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## Application of digital marketing in the capital market based on the theories of consumer behavior and technology adoption

**Abstract.** Digitalization is a prominent factor in the transformation of traditional business structures. The purpose of the current research is to evaluate the impact of digital marketing and market sensing capabilities on company performance in Indonesia. In this research, a conceptual framework based on the main variables of digital marketing was provided to explain the implementation of digital marketing in the capital market for stock brokerage companies in Indonesia and the factors affecting its skepticism. In this regard, a survey field study was conducted via questionnaires to a sample of 377 CEOs and vice presidents of brokerage companies. In order to determine the questionnaire reliability, Cronbach's alpha coefficient was measured and the values were more than 0.7, which indicates that the questionnaire has good reliability. Partial least squares approach and SmartPLS software were employed for data analysis. Based on the obtained results, consumer trust and technology adaptation have a significant effect on the attitude towards digital marketing. The results of fitting indicated that the model proposed in this research has good validity and fit.

**Keywords:** Digital Marketing; Technology Adoption; Consumer; Stock Value; Brokerage Companies; Consumer Behavior

**JEL Classifications:** E24; E41; E64; I18; J28; J31

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### 1. Introduction and Brief Literature Review

Currently, in the capital market society, with the existence of various companies and financial institutions, the issue of marketing is addressed in a traditional way and sometimes retaining old customers (Mehmood & Abbas, 2021; Ishenin et al., 2021). While there is a high potential in the virtual space of the capital market and attracting more and freer resources in this society, it is necessary to take advantage of a long-term strategy in implementing digital marketing and developing this field in various dimensions and creating a platform to encourage potential customers to actual, processing and fields of activity in this field to be provided (Zhang et al., 2023; Sharma, 2024). At present, not many studies have been conducted in this field and a comprehensive and practical model that is a tool for decision-making and policy-making and how to interact with commercial markets has not been presented. Therefore, carrying out research-applied projects in this field, the results of which can be a road map and a suitable model for explaining, identifying and evaluating important indicators and components of this category and choosing policies and making decisions for managers, is of special importance (Haque et al., 2023). One of the major problems and dilemmas that exist in the capital market is

dealing with the issue of investment with a short-term view and excitement, which can be considered as originating from the lack of transmission of sufficient information and effective awareness to the public, which could be due to active marketing by the financial institutions of the market will take a better shape, which unfortunately did not happen, and in recent years we have clearly seen its problems and challenges.

Another major problem is the correct financing for many companies and large projects in various industries, which can be done correctly and efficiently by improving the marketing performance in the capital market and companies active in the stock exchange (Haque et al., 2022; Krndžija & Pilav-Velic, 2022). Therefore, the need to deal with the correct and planned direction through the pillars and stock companies in the field of marketing and following that digital marketing that paves the way in many dimensions, can be an effective turning point to create a correct and efficient synergy and create a long-term strategy. Therefore, it is necessary for the financial institutions in the market and even the stock exchange to plan and be careful regarding the issue of marketing and its important components. Sometimes some companies confuse the exact meaning of marketing with advertising. Dealing with the important categories of marketing in the prestigious stock exchanges of the world, even the US Securities and Exchange Commission and many other countries have also taken into account and have considered very wide rules and guidelines for their funds and various capital instruments. On the other hand, we only launch investment tools such as different investment funds and formulate guidelines for them and supervise them.

Fareed & Tantawi (2022) conducted a research with the aim of investigating the impact of digitalization on transformation and the mediating impact of digital transformation on the incomes and small and medium company's models over the Corona epidemic. Their research can be applicable for policy makers, CEOs and practitioners to clarify how digitalization mediated by digital transformation influence on the results of companies. Su et al. (2023) investigated the role of business environment dynamics on competitive advantage and performance with digital orientation, digital capability and digital innovation. A quantitative approach has been used in this study. The results show that there is a positive and significant relationship between the dynamic environment with digital orientation and digital capability. Sima et al. (2020) conducted a research in digital marketing in small business, and their results of the analysis show that digital marketing has a positive and significant impact on performances, as well as digital orientation and marketing capabilities on marketing performance. Lorenzo-Romero et al. (2011) conducted a research entitled «Effects of digital marketing, entrepreneurial orientation and product innovation on competitive advantage and its effect on marketing performance in Kota Bogor city». The results showed that digital marketing, entrepreneurial orientation and product innovation had a small effect on marketing performance; But competitive advantage has a positive and significant effect on marketing performance.

