

## HOW DIGITAL BUSINESS INNOVATION MONITORING AND DIGITAL MARKETING OPERATIONAL EXCELLENCE CAN STIMULATE ORGANIZATIONAL PERFORMANCE

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### Abstract:

**Background:** The increasing development of digital technology and changes in the behavior of the younger generation of customers encourage companies to carry out Digital Transformation in order to improve company performance and survive in the face of competition. The purpose of this study is to determine the effect of Customer Experience Management on Marketing Performance mediated by Digital Business Innovation and Digital Operational Excellence in the ICT (Information and Communication Technology) industry in Indonesia. **Methods:** Using a quantitative approach, this research was conducted in two stages of study to fulfill the research objectives, namely exploratory and explanatory, which focused on companies operating in the Greater Jakarta area. A total of 132 samples were taken using proportionate stratified random sampling method in three groups of companies. **Results:** The results showed that Customer Experience Management formed by two indicators, namely virtual environment and service interaction, had no significant effect on improving marketing performance, which was formed by two indicators, namely financial performance and non-financial performance. Customer Experience Management has no significant effect on Marketing Performance through the mediation of Digital Business Innovation. Customer Experience Management has a significant effect on Marketing Performance through the mediation of Digital Operational Excellence. Digital Business Innovation has no significant effect in increasing Marketing Performance. Digital Operational Excellence have a significant effect in increasing Marketing Performance. **Conclusion and implications:** Based on the results analysis in the Information and Communication Technology industry in Indonesia, it can be concluded that Customer Experience Management, which is formed by two indicators, namely virtual environment and service interaction, does not have a significant effect in improving marketing performance. However, based on the results analysis, technology support is the most powerful item in shaping customer experience management variables, while user experience is the weakest item in shaping customer experience management. Moreover, while Customer Experience Management has no significant effect on Marketing Performance through the mediation of Digital Business Innovation, this study found that solutions are the most powerful item in shaping the Digital Business Innovation variable, while offering is the weakest item in forming the Digital Business Innovation variable. Customer Experience Management has a significant effect on Marketing Performance through the mediation of Digital Operational Excellence, operation leadership is the most powerful item in shaping the Digital Operational Excellence variable, while security is the weakest item in forming the digital operational excellence variable. Customer Experience Management has a significant effect in increasing Digital

Business Innovation and Digital Operational Excellence, and Customer retention is the most powerful item in shaping the Marketing Performance variable. The finding of this research can be used as consideration for managers and policy makers in public organizations to set the appropriate way to enhance Customer Experience Management and Marketing Performance, especially their roles in Digital Business Innovation and Digital Operational Excellence that are relevant and very much needed in today's world. **Limitations and Recommendations:** This study discusses the topic in specific industries, hence the used model in this study can be replicated, developed, or perhaps retested in different industries and sectors to strengthen generalization or deliver meaning divergence. Further research development can be carried out in other industries as well, so the condition of each variable for other types of industries can also be conducted effectively.

**Keywords:** Marketing Performance, Customer Experience Management, Digital Business Innovation, Digital Operational Excellence

## INTRODUCTION

The digital revolution in society and the advancement of marketing practices create tremendous challenges for companies, especially for Information and Communication Technology (ICT) service providers. They are faced with increasingly complex and rapidly changing market competition, which is beyond their control. Increasing digital business competition has caused many new players to reduce the market share of the ICT industry. These competitors take advantage of the latest technological innovations to provide free services with a different business model from ICT companies (Leeflang et al., 2014). Digital disruption is also changing consumer behaviour and purchasing decision-making patterns.

The phenomenon of change in this technological era is marked by the emergence of the evolution of the internet provided by companies that are not internet network providers or non-Internet Service Providers (ISP) called Over The Top (OTT) services. This OTT platform provider utilizes the network infrastructure built by telecommunication operators or often referred to as telcos or internet service providers, to provide value-added services with the attractiveness of free services. The OTT platform was formed as a push for changes in customer preferences, technology changes, and convenience that offers more customer experiences that are better than those offered by conventional services. (Nandhiasa dan Haryadi., 2016).

The main players in the ICT Industry are telecommunication operators such as Telkom Indonesia, Singtel, British Telecom (BT) as providers of telephone services, short messaging service (SMS) and 3G/4G/5G optical cable and mobile infrastructure, dealing with competitors OTT service providers who provide various services. digital content, search engines, social media and others. The various services provided by these OTT providers, such as WhatsApp and Facebook Messenger, have had a huge impact on the ICT sector, including a decrease in revenue from calls and SMS, which were originally the main sources of income for telecommunications operators, as shown in Figure 1. The decline in revenue due to competition poses a threat to the ICT industry. with large investments but revenue is dominated by OTT service providers.

The services provided by these OTT players also significantly increase internet traffic so that it has an impact increasing Capital Expenditure (CAPEX) investment for ICT players without being accompanied by a balanced increase in income. The telecommunications sector as part of the ICT industry has to deal with a business and technology environment that is constantly changing faster than most other industries over the last half century. Telco operators who have to spend large investments to provide ICT infrastructure, have problems related to declining service quality and therefore resulting in poor Customer Experience so that their market power is eroded by higher competition.

