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THE EFFECT OF TOTAL QUALITY MANAGEMENT ON ORGANIZATIONAL PERFORMANCE WITH ORGANIZATIONAL INNOVATION CAPABILITY AS A MEDIATING VARIABLE IN CONSTRUCTION SERVICE COMPANIES IN EAST JAVA

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Abstract: The construction sector in East Java, which contributes 9.92% to Indonesia's GDP, faces persistent challenges such as financial losses, project delays, and a shortage of skilled labor. Despite the sector's strategic role, previous studies have produced inconsistent findings regarding the effect of Total Quality Management (TQM) on Organizational Performance (OP). To address this gap, this research examines the direct relationship between TQM and OP and investigates the mediating role of Organizational Innovation Capability (OIC). This study adopts a quantitative-explanatory design with data collected from 104 respondents representing construction service companies in East Java. The analysis was conducted using the SEM-PLS method with SmartPLS3 software. The findings reveal that TQM positively influences OP, while TQM also enhances OIC, which in turn contributes to OP. Furthermore, OIC is confirmed to partially mediate the relationship between TQM and OP, highlighting its importance in strengthening organizational outcomes. These results provide empirical evidence that improving innovation capability is essential for maximizing the benefits of TQM in the construction sector. Future studies are encouraged to examine other potential mediators and apply advanced testing methods to further enrich the understanding of organizational performance determinants.

Keywords: *Total Quality Management, Organizational Innovation Capability, Organization Performance*

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1. Introduction

The construction sector is an important pillar of the Indonesian economy, with East Java Province contributing 9.92% to the national GDP. However, both nationally and regionally, this industry faces complex challenges that threaten its organizational performance. Empirical evidence highlights various issues, such as financial losses incurred by large companies like PT WIKA and PT Waskita Karya, delays in completing 65% of major projects, and quality control failures in 45% of projects. Additionally, the main challenge in East Java is the dominance of unskilled labor, which hinders the achievement of quality standards and impedes company performance. This critical situation threatens the pace of industrial growth and the

achievement of national economic targets, making it urgent to identify effective strategies to improve Organizational Performance (OP).

As one of the strategies for improving performance, the implementation of Total Quality Management (TQM) is often considered a solution. The principles of TQM, such as training and certification initiatives undertaken by some companies in East Java, are believed to enhance resource utilization, ensure quality, and ultimately improve performance and competitive advantage. However, academic findings on the impact of TQM on OP are not always consistent. Some studies (e.g., Abbas & Kumari, 2023; Al-Dhaafri & Alosani, 2021) support a positive influence, while others (e.g., Qasarwi et al., 2017; Tajouri & Lakhal, 2024) report insignificant results, attributed to factors such as bureaucracy, short-term focus, and rapid industry dynamics. This inconsistency indicates a research gap and suggests that the TQM-OP relationship may not be direct but influenced by mediating variables.

Based on the Resource-Based View (RBV) theory, organizational performance is determined by unique and difficult-to-imitate internal capabilities. This theory implies that the success of TQM in improving OP may depend on its ability to build specific organizational capabilities. Therefore, this study introduces Organizational Innovation Capability (OIC) as a mediating variable that is hypothesized to bridge the relationship between TQM and OP. The logic is that the implementation of TQM (e.g., customer focus and continuous improvement) can create an environment that fosters innovation. This innovation capability then becomes a source of competitive advantage that directly impacts improvements in both financial and non-financial performance, as demonstrated by previous studies (e.g., Antunes et al., 2017; Sahoo, 2019) and the practical success of companies in East Java.

Based on this background, the research questions are: (1) Does TQM have a direct effect on OP in construction service companies in East Java?; (2) Does TQM have an effect on OIC?; (3) Does OIC have an effect on OP?; and (4) Does OIC mediate the effect of TQM on OP? Specifically, this study is designed to test the direct effect of TQM on OP and analyze the mediating role of OIC in this relationship within the context of construction service companies in East Java.

