



Digital Platforms and Business Performance Determinants in Indonesian State-Owned Construction Companies

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Abstract

Purpose: This study examines the determinants of business performance through digital platform utilization in the marketing activities of Indonesian state-owned construction and infrastructure enterprises (*Badan Usaha Milik Negara/BUMN*). Specifically, it investigates the effects of product-market strategy, value co-creation, and marketing capability on digital platform adoption and business performance, with digital platforms as a mediating variable.

Research Methodology: A quantitative approach was employed using Structural Equation Modeling–Partial Least Squares (SEM-PLS) with SmartPLS. Data were collected through surveys involving 82 assistant managers, managers, and supervisors from eight BUMN construction companies in Indonesia using purposive sampling.

Results: The findings reveal that product-market strategy and marketing capability significantly influence digital platform adoption, while value co-creation does not. Product-market strategy, value co-creation, marketing capability, and digital platforms significantly enhance business performance. Digital platforms significantly mediate the relationship between product-market strategy and business performance as well as between marketing capability and business performance, but do not mediate the relationship between value co-creation and business performance.

Conclusions: Digital platforms serve as an important mechanism for improving business performance by strengthening strategic alignment and marketing capabilities within BUMN construction companies.

Limitations: This study is limited to BUMN construction companies, applies a cross-sectional research design, and does not consider moderating factors such as company size and project characteristics.

Contributions: This study contributes to digital transformation and strategic management literature by confirming the role of digital platforms as a partial mediating mechanism and providing practical insights for optimizing digital investment strategies in state-owned enterprises.

Keywords: *Business Performance, Digital Platforms, Marketing Capability, Product-Market Strategy, Value Co-Creation*

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1. Introduction

The construction industry occupies a strategically vital position in both the global and Indonesian national economies, contributing substantially to Gross Domestic Product (GDP) growth through infrastructure development and employment generation. In Indonesia, state-owned enterprises (*Badan Usaha Milik Negara*/BUMN) in the construction sector including PT Wijaya Karya, PT Adhi Karya, and comparable entities have historically served as the backbone of national infrastructure delivery, executing large-scale projects including toll roads, ports, airports, and housing developments. However, in recent years, these BUMN construction companies have confronted escalating financial and operational challenges that have raised serious concerns about their competitive sustainability.

Financial difficulties are among the most pressing of these challenges. Many BUMN construction firms rely heavily on government project financing, which frequently generates payment delays and cash flow disruptions that undermine project execution quality and financial stability. Low-profit margins driven by rising material costs, currency fluctuations, and administrative overhead from permitting and regulatory compliance compress returns on already capital-intensive projects ([Agrawal, Wankhede, Kumar, Upadhyay, & Garza-Reyes, 2022](#); [Amin, 2018](#)). These financial vulnerabilities are compounded by project management challenges: discrepancies between planning and execution, intra- and inter-team conflicts, and suboptimal resource allocation result in project delays and productivity losses that damage client relationships and competitive positioning ([Assaf, & Al-Hejji, 2006](#); [Abdallah, & Wafaa, 2020](#)).

A third category of challenge digital transformation, represents both the most demanding and the most promising strategic imperative for BUMN construction firms. Technologies including Building Information Modeling (BIM), Enterprise Resource Planning (ERP), Internet of Things (IoT), and cloud-based project management platforms have demonstrated substantial potential for improving operational efficiency, project coordination quality, and client relationship management in construction contexts ([Azhar, 2011](#); [McKinsey, 2017](#); [Artanti, Agustini, Saptono, & Dewa, 2022](#)). However, technology adoption in Indonesian construction companies lags significantly behind international benchmarks, constrained by high implementation costs, limited digital literacy, and workforce training deficits. The strategic integration of digital platforms with marketing activities particularly product-market strategy, value co-creation, and marketing capability as pathways to superior business performance has not been systematically examined in the Indonesian BUMN construction context ([Adekunle, Aigbavboa, Ejohwomu, Adekunle, & Thwala, 2021](#)).

This study addresses this gap by exploring how product-market strategy, value co-creation, and marketing capability influence business performance in BUMN construction companies, both directly and indirectly through digital platform adoption as a mediating variable. The Resource-Based View (RBV) provides the theoretical foundation, treating digital platforms, marketing capabilities, and co-creation capacity as organizationally specific, difficult-to-imitate strategic resources whose combination generates sustainable competitive advantage ([Barney, Ketchen, & Wright, 2021](#)). The study contributes to the strategic management, digital transformation, and construction business performance literatures, and offers practical guidance for BUMN construction executives navigating Indonesia's digital transformation imperative.