The poor and declining marketing performance was also marked by a decrease in revenue growth and also a decrease in Return on Invested Capex (ROIC) in 2009-2021 according to McKinsey. This is due to a significant increase in internet traffic which requires additional international bandwidth investments, without being followed by an equivalent increase in revenue which of course has an impact on decreasing profitability. Their market was replaced by competitors, namely OTT players with an increase in Earning Before Interest Tax Depreciation and Amortization (EBITDA) and many times profits. Low service satisfaction and customer loyalty have an impact on high customer churn rates in the ICT industry and are the drivers of declining revenues and profits. Due to intense competition and deep quarterly revenue contractions, the average churn rate in the telecommunications industry is around 1.9% per month, but can increase to 67% per year for prepaid services. (OmniSci., 2020).

Based on connection with the research problem that has been described, the question of this research is whether there is an influence of Customer Experience Management on Marketing Performance? Marketing Performance here can be grouped and measured by the following indicators and items:

- 1) Financial performance; which includes aspects of sales volume, profitability, Return on Investment (ROI) which tends to decline due to competition from the OTT industry and the development of new technology in the digital era.
- 2) Non-financial performance; which includes customer satisfaction, customer retention, customer loyalty, which tend to be not yet fully a priority for this industry and need to be optimized in changing digital transformation in the midst of changing competition.

Several previous studies have found a conflict between the influence of customer experience on performance that has been published in journals and dissertation research results. Some researchers look at this influence in various industries such as telecommunications companies, retail companies, manufacturing, ICT companies and financial services, at home and abroad.

One study stated that the impact of managing Customer Experience which has an effect on Marketing Performance is generally ignored by experts. According to (Mihardjo et al., 2019), customer experience orientation is not proven to affect transformational performance where co-creation elements are part of Marketing Performance. A futile co-creation effort if the Customer Experience orientation and organizational agility are still at the traditional stage. Economic outcomes that may be counterproductive for service providers following the

concept of co-creation include market performance that (Oertzen et al., 2018). Customer Experience measurement is measured for marketing results such as customer satisfaction and loyalty intentions but not directly for financial performance (Bennett dan Molisani., 2020). On previous studies have shown that customer experience management (Customer Experience Management or abbreviated CEM) which consists of three levels of CEM, namely pre, core, and post-service experience management has a positive effect on Marketing Performance. (Saad et al., 2010). Customer Experience is gradually becoming an important concern in marketing strategy as a new source to create competitive advantage. This creates a research gap to find out the true relationship between Customer Experience that can affect Marketing Performance.

Other studies fail to prove that customer experience has a significant effect on customer loyalty, through customer satisfaction. The topic of this research report is the influence of Customer Experience on Ciputra World Surabaya customer satisfaction and loyalty (Chandra., 2014). Customer satisfaction is felt to have a number of benefits, such as increasing customer loyalty, improving reputation, reducing price elasticity, lowering transaction costs in the future and increasing employee competence. Customer satisfaction is a mindset in which the needs, desires, and expectations of customers for a product or service have been met or exceeded, resulting in repeat purchases and loyalty.

Studies vary in defining Customer Experience (CX), variables and constructs, and performance measurement. Other journals have shown that CEM has an influence on both direct marketing and other performance such as supply chain and business performance. Previous studies suggest that CEM is positively related to financial performance; this effect increases with increasing market turbulence, intensity of competition, and technological turbulence. The appeal of CX appeals to practitioners, who argue that CX can improve financial performance through long-term customer loyalty. Therefore, the researchers chose Customer Experience Management as a determinant that affects Marketing Performance in this study compared to other determinants that influence it. Understanding the financial consequences of CEM is paramount, given the magnitude, and staggering growth of CEM spending. This level of customer experience management investment raises the question of whether it is worth it. One of the basic principles for implementing customer experience is to try to meet customer expectations (Klink et al., 2020).

Regarding the internal process of operating the production process, the previous journal discussed the important role of the supply chain and how to accommodate digital customer experience to improve supply chain performance. The supply chain has a central importance for every business activity. These activities play an important role in customer satisfaction which may have a significant effect on sustainable business results. In this competitive environment, companies are moving towards higher performance supply chain activities. Higher performance of supply chain activities depends on digitization. Therefore, digitization is one of the important elements of the supply chain. Study (Mihardjo et al., 2019) can also prove that Digital Customer Experience and electronic word of mouth play a positive role in promoting brand image. Where brand image is a statement of Marketing

Performance, brand image in this context has a positive role to promote supply chain image which has a positive effect on sustainable supply chain performance.

Other studies have shown that CX is an important contributor to business performance. This study defines CX and its direct impact on the market capitalization of US public companies. A strong customer experience is critical to business growth, but the company maintains a definition of CX that can be used to measure its impact on financial performance (Bennett dan Molisani., 2020).