To answer these questions, this study employs a quantitative-explanatory approach using data from 104 construction service companies in East Java. The data were analyzed using Structural Equation Modeling (SEM) with the assistance of SmartPLS 3 software. The results confirm that TQM positively influences OP. Additionally, TQM was found to enhance OIC, which in turn significantly contributes to improving OP. The key finding of this study is that OIC acts as a partial mediator in the relationship between TQM and OP. These results provide empirical evidence that enhancing organizational innovation capabilities is a key mechanism for maximizing the benefits of TQM in improving performance in the construction sector.

2. Literature Review

2.1. Resource-Based View (RBV)

The Resource-Based View (RBV) explains that sustainable competitive advantage and organizational performance are derived from a firm's ability to effectively utilize valuable, rare, inimitable, and non-substitutable internal resources (Imran et al., 2019; Hashim et al., 2023). In the construction industry, RBV emphasizes the strategic role of internal resources such as human capital, technology, organizational processes, and knowledge in achieving superior performance, even under conditions of limited resources (Abu-Mahfouz, 2019).

RBV also highlights that management practices such as Total Quality Management (TQM) can function as strategic resources by strengthening organizational routines, work culture, and

innovation capability (Bashkar et al., 2020; Yusr, 2016). Through continuous improvement and quality-oriented processes, organizations accumulate intangible resources that enhance Organizational Innovation Capability, which in turn creates differentiation and competitive advantage (Iranmanesh et al., 2020). Empirical studies across various sectors confirm the robustness of RBV in explaining the relationship between internal capabilities, innovation, and performance, supporting its relevance in the construction sector.

2.2. Organizational Performance

Organizational Performance refers to an organization's ability to achieve its strategic objectives efficiently and effectively through optimal utilization of resources (Chaithanapat et al., 2022). Prior studies conceptualize performance as a multidimensional construct encompassing financial outcomes, operational efficiency, and product quality (Kabede Adem & Virdi, 2020; Yadeta et al., 2022).

Accordingly, organizational performance in this study is reflected through three dimensions: Financial Performance, Operational Performance, and Product Quality (Magdadi, 2020). These dimensions provide a comprehensive evaluation of how well organizations transform resources and capabilities into sustainable value creation.

2.3. Organizational Innovation Capability

Organizational Innovation Capability is defined as a firm's ability to continuously transform knowledge and ideas into innovative products, processes, marketing approaches, or organizational systems to enhance competitiveness and performance (Antunes et al., 2017; Purwanto et al., 2021). This capability reflects an organization's dynamic capacity to adapt to environmental changes and market demands.

Consistent with Migdadi (2020), this study conceptualizes innovation capability through four dimensions: Product Innovation, Process Innovation, Marketing Innovation, and Organizational Innovation. Together, these dimensions capture how organizations systematically manage innovation as a strategic capability rather than as isolated creative activities.

2.4. Total Quality Management (TQM)

Total Quality Management (TQM) is a comprehensive management philosophy focused on continuous improvement, customer satisfaction, and employee involvement across all organizational levels (Al-Dhaafri et al., 2016). TQM emphasizes that quality is a shared responsibility and a strategic tool for achieving long-term competitiveness (Mubarak et al., 2021).

To operationalize TQM, this study adopts seven dimensions: Top Management Support, Customer Focus, Employee Empowerment, Supplier Quality Management, Process Management, Continuous Improvement, and Education & Training (Kabede Adem & Virdi, 2020). These dimensions collectively translate TQM principles into systematic and measurable organizational practices.

Hypothesis

TQM and Organizational Performance

Extant literature consistently demonstrates that TQM has a positive and significant effect on Organizational Performance. TQM improves performance by enhancing process efficiency, reducing waste and operational costs, and ensuring consistent product quality (Pambreni et al.,

2019). Its customer-oriented approach also strengthens customer satisfaction and loyalty, contributing to improved market and financial outcomes (Mahfouz, 2019). Moreover, employee involvement and continuous training under TQM increase motivation and competence, which further supports performance improvement (Chienwattanasook & Jermsittiparsert, 2019). Therefore, the following hypothesis is proposed:
H1: Total Quality Management has a significant effect on Organizational Performance.