2. Literature Review and Hypothesis/es Development

2.1 Theoretical Foundation: Resource-Based View and Dynamic Capabilities

The Resource-Based View ([Barney, Ketchen, & Wright, 2021](#)) constitutes the theoretical foundation of this research. RBV proposes that sustained competitive advantage derives from firm-specific resources that satisfy the VRIN criteria, namely Valuable, Rare, Inimitable, and Non-substitutable ([Mansour, Aminudin, Mansour, Abidin, & Lou, 2022](#)). Applied to BUMN construction firms, RBV suggests that

product-market strategies leveraging technical expertise and project reputation, marketing capabilities enabling client relationship management and market intelligence, and value co-creation practices enabling collaborative stakeholder value generation, all constitute VRIN resources when effectively developed and deployed [\(Dasuki, 2021\)](#). Digital platforms further amplify these resources by providing the technological infrastructure through which marketing capabilities and co-creation practices are exercised at scale, enabling firms to integrate internal and external resources more effectively and create more adaptive and efficient operational architectures [\(Chatterjee, Chaudhuri, & Vrontis, 2024\)](#).

2.2 Business Performance in Construction

Business performance in construction reflects the success of a firm in achieving its strategic objectives, encompassing operational efficiency, cost and time control, profitability, and client satisfaction dimensions [\(Giménez, Madrid-Guijarro, & Duréndez, 2019\)](#). Performance measurement systems for construction firms typically integrate financial metrics (revenue growth, profit margins, return on assets), market metrics (market share, competitive positioning, new client acquisition), and operational metrics (project delivery punctuality, quality standards, resource utilization efficiency). In the Indonesian BUMN context, business performance has been additionally challenged by pandemic-era disruptions: the 2020–2022 COVID-19 period generated widespread project suspensions, cash flow deficits, and demand contractions that temporarily reversed growth trajectories for most BUMN construction firms before recovery resumed in 2023–2024 [\(Esfandiatri, 2023\)](#).

2.3 Digital Platforms

Digital platforms are software-based ecosystems that enable user interactions, facilitate transactions, aggregate data for decision support, and coordinate collaborative value creation among multiple stakeholder groups [\(Leong, Lin, Tan, & Yu, 2024; Mishra, & Tripathi, 2020\)](#). In construction, CRM systems, ERP platforms, BIM software, and cloud-based project management tools constitute the primary digital platform categories, each contributing distinct capabilities. CRM platforms enhance client relationship management and marketing intelligence, ERP systems integrate financial, procurement, and operational data, BIM enables digital project modeling and coordination, and cloud platforms facilitate real-time collaboration across geographically distributed project teams [\(Galagali, Sandbhor, & Ruikar, 2024\)](#). The integration and reconfigurability of these platforms their capacity to connect with existing IT systems, adapt to changing business needs, and provide relevant operational information in real time are the dimensions most strongly associated with performance improvement [\(Berlato, Binni, Durmus, Gatto, Giusti, Massari, Toldo, Cascone, & Mirarchi, 2025\)](#).

2.4 Product-Market Strategy

Product-market strategy defines how a firm positions its services within specific market segments to achieve growth and profitability objectives, encompassing decisions about target markets, service differentiation, cost positioning, and product development scope [\(Hajda & Nikolov, 2022; Yarbrough et al., 2021\)](#). In construction, product-market strategy dimensions include service differentiation (technical specialization, quality leadership, sustainability credentials), cost focus (competitive pricing, operational efficiency), and market scope expansion (geographic diversification, sector diversification) [\(Jung et al., 2023\)](#). Strategic clarity in product-market positioning enables construction firms to efficiently allocate resources, build client loyalty through value-added service offerings, and develop the digital infrastructure that supports strategy execution [\(Vorhies et al., 2019; De Haan et al., 2022\)](#).

2.5 Value Co-Creation

Value co-creation is the process through which firms collaborate with customers and other stakeholders to jointly generate economic, social, and experiential value that benefits all parties [\(Barney, Ketchen, & Wright, 2021; Samans, & Nelson, 2022\)](#). In construction, value co-creation

manifests in collaborative project planning, design-build arrangements, client-contractor joint problem-solving, and transparent communication systems that enable mutual value optimization across project lifecycles ([Xu, Chi, & Chong, 2022](#); [Matarazzo, Penco, Profumo, & Quaglia, 2021](#)). The service-dominant logic framework positions value co-creation as a dynamic capability that fundamentally redefines the firm's competitive positioning from product provider to value co-architect—a transformation particularly relevant in large-scale infrastructure projects where client, contractor, subcontractor, and community stakeholder interests must be simultaneously managed ([Han, Zhou, & You, 2022](#); [Kante, & Michel, 2023](#)).