The various previous studies mentioned above indicate that there is disagreement among researchers regarding the effect of CEM ion Marketing Performance. The effect of customer service management ion Marketing Performance was found to be inconsistent. The inconsistency in these findings provides a gap that this study will fill. This contradiction is of course also an opportunity for new topics for further research, especially for the ICT industry in Indonesia.

Previous research has more researched on the direct relationship of the effect of CEM with Marketing Performance or the influence between each mediating variable and Marketing Performance which still creates research gaps. In addition, previous research also shows the inconsistency of the mediating variable between the effect of CX on Marketing Performance.

Based on theoretical studies and empirical results as well as phenomena and problems that exist in the ICT Industry in Indonesia, it is proposed to develop a new model to cover gaps and strengthen previous research that to improve Marketing Performance in the Digital Transformation era it is not enough just to have Customer Experience Management variables but also need to be mediated by the variables of Business Innovation, Operational Excellence, and Value Co-Creation to see the effect of CEM ion Marketing Performance.

(Venkatraman et al., 2014) defines business innovation as "network actions within the company with complementary competencies to innovate with new business models that are intrinsically based on the function of information and technology". Including defining how the Digital Business Innovation ecosystem capability is as "the ability of a group of independent companies in an ecosystem to design and implement a coordinated process to continuously explore new avenues of business model innovation using information and technology functionality while leveraging the value of currently deployed innovations. Much of the academic literature to date lacks a customer-focused Digital Business Innovation framework. Previous studies contribute to the literature by conceptualizing the ways in which Digital Business Innovation and Customer Experience are linked (Keiningham et al., 2020).

The perspective of the definition of the mediating variable is supported in the Forrester report which concludes that Digital Operational Excellence increases business agility where digital business is not just about Customer Experience — it is also a way of driving operational agility. Digital operations can increase speed to market, make employees more productive, promote leaner processes, and maximize asset utilization (Gill., 2015). Companies in this modern era are concerned with internal efficiency and progress in Operational Excellence in their fast-changing industry. In response, they put their efforts behind new systems that

transform operations digitally, streamline internal processes, reduce information overload, integrate business applications with information storage and enter into massive digital storage. (Moore., 2015).

While Digital Operational Excellence is used as a mediating variable to support the influence of Customer Experience Management on Marketing Performance, it is based on an empirical study that the Operational Excellence process initiative takes a strong internal focus, leaving Customer Experience problems far behind. (Moore., 2015). On the other hand research by (Colli et al., 2020) states that companies adopt various strategies to overcome obstacles in the era of digital transformation by translating the adoption of old technology, integrating, and using new technology to enable the availability of information and translate it into improving operational performance. Previous research (Farias et al., 2014) shows that the adjustment of operational activities has a significant role in the perceived value of a marketing activity. The relationship between these two variables makes this research lift this variable as an independent variable to change Customer Experience in achieving operational excellence. There is no research that specifically discusses the Digital Operation Excellence variable, so this research will close the gap.

Based on the data above, it can be said that the problem of declining marketing performance of the ICT industry in Indonesia is caused by the declining quality of service management from the internal side of the ICT industry, along with the dynamics of rapid technological change, which increases the demand for customer needs that cannot be met by the industry. this. From an external perspective, global OTT players are taking advantage of this void to provide innovative, smart and quality services that contribute to the growth of OTT. This is supported by the importance of innovation, operational capabilities to deliver services to customers as end-users, and redefining the business model with co-creation. (Järvi dan Pellinen., 2011). Thus, this study was conducted to develop a new conceptual model and bridge the gap by including Digital Business Innovation and Digital Operational Excellence as mediations to improve Marketing Performance. This model was tested empirically on an ICT industry company that is in a top-level management position or Manager level and above.

Based on the background of this research, this study proposes five hypotheses as follows:

**H1:** Customer Experience Management has a significant effect on Marketing Performance

**H2:** Customer Experience Management has a significant effect on Marketing Performance through Digital Business Innovation

**H3:** Customer Experience Management has a significant effect on Marketing Performance through Digital Operational Excellence

**H4:** Digital Business Innovation has significant effect on Marketing Performance

**H5:** Digital Operational Excellence has a significant effect on Marketing Performance

## **MATERIALS AND METHODS**

This research was carried out in two stages to fulfil the research objectives, namely exploratory and explanatory research. Based on (Sekaran dan Bougie., 2014), this research uses a mixed approach, namely qualitative and quantitative (mixed method). The research focus on companies operating in Indonesia with majority in the Greater Jakarta or known as Jabodetabek (Jakarta Bogor Depok Tangerang Bekasi) area with the following considerations: the research unit is the management of ICT industry companies, the majority of which are in the Greater Jakarta area, the largest competition for ICT industry services is in the Jabodetabek area, the majority of companies headquartered in Jabodetabek have implemented Customer Experience Management, then the development of the digital technology market which disrupted the emergence of this research phenomenon, which has the largest market in the Greater Jakarta area, hence the object of this research can represent Indonesia as a whole and the research data could have a high accuracy. This research data was collected through virtual and face-to-face meetings with the respondents. This research started in October 2021 until its completion.