TQM and Organizational Innovation Capability

Previous studies indicate that TQM plays a critical role in fostering Organizational Innovation Capability. Continuous improvement and employee involvement embedded in TQM create an organizational culture that encourages creativity, learning, and openness to change (Bazrkar et al., 2022). By emphasizing customer feedback and data-driven decision-making, TQM enables organizations to identify innovation opportunities in products, processes, and services. Additionally, cross-functional collaboration promoted by TQM facilitates knowledge sharing and idea generation across departments, strengthening innovation capability (Hudnurkar et al., 2023). Thus, the following hypothesis is proposed:
H2: Total Quality Management has a significant effect on Organizational Innovation Capability.

Organizational Innovation Capability and Organizational Performance

Organizational Innovation Capability has been widely recognized as a key driver of Organizational Performance. Product and process innovations enhance competitiveness, efficiency, and cost effectiveness, leading to improved financial and operational outcomes (AlTaweel & Al-Hawary, 2021; Ferreira et al., 2020). Innovation also enables organizations to adapt to market and technological changes, ensuring long-term sustainability and growth (Maldonado et al., 2019).
Accordingly, this study proposes:
H3: Organizational Innovation Capability has a significant effect on Organizational Performance.

The Mediating Role of Organizational Innovation Capability

Prior research suggests that Organizational Innovation Capability mediates the relationship between TQM and Organizational Performance. While TQM directly enhances performance through quality improvement and efficiency, innovation capability strengthens this effect by transforming continuous improvement efforts into adaptive and value-adding innovations (Donate et al., 2020; Bazrkar et al., 2022). Innovation capability introduces flexibility and creativity into TQM practices, enabling organizations to respond more effectively to environmental changes and overcome the rigidity often associated with standardized quality systems (Teixeira et al., 2022). Therefore, this study proposes:
H4: Organizational Innovation Capability mediates the relationship between Total Quality Management and Organizational Performance.

3. Research Method

This study adopts a positivist paradigm with an explanatory quantitative approach to examine the causal relationship between variables (Djamba & Neuman, 2002; Sekaran & Bougie, 2016). The design is cross-sectional, using a digital questionnaire-based survey distributed to construction companies in East Java as the unit of analysis to collect primary data within a

specific time period (Sekaran & Bougie, 2016). This strategy was chosen to minimize researcher intervention and obtain data in a natural context, where the questionnaire was distributed through the human capital division or directly to top management to ensure the quality and relevance of data from competent respondents (Sekaran & Bougie, 2016).

There are three main variables: Total Quality Management (TQM) as the exogenous variable (X), Organization Performance as the endogenous variable (Y), and Organizational Innovation Capability as the mediating variable (Z), which is hypothesized to mediate the relationship between X and Y (Sekaran & Bougie, 2016). The research sample consisted of 100 companies, selected from a population of 23,319 construction companies in East Java using probabilistic and purposive sampling based on specific criteria. Data were analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM) with SmartPLS 3, chosen for its ability to test complex multivariate relationships, mediation effects, and flexibility with small sample sizes and non-normally distributed data (Hair et al., 2019, 2022). Hypothesis testing, including mediation analysis (Baron & Kenny, 1986; Nitzl et al., 2016), was conducted using bootstrapping procedures to evaluate the significance of path coefficients.

4. Results and Discussion

Respondent Characteristics

The study respondents were 104 construction companies in East Java that met the purposive sampling criteria. The majority of companies had been established for 10–15 years (51.92%), followed by 5–10 years (36.54%), and >15 years (11.54%). Respondents were represented by strategic management, with the most positions being COO (24.04%), followed by Board of Directors (16.35%), CEO (15.38%), Commissioner (15.38%), Head of Human Capital (15.38%), and CFO (13.46%). The types of respondent companies varied, ranging from general contractors, material suppliers, and other related fields.