In the present study, an attempt was made to investigate the effect of digital orientation on marketing performance in the capital market with the mediating role of digital marketing. In the model presented in this research, three variables are consumer trust, technology adaptation and value as three independent variables and digital marketing is the dependent variable. Based on this, the main research hypotheses are:

- **First hypothesis:** digital marketing has a significant impact on consumer trust;
- **Second hypothesis:** digital marketing has a significant impact on the adoption of technology;
- **Third hypothesis:** digital marketing has a significant impact on value.

## 2. Methodology

Examining the behavior of managers of brokers and financial institutions indicates that the use of online channels plays an effective role in obtaining information about the capital market and stocks of various companies in question, and this is engraved as a value in the mind of the customer (Abi & Arief, 2017; Hong et al., 2022; Ram et al., 2024). Other digital marketing tools reduce advertising costs for financial companies and thus increase the quality of services provided to customers. Responding to the customer full-time through digital channels as well as providing off-line services due to the great speed and saving in the customer's time, are other advantages that create a positive attitude towards digital marketing in the field of capital. According to the technology acceptance model, perceived ease is one of the key antecedents in accepting a new technology. Therefore, if the modules and programs designed for digital marketing are in such a way that stock brokers, managers and clients of financial institutions can easily use digital tools, then their attitude towards digital marketing will be better (Zhang et al., 2023). According to the theory

of planned behavior, attitude is one of the building blocks of behavioral tendencies; this issue is also exemplified in relation to the behavior of capital market users and shareholders regarding digital marketing, which means that creating a positive attitude about digital marketing increases the desire for such marketing methods.

In this section, due to necessity, it is mentioned to explain how to conduct the research. For this purpose, first the research method and the statistical population, then the sampling method, collection tools, and then the sampling method, the information collection tools, their validity, reliability and the methods of analysis and analysis of the obtained data will be examined. This research is a survey type, which examined the variable in the real conditions. The proposed technique of this article is descriptive-analytical. The tool used in this article is a questionnaire that was designed by a researcher. The statistical scope of the research is the managing directors of brokerage companies and their assistants and senior managers who have years of experience, knowledge and skills in various affairs in the field of diverse services in the brokerage industry. There are a total of 377 brokerage companies that are engaged in various investment activities. On average, between 4 and 6 senior managers in market affairs, including; they have transactions on the market line, commodity exchange manager, securities and stock affairs manager, research and development, market analysis and studies, supply and acceptance, marketing, risk management and customer affairs. To calculate the sample volume, a formula specific to structural equations is used.

The questionnaire consists of four components, whose reliability can be seen by Cronbach's alpha method in Table 1 and its validity has been accepted by experts, managers and university professors.

As it is clear from Table 1, the Cronbach's alpha value in each of the variables is higher than 0.7, which indicates the appropriate reliability of the research variables. The statistical sample and cases participated in this research are including CEOs, managers, experts, and professors of university with high experience in the capital market in Indonesia.

Table 1:  
Validity test with Cronbach's alpha

Variable	Question	Cronbach's alpha
Digital marketing	12	0.94
Consumer confidence	8	0.88
Adaptation of technology	7	0.81
Stock value	9	0.76

Source: Author's own research

### 3. Results

Before testing the hypotheses, based on the observed data and using structural equation model fitting, the research conceptual model was tested in Lisrel statistical software, and the parameters in the research conceptual model were estimated using the maximum likelihood method. In a structural model, the analysis of the structural relationship between the underlying variables (structures) is according to the covariance matrix, so in the first step, the covariance matrix was calculated and the results are shown in Table 2, as it can be seen that the correlations between the structures present in the structural model of the research (see Figure 1), they are significant at the 5% error level.