### **Results**

The discussion of the exploratory study includes the results of the Focus Group Discussion (FGD) to explore the indicators and items of each research variable. Researchers tested the instrument (validity and reliability) after distributing questionnaires to the first 30 respondents. Furthermore, the researchers conducted explanatory tests and hypothesis testing, then conducted a final Focus Group Discussion (FGD) to obtain input from practitioners in the ICT industry based on the results of the research hypothesis testing.

### **Exploratory Study Results**

In the exploratory study process, we conducted FGDs with three groups, two groups each containing five participants and one group containing 2 participants who are leaders, regulators and academics who meet the research respondents' criteria, including having a doctoral education, working in national companies & institutions, and holding managerial positions. Participants in the FGD came from companies and institutions that have implemented digital technology. The FGD was conducted to explore the views and opinions of the participants who were considered to represent the population in the Information and Communication Technology Industry in Indonesia. Researchers through the FGD received statements that could strengthen statement items or indicators on the variables Customer Experience Management (CEM), Digital Business Innovation (DBI), Digital Operational Excellence (DOE) and Marketing Performance (MP) adopted from Kotler and Armstrong (2010), ed, Venkatesh and Singhal (2018), Jaeger et al. (2014), Ranjan and Read (2016), Mustafa (2009). In addition, through the FGD, new statement items or indicators emerged, which were then tested through CFA to determine the validity and reliability of each statement item so that the indicators formed were able to measure the latent variables tested in this study. Participants in the FGD stated that the participating companies & institutions had implemented digital technology.

The FGD results show that the research instrument adopted from Lemon and Verhoef (2016) related to Customer Experience Management (CEM) is still relevant to be tested as statement items from the CEM variable. Then the FGD also produced new indicators and statement items for CEM, including adding performance evaluation items on virtual environment indicators and grouping technology usage item statements into technology support items. In addition, in the CEM variable, there are also additional user experience items on the service interaction indicator with a total of two statement items. Furthermore, the FGD participants agreed that the service reliability item contained in the service interaction item will be one of the items that will measure the quality assurance indicator on the Digital Operational Excellence (DOE) variable.

The results of the FGD also show that the research instrument adopted from Venkatesh and Singhal (2018) related to Digital Business Innovation (DBI) is still relevant to be tested as statement items from the DBI variable. Tools indicators appeared consistently in the three FGD sessions, where participants mentioned that in order to broaden the definition in a digital context, tools indicators were more appropriate to be replaced with technology. These changes are not accompanied by changes in items and statements on indicators listed on research instruments adopted from previous studies. In addition, the FGD also produced new statement items for DBI, including the addition of network items and innovative ambience on the people indicator, adding value proposition items on the process indicator and adding value creation items on the technology indicator.

In the discussion of the Digital Operational Excellence variable in a digital context, the results of the FGD show that the research instrument adopted from Jaeger et al. (2014) is still relevant enough to be tested as statement items from DOE variables. The business process reengineering and total quality management indicators appeared consistently in the three FGD sessions, where participants stated that there needed to be a change in the names of the business process reengineering and total quality management indicators so that they remain relevant to the existing mapping items and are more in line with the context of digital products/services. . Business process reengineering indicators need to be directed to lean transformation and total quality management indicators are directed to quality assurance so that they are more relevant to the context of digital products/services. In addition, the FGD also produced new statement items for DOE, including the addition of operation teams and innovation items on the lean transformation indicator, replacing technology items with enterprise alignment items and results on the decision support system indicator and adding operations leadership, security and reliability items on the indicators. quality assurance. The FGD participants also consistently stated that it is necessary to add item reliability to the quality assurance indicator, so that the service reliability items contained in the service interaction indicator on the Customer Experience Management (CEM) variable are transferred to the quality assurance indicator on the Digital Operational Excellence (DOE) variable. According to the expert, item reliability is more relevant in measuring quality assurance indicators than service interaction indicators.



### Explanatory Study Results

For the explanatory study, we use a variance based or component-based approach model with the Partial Least Square (PLS) method. Testing the results of Structural Equation Modeling (SEM) with the PLS approach is done by looking at the results of the measurement model (outer model) and the results of the structural model (inner model) of the model under study. Evaluation of the outer model aims to analyze the relationship between items and latent variables, while the evaluation of the inner model is to analyze the relationship between the latent variables.

The results of the path diagram for the outer loading value of each statement item on the indicators and variables are presented in Figure 1 below. Furthermore, the validity results will be explained based on the outer loading value of each variable in the second order analysis.