Table 1. Summary of Respondent Characteristics

Characteristics	Category	Amount	Percentage
Company Establishment Period	5–10 years	38	36.54%
	10–15 years	54	51.92%
	>15 years	12	11.54%
Representative Position	COO	25	24.04%
	Board of Directors	17	16.35%
	CEO	16	15.38%
	Commissioner	16	15.38%
	Head of Human Capital	16	15.38%
	CFO	14	13.46%
Type of Company Business	General contractor	40	38.46%
	Subcontractor	26	25.00%
	Material provider	24	23.08%
	Construction consultant	14	13.46%
Number of Company Employees	1-50 employees	24	23.08%
	51-100 employees	28	26.92%
	101-500 employees	38	36.54%
	more than 500 employees	14	13.46%
Company Annual Revenue	Under 10 Billion	16	15.38%
	Rp. 10 billion - Rp. 50 billion	51	49.04%

	Rp. 50 billion - Rp. 100 billion	31	29.81%
	More than Rp. 100 billion	6	5.77%

Source: Processed Data (2025)

The majority of companies participating in this study are engaged in general contracting, with the highest percentage at 38.46% (40 companies). Subcontractors followed at 25% (26 companies), reflecting the high demand for technical specialization in the construction project supply chain. The material provider category contributed 23.08% (24 companies), while construction consultants were the group with the lowest percentage, at 13.46% (14 companies). This distribution indicates that the industry structure is still dominated by the core sector (general contractors), with supporting sub-sectors (subcontractors and material providers) playing a key role, while construction consultants' involvement in the industry ecosystem is relatively less optimal.

Geographically, the largest number of respondents was concentrated in Surabaya, contributing 23.08% (24 companies), reflecting its position as the economic center and epicenter of the construction industry in East Java. Jember Regency came in second with 10.58% (11 companies), followed by Bojonegoro (6.73% or 7 companies) and Banyuwangi (5.77% or 6 companies), both of which were driven by strategic infrastructure projects and the development of special economic zones. Conversely, the lowest participation came from 10 regencies/cities, namely Bangkalan, Probolinggo, Sumenep, and the cities of Blitar and Pasuruan, each contributing only 0.96% (1 company). While there are differences in contributions between regions, these data overall validate the diversity of respondents' origins, spanning 24 different regions, though still dominated by metropolitan areas and key buffer regencies in the provincial economy.

Description of Respondents' Answers

Table 2. Summary of Respondents' Answer Descriptions (Organizational Performance)

Organization Performance				
Variable	**Mean**	**Scale min**	**Scale max**	**Standard Deviation**
FP1	4.35	1	5	0.64
FP2	4.31	1	5	0.67
FP3	4.10	1	5	0.81
FP4	4.25	1	5	0.73
Operational Performance				
Variable	**Mean**	**Scale min**	**Scale max**	**Standard Deviation**
OP1	4.25	1	5	0.68
OP2	4.23	1	5	0.77
OP3	4.18	1	5	0.76
OP4	4.28	1	5	0.72
Product Quality				
Variable	**Mean**	**Scale min**	**Scale max**	**Standard Deviation**
PQ1	4.29	3	5	0.72
PQ2	4.28	4	2	0.79
PQ3	4.15	4	3	0.79
PQ4	4.12	4	2	0.87

Source: Processed Data (2025)

Respondents' perceptions were measured using a five-point Likert scale. The descriptive analysis shows that all indicators of Organizational Performance (OP), Organizational Innovation Capability (OIC), and Total Quality Management (TQM) fall within the high category, indicating favorable respondent evaluations across all constructs.

For Organizational Performance (Table 2), the highest mean values were observed in the Financial Performance, Operational Performance, and Product Quality dimensions, suggesting that companies generally perceive strong profitability, operational efficiency, and product quality. However, relatively higher standard deviations on several indicators indicate variations in performance perceptions, likely influenced by differences in project characteristics, company size, and operational complexity.