As shown in Figure 1, significant values and coefficients related to path coefficients and factor loadings between the studied variables are shown. According to the study of the investigated model, the values of the factor loadings should be more than 0.4 and also the significant coefficients should be more than 1.96 and be significant at the confidence level of 95%; Therefore, according to the above diagram, it is clear that all values of factor loadings are greater than 0.4 and significant at the 95% confidence level.

Table 2:  
Research eligibility criteria

Fit index	Digital marketing	Consumer confidence	Adaptation of technology	Stock value
Goodness of Fit Index	0.98	0.93	0.91	0.91
Root mean Square error	0.031	0.021	0.042	0.048
Root Mean Square Residual	0.031	0.039	0.039	0.041
Non-Normed Fit Index	0.96	0.92	0.91	0.92
Comparative Fit Index	0.99	0.97	0.96	0.94

Source: Author's own research

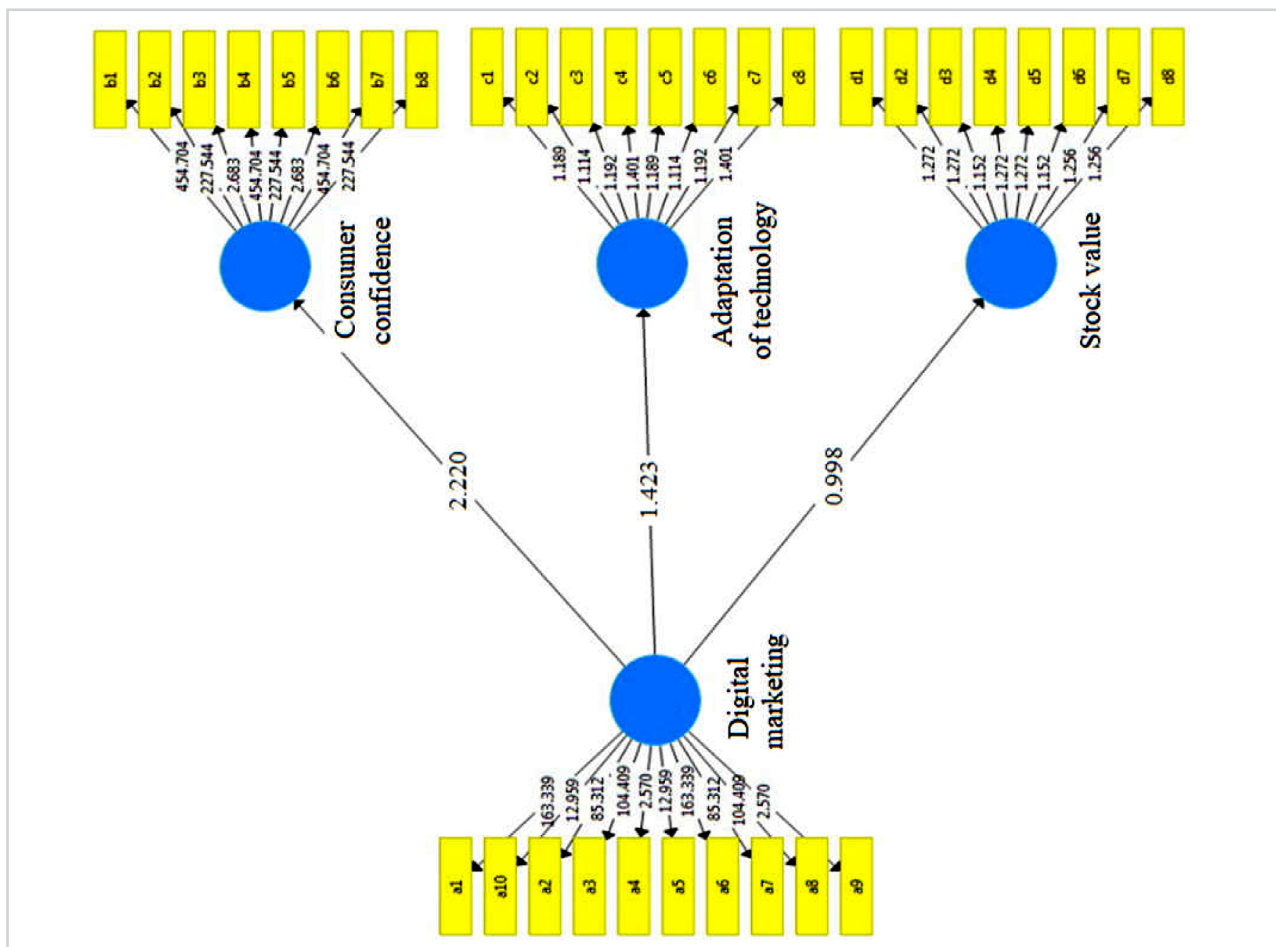


Figure 1:  
**Structural model results and path coefficients**  
Source: Author's own research

Checking the internal consistency of each structure (Table 3), According to the calculations and investigations, the goodness of fit value is equal to 0.818, which shows the very high fit of the investigated model.

After analyzing the data using PLS software and determining the coefficients of the path and the significant level, we will examine the hypothesis test. According to the obtained results in Table 4, the variable of consumer trust and technology adaptation has a significant level of less than 0.05, so it can be said that digital content marketing has an effect on consumer trust and technology adaptation in the capital market. In relation to the value variable, despite their high correlation with digital marketing, due to the lack of a suitable significant level, the third hypothesis of the research has not been confirmed.

Table 3:  
**Checking the reliability of the scale of the risk indicators questionnaire**

Variable	Question	Construct validity	Face validity	AVE	R-Square	GOF