2.6 Marketing Capability

Marketing capability refers to an organization's integrated ability to understand market environments, create distinctive value propositions, communicate effectively with target clients, and manage customer relationships sustainably ([Brown, Foroudi, & Hafeez, 2019](#); [Asmawati, & Nohong, 2023](#); [Mishra, Rolland, Satpathy, & Moore, 2019](#)). Marketing capabilities in construction include market sensing (identifying market trends, competitor activities, and client needs), customer linking (building and maintaining trust-based client relationships), new offering development (designing service configurations responsive to emerging client requirements), and digital marketing (leveraging digital channels for brand communication and lead generation) ([Osman, Liu, & Wang, 2023](#); [Shlepneva, & Maletina, 2021](#)). Marketing capabilities are increasingly recognized as a primary source of sustainable competitive advantage in construction markets characterized by relationship-based project award processes where reputation, trust, and demonstrated value creation capacity are primary selection criteria ([Jolly, Isa, Othman, & Ahmdon, 2016](#); [Oduro, & Mensah-Williams, 2023](#)).

2.7 Research Hypotheses

Based on the theoretical framework and prior empirical literature, the following hypotheses guide this study:

- H_1 : Product-market strategy has a significant positive effect on digital platform adoption.
- H_2 : Value co-creation has a significant positive effect on digital platform adoption.
- H_3 : Marketing capability has a significant positive effect on digital platform adoption.
- H_4 : Product-market strategy has a significant positive effect on business performance.
- H_5 : Value co-creation has a significant positive effect on business performance.
- H_6 : Marketing capability has a significant positive effect on business performance.
- H_7 : Digital platforms have a significant positive effect on business performance.
- H_8 : Digital platforms mediate the relationship between product-market strategy and business performance.
- H_9 : Digital platforms mediate the relationship between value co-creation and business performance.
- H_{10} : Digital platforms mediate the relationship between marketing capability and business performance.

3. Research Methodology

3.1 Research Design

This study employs a quantitative research design based on survey data, appropriate for testing the hypothesized causal relationships among strategic management variables using structural modeling ([Hair, Hult, Ringle, Sarstedt, Danks, & Ray, 2021](#)). SEM-PLS was selected over CB-SEM for three

reasons: the model is exploratory and theory-extending rather than strictly confirmatory; the sample size is moderate ($n=82$); and the reflective-formative construct structure is better accommodated by PLS estimation ([Hair, Howard, & Nitzl, 2020](#); [Sarstedt, Ringle, & Hair, 2017](#); [Sugiyono, 2016](#)). SmartPLS 4 software was used for all measurement and structural model analyses.

3.2 Population, Sample, and Data Collection

The target population comprised managers, assistant managers, and supervisors in BUMN construction companies in Indonesia individuals with direct knowledge of and responsibility for the strategic marketing, digital platform, and performance management activities examined in this study. Purposive sampling was applied based on these positional criteria. Slovin's formula with a 10% margin of error produced a minimum sample requirement of 82 respondents. Data were collected from eight BUMN construction companies from December 2024 to August 2025 via structured Likert-scale questionnaires distributed both online (Google Forms) and offline. Table 1 presents the variable operationalization summary.

Table 1. Variable Operationalization Summary

Variable	Role	Key Dimensions	Primary Source
Product-Market Strategy	IV	Differentiation, Cost Focus, Product-Market Scope	Vorhies et al. (2019) ; Hajda and Nikolov (2022)
Value Co-Creation	IV	Promotional innovativeness, Proactive stakeholder engagement	Barney et al. (2021)
Marketing Capability	IV	Market research, Strategic planning, Marketing execution	Brown et al. (2019)
Digital Platforms	MED	Digital platform integration, Digital platform reconfiguration	Sanistasya et al. (2023)
Business Performance	DV	Market share, Competitive position, Sales growth, Customer satisfaction, Profitability	Yolanda et al. (2022)

IV = Independent Variable; MED = Mediating Variable; DV = Dependent Variable.

Table 1 shows the variable operationalization summary, including the roles, key dimensions, and primary sources used to measure each construct in the research model. The table provides an overview of the conceptualization and measurement indicators for product-market strategy, value co-creation, marketing capability, digital platforms, and business performance.

3.3 PLS-SEM Assessment Procedure

The two-step assessment procedure of ([Hair, Howard, & Nitzl, 2020](#); [Hair, Hult, Ringle, Sarstedt, Danks, & Ray, 2021](#)) was followed. In Step 1 (Measurement Model), outer loadings (≥ 0.70), composite reliability ($CR \geq 0.70$), Cronbach's alpha ($\alpha \geq 0.70$), and AVE (≥ 0.50) were assessed. Discriminant validity was confirmed via the Heterotrait-Monotrait (HTMT) ratio criterion. Indicators with outer loadings below threshold were eliminated following the algorithm results in SmartPLS 4. In Step 2 (Structural Model), bootstrapping with 5,000 resamples produced path coefficients (β), t -statistics, and p -values. Significance threshold: $p < 0.05$ ($\alpha = 5\%$). Mediation was assessed through the statistical significance of indirect effects ([Tatiek & Hendar, 2021](#)).