Table 3. Summary of Respondents' Answer Descriptions for Organizational Innovation Capability

Product Innovation				
Variable	**Mean**	**Scale min**	**Scale max**	**Standard Deviation**
PI1	4.12	1	5	0.71
PI2	4.13	1	5	0.75
PI3	3.98	1	5	0.87
PI4	4.13	1	5	0.72
Process Innovation				
Variable	**Mean**	**Scale min**	**Scale max**	**Standard Deviation**
RI1	3.97	1	5	0.77
RI2	4.08	1	5	0.73
RI3	4.13	1	5	0.75
RI4	4.15	1	5	0.8
Marketing Innovation				
Variable	**Mean**	**Scale min**	**Scale max**	**Standard Deviation**
MI1	4.03	1	5	0.77
MI2	4.16	1	5	0.73
MI3	4.04	1	5	0.84
MI4	4.14	1	5	0.79
Organizational Innovation Capability				
Variable	**Mean**	**Scale min**	**Scale max**	**Standard Deviation**
OI1	4.20	1	5	0.69
OI2	4.25	1	5	0.66
OI3	4.12	1	5	0.80
OI4	4.26	1	5	0.65

Source: Processed Data (2025)

Regarding Organizational Innovation Capability (Table 3), all dimensions—product, process, marketing, and organizational innovation—also recorded high mean scores. Product and organizational innovation showed the strongest evaluations, reflecting companies' ability to integrate knowledge and respond to competitive dynamics. Meanwhile, slightly lower mean values and higher variability in certain indicators suggest uneven resource allocation and differences in innovation flexibility among firms.

Table 4. Summary of Respondents' Answer Descriptions for Total Quality Management

Top Management Support				
Variable	**Mean**	**Scale min**	**Scale max**	**Standard Deviation**
TQ1	4.17	1	5	0.80
TQ2	4.07	1	5	0.78
TQ3	3.93	1	5	0.90
TQ4	4.07	1	5	0.79
TQ5	4.15	1	5	0.81
TQ6	4.13	1	5	0.76
TQ7	4.08	1	5	0.76
Customer Focus				
Variable	**Mean**	**Scale min**	**Scale max**	**Standard Deviation**
CF1	4.06	1	5	0.80
CF2	4.03	1	5	0.97
CF3	4.04	1	5	0.84
CF4	4.19	1	5	0.74
CF5	3.94	1	5	1.00
CF6	4.12	1	5	0.88
CF7	3.92	1	5	0.84
Employee Empowerment & Involvement				
Variable	**Mean**	**Scale min**	**Scale max**	**Standard Deviation**
EE1	4.08	1	5	0.90
EE2	3.99	1	5	0.85
EE3	4.14	1	5	0.85
EE4	3.94	1	5	0.77
EE5	3.99	1	5	0.78
EE6	3.98	1	5	0.80
EE7	4.12	1	5	0.80
Supplier Quality Management				
Variable	**Mean**	**Scale min**	**Scale max**	**Standard Deviation**
SQ1	4.09	1	5	0.76
SQ2	3.98	1	5	0.85
SQ3	4.08	1	5	0.77
SQ4	4.12	1	5	0.78
SQ5	4.10	1	5	0.79
SQ6	4.05	1	5	0.79
Process Management				
Variable	**Mean**	**Scale min**	**Scale max**	**Standard Deviation**
PM1	4.09	1	5	0.75
PM2	4.16	1	5	0.76
PM3	4.11	1	5	0.77
PM4	4.15	1	5	0.78
PM5	4.09	1	5	0.76
PM6	4.12	1	5	0.85

Continuous Improvement				
Variable	**Mean**	**Scale min**	**Scale max**	**Standard Deviation**
CI1	3.93	1	5	0.83
CI2	4.11	1	5	0.87
CI3	4.01	1	5	0.83
CI4	4.17	1	5	0.84
CI5	3.94	1	5	0.77
Education & Training				
Variable	**Mean**	**Scale min**	**Scale max**	**Standard Deviation**
ET1	3.92	1	5	0.88
ET2	3.99	1	5	0.79
ET3	4.16	1	5	0.80
ET4	4.13	1	5	0.72
ET5	4.08	1	5	0.73

Source: Processed Data (2025)

For Total Quality Management (Table 4), all seven dimensions demonstrated high respondent agreement, indicating strong TQM implementation across construction companies in East Java. Top Management Support and Process Management received the highest evaluations, highlighting management commitment and structured operational control. In contrast, Education & Training and Customer Focus showed greater variability, suggesting differences in training investment and customer engagement practices across companies.