Digital marketing	12	0.976	0.961	0.961	1	0.822
Consumer confidence	8	0.960	0.865	0.945	0.845	-
Adaptation of technology	7	0.941	0.893	0.894	0.841	-
Stock value	9	0.953	0.791	0.903	0.803	-

Source: Author's own research

Table 4:  
**Hypothesis test results**

Hypothesis	P-value	Results
H1: Digital Marketing » Consumer confidence	0.000	Confirmed
H2: Digital Marketing » Adaptation of technology	0.001	Confirmed
H1: Digital Marketing » Stock value	0.104	Rejected

Source: Author's own research

#### 4. Conclusion

Advanced technologies have mainly expanded the e-business process to create value. Innovative developments have changed the dynamics of market by offering new services and goods to the consumer. Promoting advanced marketing techniques (such as applications, software, and infrastructure) has changed marketing discipline in the presence of emerging technologies to leverage businesses around the world to meet the needs of the modern marketplace. The hypothesis test showed that digital marketing has a positive and direct impact on consumer trust and technology adaptation. This finding indicates that one of the factors that make users, both agencies and ordinary customers, have a positive view of digital marketing in the field of capital market is that they fully feel the benefits of this form of marketing.

According to the results obtained, it is suggested to the stock brokerage companies, which are the specific audience of this research, to create a platform in the field of digital marketing and create an attitude in the field of education (in various formats by the companies themselves) by setting up a training unit and provide educational packages that result in the emergence of appropriate behavioral tendencies, and in order to strengthen culture and financial literacy and customer participation and create various incentives, including the customer club, to plan and implement so that customers gain more knowledge about this field.