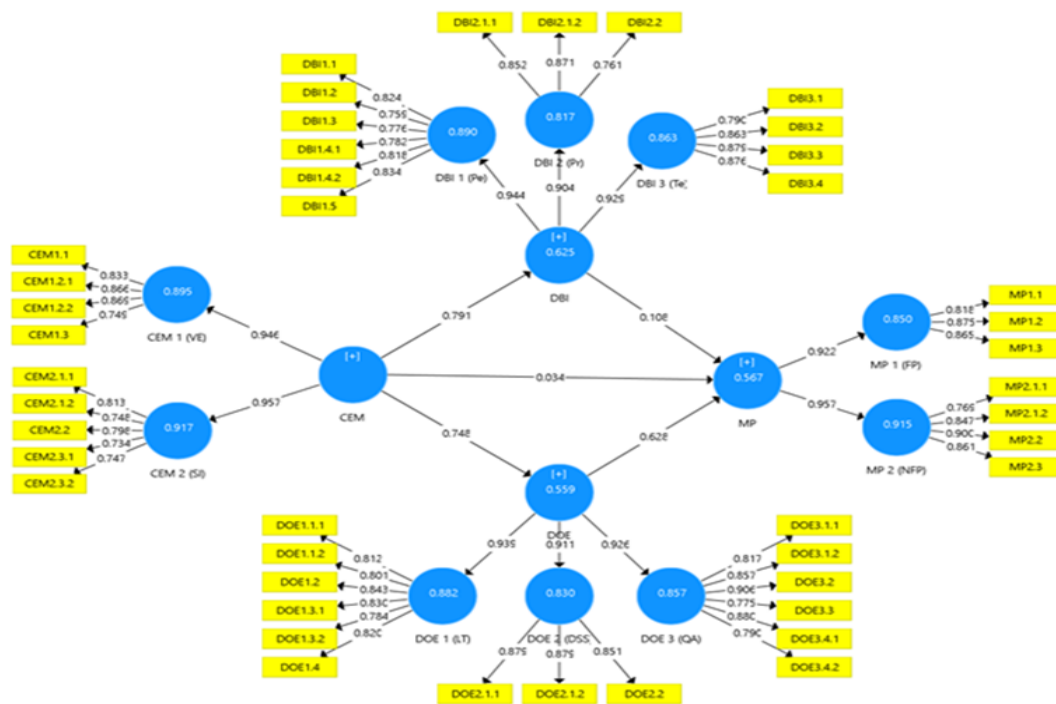


Figure 1: the Measurement Model Diagram

### Measurement Model Analysis

Items in each variable can be considered valid if the value of the outer loading indicator is more than 0.7. Based on the outer loading values and AVE obtained through the SEM-PLS Algorithm, it was found that each statement item was greater than 0.7 and so it is considered valid in measuring indicators and variables. The results of the outer model test concluded that

all variables and item constructs were valid and reliable so that they could be used for further analysis.

### Structural Model Analysis

The inner model analysis was conducted to evaluate the relationship between the latent variable constructs. In this study, the inner model was tested by analyzing the value of R-square (R<sup>2</sup>) on the latent endogenous construct, and the value of predictive-relevance (Q<sup>2</sup>) to measure how well the observed values and parameter estimates generated by the model.

**TABLE 1. Evaluation of Inner Model**

Construct	R <sup>2</sup>	Q <sup>2</sup>
Virtual Environment	0.895	0.994
Service Interaction	0.917	
People	0.625	
Process	0.890	
Technology	0.817	
Lean Transformation	0.863	
Decision Support System	0.559	
Quality Assurance	0.882	
Financial Performance	0.830	
Non-financial performance	0.857	
Digital Business Innovation	0.567	
Digital Operational Excellence	0.850	
Marketing Performance	0.915	

The results of these calculations, as in Table 1, indicate that the R-square value in this research model can be categorized into strong and moderately strong criteria, so it can be concluded that the variables in the model have a greater influence on the dependent variable than other factors originating from outside the research model. Meanwhile, the result of the Q<sup>2</sup> calculation in this study is 0.994, so it can be concluded that the model in this study has a relevant predictive value.

In this section, the results of the research hypothesis testing will be shown, namely the test of direct and indirect effects (mediation) between latent variables. Hypothesis testing in PLS is done by bootstrapping the sample. Multigroup analysis as applied using the partial least squares structural equation model (PLS-SEM) is a way to test preselected data sets to determine if there are significant differences in the estimates of group-specific parameters. This method, as implemented in Smart PLS, is an extension of the bootstrap-based multigroup analysis approach originally proposed for PLS-SEM (Henseler et al., 2009).

Based on Henseler et al. (2009), there are two models of analysis involving mediator variables: (1) full mediation, meaning that the independent variable is not able to significantly influence the dependent variable without going through the mediator variable; and (2) partial

mediation, meaning that the independent variable is able to directly influence the dependent variable without going through/involving the mediator variable.

Table 2 below presents the results of the evaluation of the inner model by looking at the relationship between constructs. If the t-value is greater than t-table (1.96), it means that there is a significant influence on the relationship between the constructs of the latent variables being analyzed.