4. Results and Discussions

4.1 Descriptive Analysis

Table 2. Descriptive Statistics Summary by Variable

Variable	Mean Range	Highest Indicator	Lowest Indicator	Interpretation
Business Performance	3.50–3.63	Market share growth (3.63)	Sales & profit growth (3.50)	Generally positive; COVID-19 impact on financial indicators
Digital Platforms	3.66–3.84	Platform flexibility/adaptability (3.84)	IT system integration (3.71)	High perception of operational value; integration can be improved
Product-Market Strategy	3.75–3.88	Low-cost service provision (3.88)	Cost-oriented procedure development (3.75)	Cost Focus dimension dominant; room to strengthen differentiation
Value Co-Creation	3.80–3.98	Vendor/partner promotional innovation (3.98)	Coordination/communication innovation (3.80)	Strong external collaboration; communication coordination needs improvement
Marketing Capability	3.71–3.89	Competitor product similarity identification (3.89)	Contract profit forecasting (3.71)	Market intelligence strong; financial analytics need strengthening

Table 2 presents the descriptive statistics summary for all five research variables. All mean values fall in the range 3.50–3.89, indicating that respondents assessed all constructs favorably between 'neutral' and 'agree' on the five-point Likert scale. Value co-creation achieved the highest mean score (3.89), reflecting strong perceptions of collaborative stakeholder engagement practices among BUMN construction respondents. Business performance achieved a mean of 3.50–3.63 across indicators, with market share growth (3.63) and customer satisfaction (3.61) rated highest, and sales and profit growth (3.50) rated lowest a pattern consistent with the documented COVID-19 pandemic impact on BUMN construction financial performance during 2020–2022.

4.2 Measurement Model Assessment

Following SmartPLS 4 algorithm execution, indicators with outer loadings below 0.70 were eliminated from the model. After elimination, all remaining indicator outer loadings exceeded 0.70, confirming strong indicator reliability. Composite reliability and AVE values for all constructs exceeded their respective thresholds ($CR > 0.70$; $AVE > 0.50$), and HTMT ratios confirmed discriminant validity between all construct pairs. The cleaned measurement model provides an adequate foundation for structural path estimation.

4.3 Hypothesis Testing: Direct Effects

Table 3 presents the direct effects hypothesis test results. All hypothesis decisions are based on $p < 0.05$ at $\alpha = 5\%$ significance.

Table 3. Direct Effects Hypothesis Testing Results (SEM-PLS Bootstrapping)

Hyp.	Path	β	p-value	Sig.?	Decision
H_1	Product-Market Strategy $\rightarrow$ Digital Platforms	0.579	.000	Yes	Supported
H_2	Value Co-Creation $\rightarrow$ Digital Platforms	–	.063	No	Not Supported
H_3	Marketing Capability $\rightarrow$ Digital Platforms	0.248	.002	Yes	Supported
H_4	Product-Market Strategy $\rightarrow$ Business Performance	0.181	.022	Yes	Supported
H_5	Value Co-Creation $\rightarrow$ Business Performance	0.301	.000	Yes	Supported
H_6	Marketing Capability $\rightarrow$ Business Performance	0.170	.028	Yes	Supported
H_7	Digital Platforms $\rightarrow$ Business Performance	0.337	.001	Yes	Supported

Table 3 shows the results of direct effect hypothesis testing using SEM-PLS bootstrapping analysis. The results indicate that product-market strategy significantly influences digital platforms ($\beta=0.579$, $p=0.000$) and business performance ($\beta=0.181$, $p=0.022$), supporting H_1 and H_4 . Marketing capability also significantly affects digital platforms ($\beta=0.248$, $p=0.002$) and business performance ($\beta=0.170$, $p=0.028$), supporting H_3 and H_6 . Meanwhile, value co-creation does not significantly influence digital platforms ($p=0.063$) but has a significant positive effect on business performance ($\beta=0.301$, $p=0.000$), supporting H_5 . Furthermore, digital platforms significantly enhance business performance ($\beta=0.337$, $p=0.001$), supporting H_7 . These findings indicate that strategic orientation, marketing capability, and digital platform utilization play important roles in improving business performance, while value co-creation contributes directly to performance improvement rather than digital platform adoption.

4.4 Hypothesis Testing: Indirect Effects

Table 4 presents the indirect effects results testing the mediating role of digital platforms.