Internal Consistency Reliability

Table 5. Results of Internal Consistency Reliability – Second Order Construct

Variables	**Dimensions**	**Cronbach's Alpha**	**Composite Reliability**	
			Rho_A	**Rho_C**
Organization Performance	*Financial Performance*	0.871	0.880	0.921
	Operational Performance	0.916	0.920	0.941
	Product Quality	0.934	0.936	0.953
Organizational Innovation Capability	*Product Innovation*	0.915	0.917	0.940
	Process Innovation	0.869	0.873	0.920
	Marketing Innovation	0.882	0.886	0.919
	Organizational Innovation	0.925	0.931	0.947
Total Quality Management	*Customer Focus*	0.934	0.939	0.947
	Continuous Improvement	0.902	0.903	0.928
	Employee Empowerment & Involvement	0.923	0.924	0.939

Education & Training	0.875	0.877	0.914
Process Management	0.936	0.939	0.950
Supplier Quality Management	0.926	0.928	0.942
Top Management Support	0.926	0.928	0.942

Source: Processed Data (2025)

The measurement model was evaluated by assessing internal consistency reliability, convergent validity, and discriminant validity. As shown in Tables 5–10, all first-order and second-order constructs demonstrated satisfactory reliability, with Cronbach's Alpha, rho_A, and Composite Reliability values exceeding the recommended threshold of 0.70 (Hair et al., 2022). Convergent validity was also established, as all Average Variance Extracted (AVE) values were above 0.50, indicating adequate indicator representation of their respective constructs. Furthermore, discriminant validity was confirmed using the Heterotrait–Monotrait (HTMT) ratio, with all values below the recommended threshold of 0.85. Overall, these results confirm that the measurement model is reliable and valid, and therefore suitable for subsequent structural model analysis.

R-Square

Table 6. Evaluation of Explanatory Power Model (R-Square)

	R Square	R Square Adjusted
Organizational Innovation Capability	0.232	0.225
Organization Performance	0.732	0.727

Source: Processed Data (2025)

The statistical analysis results presented in Table 11 reveal that the *Organizational Innovation Capability variable* shows an Adjusted R-Square value of 0.225. This figure indicates that 22.5% of the variation in the variable can be explained by the predictors in the model, namely *Total Quality Management* (TQM). This value reflects the model's weak explanatory power, while the remaining (77.5%) is influenced by external factors not covered in the study. On the other hand, the *Organization Performance variable* recorded an Adjusted R-Square of 0.727, which means that 72.7% of the variation in organizational performance can be explained by the predictors in the model (Organizational *Innovation Capability* and *Total Quality Management),* both through direct and indirect influences. This value indicates a moderate to high explanatory power of the model, confirming that the combination of predictor variables used is effective in mapping the dynamics of company performance.

Q-Square (Goodness of Fit Model)

The suitability of the structural model (inner model) is assessed using the predictive relevance (Q^2) indicator. A Q^2 value > 0 indicates that the model has relevant predictive ability to the empirical data. Furthermore, the model's explanatory power is also evaluated using the R^2 (R-Square) value for each endogenous variable. In this study, the R^2 values for each endogenous variable are shown in Table 12 below.