**TABLE 2: Path Coefficient Value and T-statistic Constructs**

<b>Construct Relationship</b>	<b>Path Coefficient</b>	<b>T-value</b>	<b>T-table</b>	<b>Result</b>
H1: CEM -> MP	0.034	0.285	1.96	Insignificant
H2: CEM -> DBI -> MP	0.085	0.605	1.96	Insignificant
H3: CEM -> DOE -> MP	0.470	3.479	1.96	Significant
H4: DBI -> MP	0.108	0.607	1.96	Insignificant
H5: DOE -> MP	0.628	3.725	1.96	Significant
CEM -> DBI	0.791	24.282	1.96	Significant
CEM -> DOE	0.748	17.424	1.96	Significant

## DISCUSSION

The aim of the current study was to determine the effect of Customer Experience Management on Marketing Performance mediated by Digital Business Innovation and Digital Operational Excellence in the ICT (Information and Communication Technology) industry in Indonesia.

### **Hypothesis 1: The Effect of Customer Experience Management (CEM) on Marketing Performance (MP)**

Based on table 2, the t-statistic value on the Customer Experience Management path to Marketing Performance directly is 0.285 which is smaller than the t-table value (1.96), so it can be concluded that hypothesis 1 is rejected, meaning that Customer Experience Management has no significant effect on Marketing Performance. The path coefficient value is 0.034 which indicates the direction of a positive relationship, which means that increasing CEM will cause an increase in MP, but the effect is not significant.

The test results are in accordance with Mihardjo's research (2019) which states that customer experience orientation has no effect in increasing transformational performance in the Information and Communication Technology industry in Indonesia. In this study, customer experience orientation is formed by four indicators, namely image quality, customer engagement, trust personalization, and service potential, where customer engagement is one of the indicators used in measuring customer experience management variables in this study.

Similar results are also found in the research of Pramudika & Wickramasooriya (2016) which states that although there is a relationship between customer experience management and market performance, there is no relationship between customer experience management and financial performance in the case study of Sri Lankan printing & publishing industry

(Colombo Region). This makes it somewhat difficult to interpret whether there is a relationship between customer experience management and business performance, because business performance consists of market performance and financial performance. In this study, it is stated that the influence of political factors and economic factors directly affects business performance rather than customer experience management strategies when considering their financial performance. Meanwhile, financial performance is one of the indicators used to measure the marketing performance variables in this research on the ICT industry in Indonesia.

Other results can be seen in Chandra's (2014) research which states that the results of this study fail to prove that customer experience has a significance for customer loyalty through customer satisfaction mediation at Ciputra World Surabaya. Meanwhile, customer loyalty and customer satisfaction are used as items (Hooper et al., 2010) that measure non-financial performance indicators on the marketing performance variable in this study.

The ineffectiveness of customer experience management on the performance of a company, both financial performance and marketing performance can be caused by various factors that also influence the scope of a company or industry. This makes it somewhat difficult to interpret whether there is a relationship between customer experience management and business performance in general, because business performance consists of market performance and financial performance. In this study, it is stated that the influence of political factors and economic factors directly affects business performance rather than customer experience management strategies when considering their financial performance. Meanwhile, financial performance is one of the indicators used to measure the marketing performance variables in this research on the ICT industry in Indonesia.

### **Hypothesis 2: The Effect of Customer Experience Management (CEM) on Marketing Performance (MP) through Digital Business Innovation (DBI)**

Based on table 2, the t-statistic value on the Customer Experience Management path towards Digital Business Innovation towards Marketing Performance of 0.605 is smaller than the t-table value (1.96), so it can be concluded that hypothesis 2 is rejected, meaning that Customer Experience Management through Digital mediation variables Business Innovation has no significant effect on Marketing Performance. The path coefficient value is 0.085 which indicates the direction of a positive relationship, which means that increasing CEM will cause an increase in DBI which in turn causes an increase in MP, but the effect is not significant. This shows that the relationship between constructs is a "partial mediation" model (Henseler et al., 2009), meaning that the independent variable (CEM) can directly influence the dependent variable (MP) without going through/involving the mediator variable (DBI).

Digital Business Innovation as a mediator between the influence of Customer Experience Management on Marketing Performance is a novelty in this study because there has been no research examining the effect of this mediation. Digital business innovation is expected to be a mediator that can make customer experience management a positive and significant impact

on marketing performance in the ICT industry in Indonesia, however, this result was not obtained in this study.

As mentioned in the results of hypothesis 1, that the results of customer experience management have no significant effect on marketing performance, according to Mihardjo's (2019) research which states that customer experience orientation has no effect on increasing transformational performance in the Information and Communication Technology industry in Indonesia. In addition, Susdiani's research (2020) states that process innovation does not affect any type of MSME performance in the creative industry in Padang City. In this study, it was found that organizational innovation has an influence on all types of performance, namely financial performance, consumer performance, internal business process performance, and learning and growth performance. In contrast, process innovation does not have a significant effect on all types of performance. Meanwhile, innovation in marketing only influences two types of performance, namely learning and growth performance and internal business process performance. Then, product innovation only affects learning and growth performance. The results of this study indicate that not all innovations can have a positive and insignificant impact on performance.