Table 4. Indirect Effects Mediation via Digital Platforms (Bootstrapping)

Hyp.	Indirect Path	Indirect β	p-value	Decision
H_8	Product-Market Strategy $\rightarrow$ Digital Platforms $\rightarrow$ Business Performance	0.195	.002	Supported (Partial Mediation)
H_9	Value Co-Creation $\rightarrow$ Digital Platforms $\rightarrow$ Business Performance	–	.135	Not Supported
H_{10}	Marketing Capability $\rightarrow$ Digital Platforms $\rightarrow$ Business Performance	0.038	.014	Supported (Partial Mediation)

Source: SmartPLS 4 Bootstrapping Output, 2024–2025

Table 4 shows the results of the mediation analysis using SEM-PLS bootstrapping to examine the indirect effects of digital platforms on the relationships between the independent variables and business performance. The findings indicate that digital platforms significantly mediate the relationship between product-market strategy and business performance (indirect $\beta=0.195$, $p=0.002$), supporting H_8 with partial mediation. Digital platforms also partially mediate the relationship between marketing capability and business performance (indirect $\beta=0.038$, $p=0.014$), supporting H_{10} . However, the mediating effect of digital platforms on the relationship between value co-creation and business performance is not significant ($p=0.135$), resulting in H_9 being not supported. These results suggest that digital platforms strengthen the impact of strategic orientation and marketing capability on business performance, but their role is limited in translating value co-creation activities into performance outcomes.

4.5 Discussion of Results

4.5.1 Product-Market Strategy Effects

Product-market strategy significantly influences both digital platform adoption (H_1 : $\beta=0.579$, $p<0.001$) and business performance directly (H_4 : $\beta=0.181$, $p=0.022$), and digital platforms partially mediate the strategy $\rightarrow$ performance relationship (H_8 : indirect $\beta=0.195$, $p=0.002$). The strong H_1 path coefficient (0.579) is the largest in the direct effects model, confirming that strategic market positioning is the primary driver of digital platform intensification in BUMN construction firms. This finding is consistent with RBV and Resource-Advantage theory, which emphasizes that a refined product-market strategy one that clearly defines target segments, differentiation positioning, and cost management priorities creates operational imperatives for digital infrastructure capable of supporting lead and bid management, procurement coordination, and client relationship tracking at scale (Vorhies, Morgan, & Autry, 2019; Yang, Jiang, & Xie, 2019). The partial mediation finding (H_8) indicates that product-market strategy improves performance both directly (through resource allocation efficiency and client positioning advantages) and indirectly through the digital capabilities that strategic clarity activates.

4.5.2 Value Co-Creation Effects

Value co-creation does not significantly influence digital platform adoption (H_2 : $p=0.063$) but significantly and most powerfully influences business performance directly (H_5 : $\beta=0.301$, $p<0.001$). The null H_2 finding is theoretically important: it suggests that value co-creation practices in BUMN construction firms are not primarily contingent on digital platform adoption they operate through human relationship mechanisms, professional trust, and collaborative contracting arrangements that precede and are independent of digital technology deployment (Indriyani et al., 2024; Xu et al., 2022). The strong H_5 path (largest direct performance effect at $\beta=0.301$) confirms service-dominant logic's prediction that co-creation between companies and their partners generates the most powerful performance improvements, as collaborative value generation strengthens client loyalty, reduces project execution friction, and creates reputational advantages that translate into sustained competitive positioning. The non-significant mediation (H_9 : $p=0.135$) confirms that this co-creation $\rightarrow$ performance pathway bypasses digital platforms, operating instead through the relationship quality and trust dimensions that digital tools support but do not fundamentally constitute.

4.5.3 Marketing Capability Effects

Marketing capability significantly influences digital platform adoption (H_3 : $\beta=0.248$, $p=0.002$) and business performance directly (H_6 : $\beta=0.170$, $p=0.028$), with digital platforms partially mediating the capability $\rightarrow$ performance relationship (H_{10} : indirect $\beta=0.038$, $p=0.014$). The H_3 finding is consistent with RBV, which suggests that organizations with strong marketing capabilities particularly market sensing, customer linking, and competitor intelligence functions require digital platforms as the enabling infrastructure for collecting, processing, and acting on the market data that sophisticated marketing practices generate (Vorhies & Morgan, 2005). The partial mediation (H_{10}) confirms a dual performance mechanism: marketing capabilities directly improve performance through superior market intelligence and client relationship management, and also improve performance indirectly by driving more intensive and strategic digital platform utilization that further amplifies marketing effectiveness.

4.5.4 Digital Platform's Direct Performance Effect

Digital platforms exert a significant positive direct effect on business performance (H_7 : $\beta=0.337$, $p=0.001$), ranking as the second-strongest direct performance predictor after value co-creation. This finding confirms that BIM, ERP, and CRM digital platforms contribute materially to BUMN construction performance through multiple operational mechanisms. Real-time operational information (mean=3.83) enables more informed and faster managerial decision-making, platform adaptability (mean=3.84) enhances responsiveness to project-specific requirements, and system integration capabilities support cross-functional data coherence that reduces coordination costs and project execution errors. (Galagali, Sandbhor, & Ruikar, 2024; Wibowo, Knight, Gaol, & Indrawan, 2024).