#### References

1. Abi, J., & Arief, M. T. S. (2017). Examining the Relationship between Transformational Leadership and Dynamic Capability to the Adoption of Digital Marketing in Consumer Shopping Good Firms. *International Journal of Economics & Management*, 11(S2), 467-504. <https://www.semanticscholar.org/paper/Examining-the-Relationship-between-Transformational-Abi-Arief/1a5e2ebdcccfae16660a2be39c104c83794c1ff20>
2. Mehmood, K., & Abbas, A. (2021). Understanding digital marketing adoption in India: integrated by technology acceptance model (TAM) and theory of planned behaviour (TPB) framework. *Journal of Management Sciences*, 8(2), 70-87. <http://hdl.handle.net/1854/LU-01HHF01DV7XDXWN6MQ7J8MJDNV>
3. Fareed, G., & Tantawi, P. (2022). Digital Marketing Adoption Framework for Small Businesses in Egypt: A Grounded Theory Approach. In Bilgin, M. H., Danis, H., Demir, E., & Zaremba, A. (Eds.), *Eurasian Business and Economics Perspectives* vol. 21, (pp. 251-268). Cham: Springer International Publishing. [https://doi.org/10.1007/978-3-030-94036-2\\_14](https://doi.org/10.1007/978-3-030-94036-2_14)
4. Haque, M. Z., Qian, A., Hoque, M. R., & Lucky, S. A. (2023). Virtual communities decision model (VCDM): An empirical validation in online social networks (OSNs) adoption among capital market investors. *Information Development*, 39(3), 439-479. <https://doi.org/10.1177/02666669221146466>
5. Haque, M. Z., Qian, A., Hoque, Md. R., & Lucky, S. A. (2022). A unified framework for exploring the determinants of online social networks (OSNs) on institutional investors' capital market investment decision. *Technology in Society*, 70, 102061. <https://doi.org/10.1016/j.techsoc.2022.102061>
6. Hong, J.-D., Mwakalonge, J., & Jeong, K.-Y. (2022). Design of disaster relief logistics network system by combining three data envelopment analysis-based methods. *International Journal of Industrial Engineering & Management (IJIEIM)*, 13(3), 172-185. <https://doi.org/10.24867/IJIEIM-2022-3-310>
7. Ishenin, D., Govorkov, S., Teslenko, I., Klykov, M., Kabanov, O., Lyalin, E., Mukhamedova, Z., & Shaposhnikov, A. (2021). An Algorithm for Computer-Aided Design of A Technological Process with Preset Manufacturability Parameters. *Procedia Environmental Science, Engineering and Management*, 8(4), 733-738. [http://procedia-esem.eu/pdf/issues/2021/no4/2\\_Ishenin\\_21.pdf](http://procedia-esem.eu/pdf/issues/2021/no4/2_Ishenin_21.pdf)
8. Krndžija, L., & Pilav-Velic, A. (2022). Innovative behavior of Small and Medium Enterprises: A comprehensive bibliometric analysis. *International Journal of Industrial Engineering and Management*, 13(3), 158-171. <https://doi.org/10.24867/IJIEIM-2022-3-309>
9. Lorenzo-Romero, C., Constantinides, E., & Alarcón-del-Amo, M. (2011). Consumer adoption of social networking sites: implications for theory and practice. *Journal of research in Interactive Marketing*, 5(2-3), 170-188. <https://doi.org/10.1108/17505931111187794>
10. Sharma, S. (2024). Understanding digital marketing adoption by start-up companies in India: through an integrated technology acceptance model and theory of planned behaviour framework. *International Journal of Business Information Systems*, 46(4), 435-459. <https://doi.org/10.1504/IJBIS.2024.141335>
11. Sima, V., Gheorghe, I. G., Subić, J., & Nancu, D. (2020). Influences of the industry 4.0 revolution on the human capital development and consumer behavior: A systematic review. *Sustainability*, 12(10), 4035. <https://doi.org/10.3390/su12104035>
12. Su, J., Zhang, Y., & Wu, X. (2023). How market pressures and organizational readiness drive digital marketing adoption strategies' evolution in small and medium enterprises. *Technological Forecasting and Social Change*, 193, 122655. <https://doi.org/10.1016/j.techfore.2023.122655>
13. Zhang, B., Ying, L., Khan, M. A., Ali, M., Barykin, S., & Jahanzeb, A. (2023). Sustainable digital marketing: Factors of adoption of m-technologies by older adults in the Chinese market. *Sustainability*, 15(3), 1972. <https://doi.org/10.3390/su15031972>

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