Based on research by Mihardjo (2019) and Susdiani (2020) it shows that customer experience and innovation do not always have a significant effect on improving performance. This is due to other factors outside of customer experience and innovation which also have an impact on the decline or increase in company performance.

### **Hypothesis 3: The Effect of Customer Experience Management (CEM) on Marketing Performance (MP) through Digital Operational Excellence (DOE)**

Based on table 2, the value of t-statistics on the path of Customer Experience Management towards Digital Operational Excellence towards Marketing Performance of 3.479 is greater than the value of t-table (1.96), so it can be concluded that hypothesis 3 is accepted, meaning that Customer Experience Management through digital mediation variables Operational Excellence has a significant effect on Marketing Performance. The path coefficient value is 0.470 which indicates the direction of a positive relationship, which means that increasing CEM will cause an increase in DOE which in turn causes an increase in MP. This shows that the relationship between constructs is a "full mediation" model (Henseler et al., 2009), meaning that the independent variable (CEM) is not able to significantly influence the dependent variable (MP) without going through the mediator variable (DOE).

Digital Operational Excellence as a mediator between the influence of Customer Experience Management on Marketing Performance is a novelty in this research, where the results obtained are as expected, namely Customer Experience Management can improve the Marketing Performance of companies in the ICT industry in Indonesia through the mediation of Digital Operational Excellence.

Gill (2015) in the Forrester report concludes that digital operational excellence improves business agility where digital business is not just about customer experience — it's also a way of driving operational agility. Digital operations can increase speed to market, make

employees more productive, promote leaner processes, and maximize asset utilization. Meanwhile, research by Farias et al (2014) shows that the adjustment of operational activities plays a significant role in the perceived value of a marketing activity.

The results of this study are also in accordance with Makudza's (2020) research in a case study of the banking industry. Around 2010, retail banks in Africa had improved their customer service beyond customer expectations indicating that the move was to increase customer satisfaction and customer loyalty. Good management of this digital platform acts as an antecedent of customer experience management and thereby increases customer loyalty. Based on this, the researcher sees that good digital platform management is one of the digital operational excellence efforts to improve customer experience and company performance.

#### **Hypothesis 4: The Effect of Digital Business Innovation (DBI) on Marketing Performance (MP)**

Based on table 2, the t-statistic value on the Digital Business Innovation path towards Marketing Performance directly is 0.607 smaller than the t-table value (1.96), so it can be concluded that hypothesis 4 is rejected, meaning that Digital Business Innovation has no significant effect on Marketing Performance. . The path coefficient value is 0.108 which indicates the direction of a positive relationship, which means that increasing DBI will cause an increase in MP, but the effect is not significant.

The results of this study are not in accordance with Mihardjo's research (2019) which states that the business model innovation built by structure innovation, content innovation, commercial innovation, and governance innovation delivery influences transformational performance in the Information and Communication Technology industry in Indonesia. In this study, business model innovation is also correlated with co-creation strategy.

Similar findings to the results of this study were found in the study of Kusuma et al (2021) in a case study at PT. INKA (Railway Industry) Madiun. In this research, it is known that PT. INKA Madiun has launched the INKA Mobile application to make it easier for employees to complete their tasks, so this research is focused on explaining the impact of innovation on employee performance with self-efficacy as a moderating variable. From this study, it was found that innovation did not have a significant positive effect on performance, while self-efficacy had a positive effect on employee performance. Through the moderation test, it was found that self-efficacy weakens the relationship between innovation and performance.

#### **Hypothesis 5: The Effect of Digital Operational Excellence (DOE) on Marketing Performance (MP)**

Based on table 2, the t-statistic value on the Digital Operational Excellence path to Marketing Performance directly is 3.725 greater than the t-table value (1.96), so it can be concluded that hypothesis 5 is accepted, meaning that Digital Operational Excellence has a significant effect on Marketing Performance. The path coefficient value is 0.628 which indicates the direction of the positive relationship, which means that increasing DOE will cause an increase in MP.

The results of this study are in accordance with the study of Ojha (2015) which states that operational excellence has a greater impact on customer retention which is a marketing performance variable. Meanwhile, different findings are found in Mihardjo's research (2019) where the distinctive operational capabilities built by digital leadership values, culture leaders, high technology assets, and adaptation to environmental agility have no effect in increasing transformational performance in the ICT industry in Indonesia. There are other aspects that have a greater influence than distinctive operational capability in improving transformational performance, namely business model innovation and co-creation strategy.

Similar results were also found in the research by Alexieva et al (2018) which stated that innovativeness, creativity, business alertness, and risk taking had a significant effect on the successful implementation of Business Process Management (BPM) and affected the performance of Bulgarian companies. The study concludes that management mindset or lack of it has a major influence on business performance and if any organization leans towards development and growth should embrace the concept of BPM.