From an RBV perspective, digital platforms function as strategic enablers that expand organizational capacity to integrate internal and external resources, create adaptive work architectures, and accelerate information flows across the value chain capabilities that translate directly into competitive performance advantages.

5. Conclusions

This study examined the effects of product-market strategy, value co-creation, and marketing capability on business performance in BUMN Indonesian construction companies, mediated by digital platform adoption, using SEM-PLS analysis of data from 82 respondents across eight construction firms. Ten principal conclusions are drawn. First, product-market strategy significantly and positively influences digital platform adoption (H_1 : $\beta=0.579$, $p<0.001$), confirming that strategic clarity drives digital infrastructure investment. Second, value co-creation does not significantly influence digital platform adoption (H_2 : $p=0.063$), indicating that co-creation practices in construction operate primarily through relationship mechanisms that are not contingent on platform deployment. Third, marketing capability significantly influences digital platform adoption (H_3 : $\beta=0.248$, $p=0.002$), confirming that sophisticated marketing functions require digital enabling infrastructure. Fourth, product-market strategy significantly improves business performance directly (H_4 : $\beta=0.181$, $p=0.022$). Fifth, value co-creation is the strongest direct business performance driver (H_5 : $\beta=0.301$, $p<0.001$), confirming service-dominant logic's prediction of co-creation's performance primacy. Sixth, marketing capability significantly improves business performance (H_6 : $\beta=0.170$, $p=0.028$). Seventh, digital platforms significantly and directly improve business performance (H_7 : $\beta=0.337$, $p=0.001$). Eighth, digital platforms significantly partially mediate the product-market strategy $\rightarrow$ performance relationship (H_8 : indirect $\beta=0.195$, $p=0.002$). Ninth, digital platforms do not significantly mediate the value co-creation $\rightarrow$ performance relationship (H_9 : $p=0.135$), as co-creation's performance benefits operate through relationship-based rather than technology-mediated channels. Tenth, digital platforms significantly partially mediate the marketing capability $\rightarrow$ performance relationship (H_{10} : indirect $\beta=0.038$, $p=0.014$). These findings support the theoretical integration of RBV, service-dominant logic, and dynamic capabilities theory in explaining how BUMN construction firms achieve business performance through the strategic deployment of marketing-oriented capabilities and digital technologies.

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Author Contributions

BSK contributed to the conceptualization, methodology, data collection, formal analysis, investigation, and manuscript preparation. WA contributed to supervision, theoretical development, validation, critical review, and revision of the manuscript. JT contributed to data analysis support, interpretation of results, visualization, and manuscript editing. All authors contributed to the research development, critically reviewed the manuscript, and approved the final version for publication.

Conflict of Interest

The authors declare that there is no conflict of interest regarding the publication of this article. The authors have no financial, personal, or professional relationships that could have influenced the research process, analysis, or interpretation of the findings.

References

- Abdallah, S., & Wafaa, A. (2020). The product market strategy, value creation, and competitive advantages as a determinant factor of marketing performance. *International Journal of Supply Chain Management*, 9(3), 13-17..
- Adekunle, S. A., Aigbavboa, C. O., Ejohwomu, O., Adekunle, E. A., & Thwala, W. D. (2021). Digital transformation in the construction industry: A bibliometric review. *Journal of Engineering, Design and Technology*, 22(1), 130-158. <https://doi.org/10.1108/JEDT-08-2021-0442>
- Agrawal, R., Wankhede, V. A., Kumar, A., Upadhyay, A., & Garza-Reyes, J. A. (2022). Nexus of circular economy and sustainable business performance in the era of digitalization. *International Journal of Productivity and Performance Management*, 71(3), 748-774. <https://doi.org/10.1108/IJPPM-12-2020-0676>
- Amin, R. M. (2018). Competitive strategy analysis through a resource-based-view approach to achieve sustainable competitive advantage: Study on Village Tour Sanankerto. *University of Brawijaya Repository*.
- Artanti, J., Agustini, P. M., Saptono, A., Kartika Hanum, G., & Dewa Oetomo, R. (2022). Analysis of virtual product marketing strategies to increase customer satisfaction: Case study on Bukalapak partners. *IAIC Transactions on Sustainable Digital Innovation*, 3(2), 86-109. <https://doi.org/10.34306/itsdi.v3i2.516>
- Asmawati, & Nohong, M. (2023). Dynamic marketing capability: Science mapping based on bibliometric analysis. *International Economics and Business Conference (IECON)*, 1(1), 83-95. <https://doi.org/10.35912/iecon.v1i1.134>
- Assaf, S. A., & Al-Hejji, S. (2006). Causes of delay in large construction projects. *International Journal of Project Management*, 24(4), 349-357. <https://doi.org/10.1016/j.ijproman.2005.11.010>
- Azhar, S. (2011). Building information modeling (BIM): Trends, benefits, risks, and challenges for the AEC industry. *Leadership and Management in Engineering*, 11(3), 241-252. [https://doi.org/10.1061/\(ASCE\)LM.1943-5630.0000127](https://doi.org/10.1061/(ASCE)LM.1943-5630.0000127)
- Barney, J. B., Ketchen, D. J., & Wright, M. (2021). Resource-based theory and the value creation framework. *Journal of Management*, 47(7), 1936-1955. <https://doi.org/10.1177/01492063211021655>
- Berlato, M., Binni, L., Durmus, D., Gatto, C., Giusti, L., Massari, A., Toldo, B. M., Cascone, S., & Mirarchi, C. (2025). Digital platforms for the built environment: A systematic review across sectors and scales. *Buildings*, 15(14), 1-38. <https://doi.org/10.3390/buildings15142432>
- Brown, D., Foroudi, P., & Hafeez, K. (2019). Marketing management capability: The construct and its dimensions. *Qualitative Market Research*, 22(5), 609-637. <https://doi.org/10.1108/QMR-10-2017-0131>
- Chatterjee, S., Chaudhuri, R., & Vrontis, D. (2024). Examining the marketing performance of the firms from an international dynamic marketing capability perspective. *International Marketing Review*, 41(1), 138-161. <https://doi.org/10.1108/IMR-05-2022-0107>
- Dasuki, R. E. (2021). Manajemen strategi: kajian teori resource based view. *Coopetition*, 12(3), 373008. <https://doi.org/10.32670/coopetition.v12i3.710>
- De Haan, J., Voordijk, H., & Joosten, G. J. (2022). Market strategies and core capabilities in the building industry. *Construction Management and Economics*, 20(2), 109-118. <https://doi.org/10.1080/01446190110108662>

