-2012-0117
- Foltean, F. S., Trif, S. M., & Tuleu, D. L. (2018). Customer relationship management capabilities and social media technology use: Consequences on firm performance. Journal of Business Research. doi: 10.1016/j.jbusres.2018.10.047
- 11. GALVAN, S. (2016). Social Media Use in Purchasing Behavior of Professional Hispanic Women. (DBA), Northcentral University.
- 12. Jaworski, B. J., Kohli, A. K., & Sarin, S. (2020). Driving markets: A typology and a seven-step approach. Industrial Marketing Management, 91, 142-151. doi: 10.1016/j.indmarman.2020.08.018
- Jing, L., Tan, B., Jiang, S., & Ma, J. (2021). Additive manufacturing industrial adaptability analysis using fuzzy Bayesian Network. Computers & Industrial Engineering, 155, 107216. doi: 10.1016/j.cie.2021.107216
- Kiráľová, A., & Pavlíčeka, A. (2015). Development of Social Media Strategies in Tourism

Destination. Procedia - Social and Behavioral Sciences, 175, 358-366. doi: 10.1016/j.sbspro.2015.01.1211

- Lacka, E., & Chong, A. (2016). Usability perspective on social media sites' adoption in the B2B context. Industrial Marketing Management, 54, 80-91. doi: 10.1016/j.indmarman.2016.01.001
- Lee, S. Y., & Lee, S. W. (2020). Social Media Use and Job Performance in the Workplace: The Effects of Facebook and KakaoTalk Use on Job Performance in South Korea. Sustainability, 12(10), 4052. doi: 10.3390/su12104052
- Ogilvie, J., Agnihotri, R., Rapp, A., & Trainor, K. (2018). Social media technology use and salesperson performance: A two study examination of the role of salesperson behaviors, characteristics, and training. Industrial Marketing Management, 75, 55-65.
- Paniagua, Rivelles, & Sapena. (2019). Social Determinants of Success: Social Media, Corporate Governance and Revenue. Sustainability, 11(19), 5164. doi: 10.3390/su11195164
- Roggeveen, A. L., Nordfält, J., & Grewal, D. (2016). Do Digital Displays Enhance Sales? Role of Retail Format and Message Content. Journal of Retailing, 92, 10. doi: 10.1016/j.jretai.2015.08.001
- Shao, J., Li, X., Morrison, A. M., & Wu, B. (2016). Social media micro-film marketing by Chinese destinations: The case of Shaoxing. Tourism Management, 54, 439-451. doi: 10.1016/j.tourman.2015.12.013
- Siamagka, N.-T., Christodoulides, G., Michaelidou, N., & Valvi, A. (2015). Determinants of social media adoption by B2B organizations. Industrial Marketing Management, 51, 89-99. doi: 10.1016/j.indmarman.2015.05.005
- Song, Q., Wang, Y., Chen, Y., Benitez, J., & Hu, J. (2019). Impact of the usage of social media in the workplace on team and employee performance. Information & Management, 56(8), 103160.
- 23. Sony, M., & Mekoth, N. (2016). The relationship between emotional intelligence, frontline employee adaptability, job satisfaction and job performance. Journal of Retailing and Consumer Services, 30, 20-32. doi: 10.1016/j.jretconser.2015.12.003
- 24. Tang, T., Zhang, S., & Peng, J. (2021). The value of marketing innovation: Market-driven versus market-driving. Journal of Business Research, 126, 88-98. doi: 10.1016/j.jbusres.2020.12.067
- 25. Vaibhav, C., & Sridhar, G. (2017). Salesperson's spirituality: impact on customer orientation and adaptability. Marketing Intelligence & Planning, 35(3), 408-424. doi: 10.1108/MIP-06-2016-0087
- Wang, H.-J., Demerouti, E., & Le Blanc, P. (2017). Transformational leadership, adaptability, and job crafting: The moderating role of organizational identification. Journal of Vocational Behavior, 100, 185-195. doi: 10.1016/j.jvb.2017.03.009
- 27. Yin, Y., Wang, Y., & Lu, Y. (2019). Why firms adopt empowerment practices and how such practices affect firm performance? A transaction cost-exchange

perspective. Human Resource Management Review, 29(1), 111-124. doi: 10.1016/j.hrmr.2018.01.002

- Yongliang, C., Hengli, L., & Deshuai, L. (2018). Optimal configuration design of open architecture products considering product adaptability and diversity of modules. Procedia CIRP, 76, 73-78.
- 29. Zu, X., Diao, X., & Meng, Z. (2019). The impact of social media input intensity on firm performance: Evidence from Sina Weibo. Physica A: Statistical Mechanics and its Applications, 536, 122556.