The finding on this research showed that Customer Experience Management has no significant effect on Marketing Performance. From managerial perspective, this means that the capacity of Indonesian economy to adopt and explore digital technologies that lead to transformations in government practices, business models, and society in general is still low, especially in terms of knowledge. Compared to other countries, the researcher looked at the countries in previous studies which showed that Customer Experience Management and innovation had significant effect on company performance, namely the USA, Denmark, and Italy. Based on the IMD World Digital Competitiveness Ranking in 2021, if we try to look at the rankings based on each factor, USA was ranked 1st overall, ranked 3 for knowledge, ranked 4 for technology, and ranked 1 for future readiness. Denmark is ranked 4th overall, ranked 8th for knowledge, ranked 9th for technology, and ranked 2nd for future readiness. Italy is ranked 40th overall, ranked 40th for data, ranked 42nd for technology, and ranked 30th for future readiness. While in Indonesia, the country is ranked 53 out of 64 countries, ranked 60th for knowledge, 49th for technology, and 48th for future readiness from 64 countries.

Based on the data and the findings of this research, it is known that developed countries such as the USA, Denmark, and Italy have better economic capacity to adopt and explore digital technologies compared to developing country such as Indonesia. Therefore, the researcher concludes that the ability to adopt and explore a country's digital technology affects the transformation and implementation of Customer Experience Management in companies and organizations in that country, which has an impact on the performance of companies and organizations. This is also supported by research evidence in Indonesia and Sri Lanka which shows that Customer Experience Management and Digital Business Innovation have no effect on Marketing Performance as previously stated.

The novelty generated through the minor analysis in this study is a prove that the mediating factors used in this study can significantly affect the dependent variable which is Marketing Performance (MP). The results of this study contribute to the development of theoretical

knowledge, especially in the field of marketing management. The results found in this study can be used as an alternative solution model to improve Marketing Performance, as well as used as a basis for consideration for the world of practitioners, especially in developing countries, to thrive in a competitive global market and to solve current problems faced by companies in this digital age.

## CONCLUSION

This study aims to determine the effect of Customer Experience Management on Marketing Performance mediated through the mediation of Digital Business Innovation and Digital Operational Excellence in the ICT (Information and Communication Technology) industry in Indonesia.

Based on the results of research in the Information and Communication Technology industry in Indonesia, it can be concluded that Customer Experience Management does not have a significant effect in improving marketing performance. From a managerial perspective, this result makes it somewhat difficult to interpret whether or not there is a relationship between customer experience management and business performance in general, because business performance consists of marketing performance and financial performance. In this study, it is stated that the influence of political factors and economic factors directly affects business performance rather than customer experience management strategies when considering their financial performance. Meanwhile, financial performance is one of the indicators used to measure the marketing performance variables in this research on the ICT industry in Indonesia.

This study found that Customer Experience Management has no significant effect on Marketing Performance through the mediation of Digital Business Innovation. Furthermore, Digital Business Innovation has no significant effect in improving Marketing Performance. This shows that customer experience and innovation do not always have a significant effect on improving company's performance, especially in developing countries. This is due to other factors outside of customer experience and digital innovation which also have an impact on the decline or increase in company performance. This is supported by research evidence in Indonesia and Sri Lanka which shows that Customer Experience Management and Digital Business Innovation have no effect on Marketing Performance.

However, this study found that Customer Experience Management has a significant effect on Marketing Performance through the mediation of Digital Operational Excellence. Furthermore, Digital Operational Excellence has a significant effect on improving Marketing Performance, and Customer Experience Management has a significant effect in increasing Digital Business Innovation and Digital Operational Excellence. Based on these findings, it can be concluded that Customer Experience Management can affect the ability of a company's innovation advantage such as the ability to create other new marketing indicators that increase company profits or performance. This research has proven that company's ability to adapt and explore digital technology in a country can create a transformation that affects the implementation of Customer Experience Management, Digital Business



Innovation, and Digital Operational Excellence in that country, which has an impact on the company's performance itself.

The results of this study contribute to the development of theoretical knowledge, especially in the field of marketing management. The finding of this research can be used as consideration for managers and policy makers in public organizations to set the appropriate way to enhance Customer Experience Management and Marketing Performance, and explore their relationships with Digital Business Innovation and Digital Operational Excellence that are relevant and very much needed in today's world.

The limitation in this study is that the researchers only discussed the topic in specific industry which is ICT industry in Indonesia. Therefore, the model used in this study can be replicated, developed, or perhaps retested in different industry and sectors to strengthen generalization or deliver meaning divergence. Further research development can be carried out in other industries, so the condition of each variable for other types of industries can also be conducted effectively. Moreover, insignificant results in this study can be used as a consideration for further research to examine the relationship between customer experience management and marketing performance more profoundly, so that a more definite theory can be obtained. Eventually, because the current research used a quantitative approach, it is interesting to conduct a qualitative study aimed to explore a more profound analysis of the results and enrich the study of the topic that has been researched.

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