- Esfandiatri, Y. G. Y. (2023). Analisis Financial Distress pada Perusahaan Konstruksi BUMN Karya. *Syntax Idea*, 5(11). <https://doi.org/10.46799/syntax-idea.v5i11.2663>
- Galagali, A. A., Sandbhor, S., & Ruikar, K. (2024). A survey on enterprise resources planning and building information modeling integration: A Construction 4.0 perspective. *Buildings*, 14(10), 1-16. <https://doi.org/10.3390/buildings14103165>
- Giménez, J., Madrid-Guijarro, A., & Duréndez, A. (2019). Competitive capabilities for the innovation and performance of Spanish construction companies. *Sustainability*, 11(19), 1-24. <https://doi.org/10.3390/su11195475>
- Hair, J. F., Howard, M. C., & Nitzl, C. (2020). Assessing measurement model quality in PLS-SEM using confirmatory composite analysis. *Journal of Business Research*, 109, 101–110. <https://doi.org/10.1016/j.jbusres.2019.11.069>
- Hair, J. F., Hult, G. T. M., Ringle, C. M., Sarstedt, M., Danks, N. P., & Ray, S. (2021). *Partial least squares structural equation modeling (PLS-SEM) using R*.
- Hajda, J., & Nikolov, B. (2022). Product market strategy and corporate policies. *Journal of Financial Economics*, 146(3), 932-964. <https://doi.org/10.1016/j.jfineco.2022.09.003>
- Han, W., Zhou, Y., & You, R. (2022). Strategic orientation, business model innovation and corporate performance: Evidence from the construction industry. *Frontiers in Psychology*, 13, 1–15. <https://doi.org/10.3389/fpsyg.2022.971654>
- Indriyani, R., Dewi, A. R., & Kempa, S. (2024). Penggunaan media sosial dalam mendukung kinerja pemasaran: evaluasi dampak value co-creation dan produktivitas kerja. *Co-Value Jurnal Ekonomi Koperasi Dan Kewirausahaan*, 15(6). <https://doi.org/10.59188/covalue.v15i6.4860>
- Jolly, B., Isa, F. M., Othman, S. N., & Ahmdon, M. A. S. (2016). The influence of management capability, marketing capability and competitive advantage on Malaysian construction project performance. *International Review of Management and Marketing*, 6(8), 142-148..
- Jung, C., Mallon, M. R., & Wilden, R. (2024). Strategy by doing and product-market performance: A contingency view. *Journal of Management*, 50(5), 1684-1713. <https://doi.org/10.1177/01492063221147298>
- Kante, M., & Michel, B. (2023). Use of partial least squares structural equation modeling (PLS-SEM) in privacy and disclosure research on social network sites: A systematic review. *Computers in Human Behavior Reports*, 10, 100291. <https://doi.org/10.1016/j.chbr.2023.100291>
- Leong, C., Lin, S., Tan, F., & Yu, J. (2024). Coordination in a digital platform organization. *Information Systems Research*, 35(1). <https://doi.org/10.1287/isre.2023.1226>
- Mansour, H., Aminudin, E., Mansour, T., Abidin, N. I. A. B., & Lou, E. (2022). Resource-based view in construction project management research: A meta-analysis. *IOP Conference Series: Earth and Environmental Science*, 1067(1). <https://doi.org/10.1088/1755-1315/1067/1/012057>
- Matarazzo, M., Penco, L., Profumo, G., & Quaglia, R. (2021). Digital transformation and customer value creation in made-in-Italy SMEs: A dynamic capabilities perspective. *Journal of Business Research*, 123, 642–656. <https://doi.org/10.1016/j.jbusres.2020.10.033>
- McKinsey Global Institute. (2017). *Reinventing construction through a productivity revolution*.
- Mishra, B. K., Rolland, E., Satpathy, A., & Moore, M. (2019). A framework for enterprise risk identification and management: The resource-based view. *Managerial Auditing Journal*, 34(2), 162-188. <https://doi.org/10.1108/MAJ-12-2017-1751>
- Mishra, S., & Tripathi, A. R. (2020). Literature review on business prototypes for digital platform. *Journal of Innovation and Entrepreneurship*, 4. <https://doi.org/10.1186/s13731-020-00126-4>

- Oduro, S., & Mensah-Williams, E. (2023). Marketing capabilities and competitive performance in the SMEs context: A bi-theoretical perspective. *Journal of Small Business Strategy*, 33(2), 17-35. <https://doi.org/10.53703/001c.77458>
- Osman, A. M., Liu, Y., & Wang, Z. (2023). Influence of organizational culture on construction firms' performance: The mediating roles of innovation and marketing capabilities. *Buildings*, 13(2). <https://doi.org/10.3390/buildings13020308>
- Samans, R., & Nelson, J. (2022). *Sustainable enterprise value creation: Integrating ESG and stakeholder perspectives into business strategy*.
- Sanistasya, P. A., Syarifah, I., & Pitaloka, A. D. (2023). Digital platform capability and entrepreneurial marketing on SMEs performance in Indonesia's new capital city. *Journal of Entrepreneurship*, 2(1), 397-406..
- Sarstedt, M., Ringle, C. M., & Hair, J. F. (2017). Partial least squares structural equation modeling. In C. Homburg, M. Klarmann, & A. Vomberg (Eds.), *In C. Homburg, M. Klarmann, & A. Vomberg (Eds.), Handbook of market research*. Springer.
- Shlepneva, T. O., & Maletina, T. A. (2021). Marketing in construction as a systematic approach to managing the activities of a construction organization. *IOP Conference Series: Earth and Environmental Science*, 751(1). <https://doi.org/10.1088/1755-1315/751/1/012176>
- Sugiyono. (2016). *Metode penelitian kuantitatif, kualitatif, dan R&D [Quantitative, qualitative, and R&D research methods]* (2nd ed.).
- Tatiek, N., & Hendar, H. (2021). The effect of customer and competitor market sensing capability on business performance of SMEs: An empirical study in Indonesia. *Journal of Asian Finance*, 8(8), 601-612. <https://doi.org/10.13106/jafeb.2021.vol8.no8.0601>
- Vorhies, D., Morgan, R., & Autry, C. (2019). Product-market strategy and the marketing capabilities of the firm: Impact on market effectiveness and cash flow performance. *Strategic Management Journal*, 30, 1310–1334. <https://doi.org/10.1002/smj.798>
- Vorhies, D. W., & Morgan, N. A. (2005). Benchmarking marketing capabilities for sustainable competitive advantage. *Journal of Marketing*, 69(1), 80-94. <https://doi.org/10.1509/jmkg.69.1.80.55505>
- Wibowo, F. A., Knight, A., Gaol, S. L., & Indrawan, D. (2024). Uncovering financial performance and efficiency: A glimpse into Indonesia's state-owned enterprises (SOEs) construction industry debt and financial risk. *Preprints*. <https://doi.org/10.20944/preprints202406.0832.v1>
- Xu, Y., Chi, M., & Chong, H. Y. (2022). Interaction aspects of value co-creation process toward shared vision in megaprojects. *Buildings*, 12(11). <https://doi.org/10.3390/buildings12111956>
- Yang, Z., Jiang, Y., & Xie, E. (2019). Buyer-supplier relational strength and purchasing firm's marketing capability: An outside-in perspective. *Industrial Marketing Management*, 82, 27–37. <https://doi.org/10.1016/j.indmarman.2019.03.009>
- Yarbrough, L., Morgan, N. A., & Vorhies, D. W. (2021). The impact of product market strategy-organizational culture fit on business performance. *Journal of the Academy of Marketing Science*, 39(4), 555-573. <https://doi.org/10.1007/s11747-010-0238-x>
- Yolanda, R., Fauzi, A., & Puspitasari, D. (2022). Business performance indicators in construction SMEs: Sales growth, market reach, and profitability metrics. *Journal of Business and Economic Management*, 8(2), 44-58..