Table 7. Evaluation of Goodness of Fit (Q-Square)

	SSO	SSE	Q^2 (=1-SSE/SSO)
Organization Performance	1144,000	516,124	0.549
Organizational Innovation Capability	1560,000	1305.083	0.163

Source: Processed Data (2025)

Based on the analysis results, it was found that the endogenous variable *Organization Performance* recorded a Q-Square value of 0.549, which far exceeds the minimum threshold (>0). This indicates that the structural model has very strong predictive relevance in explaining the variable. Specifically, approximately 54.9% of the variation in *Organization Performance* can be predicted by the combination of exogenous variables in the model. On the other hand, the variable *Organizational Innovation Capability* showed a Q-Square value of 0.163. Although lower, this value is still above zero, indicating that the model still has adequate predictive relevance, with 16.3% of the variation in the variable can be explained by the predictors used. This difference illustrates that the contribution of predictor variables is more dominant in influencing *Organization Performance* than *Organizational Innovation Capability,* but both constructs still meet the basic requirements of the model's predictive ability.

Hypothesis Testing

The significance of the path influence in the structural model is evaluated through the t-statistic value generated from the bootstrapping procedure. Researchers check the significance of the hypothesis by comparing the calculated t-statistic value with the critical t-table value at a significance level of $\alpha = 0.05$ (5%), which has a cut-off value of 1.96. If the obtained t-statistic is greater than the critical value (t-statistic > 1.96), the hypothesis is declared accepted. Alternatively, the hypothesis can be considered significant if the p-value is less than 0.05. Thus, these two approaches—t-statistic and p-value—form the basis for statistical decision-making in confirming or rejecting the relationship between variables in the study.

Table 8. Hypothesis Test Results

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values
DIRECT EFFECT					
Total Quality Management -> Organization Performance (H1)	0.384	0.394	0.082	4,663	**0.000**
Total Quality Management -> Organizational Innovation Capability (H2)	0.482	0.471	0.080	6,025	**0.000**
Organizational Innovation Capability -> Organization Performance (H3)	0.601	0.597	0.074	8.135	**0.000**
DIRECT EFFECT					
Total Quality Management -> Organizational Innovation Capability -> Organization Performance (H4)	0.285	0.277	0.059	4,815	**0.000**

Source: Processed Data (2025)

The following are the results of hypothesis testing on the structural model:

The Effect of *Total Quality Management* on *Organizational Performance*

The test results show that *Total Quality Management* has a positive and significant effect on *Organizational Performance.* The path coefficient value (Original Sample) of 0.384 indicates that every one unit increase in *Total Quality Management* will increase *Organizational Performance* by 0.384 units. This effect is statistically significant because the T-statistic value (4.663) is greater than the t-table (1.96) and the P-value (0.000) is smaller than the alpha significance level of 0.05. Thus, H1 is accepted.

The Influence of *Total Quality Management* on *Organizational Innovation Capability*

The test results show that *Total Quality Management* has a positive and significant effect on *Organizational Innovation Capability.* The path coefficient value (Original Sample) of 0.482 indicates that every one unit increase in *Total Quality Management* will increase *Organizational Innovation Capability* by 0.482 units. This effect is statistically significant because the T-statistic value (6.025) is greater than the t-table (1.96) and the P-value (0.000) is smaller than the alpha significance level of 0.05. Thus, H2 is accepted.

The Influence *of Organizational Innovation Capability* on *Organizational Performance*

The test results show that *Organizational Innovation Capability* has a positive and significant effect on *Organizational Performance.* The path coefficient value (Original Sample) of 0.601 indicates that every one unit increase in *Organizational Innovation Capability* will increase *Organizational Performance* by 0.601 units. This effect is statistically significant because the T-statistic value (8.135) is greater than the t-table (1.96) and the P-value (0.000) is smaller than the alpha significance level of 0.05. Thus, H3 is accepted.

The Mediating Role *of Organizational Innovation Capability* in the Influence of *Total Quality Management* on *Organizational Performance*

Testing the indirect effect of *Total Quality Management* on *Organizational Performance* through *Organizational Innovation Capability* shows a positive and significant effect. The indirect path coefficient value (Original Sample) of 0.285 indicates that *Total Quality Management* indirectly increases *Organizational Performance* by 0.285 units through the intermediary of *Organizational Innovation Capability.* This indirect effect is statistically significant, as evidenced by the T-statistic value (4.815) which is greater than the t-table (generally 1.96 at alpha 0.05) and the P-value (0.000) which is much smaller than the significance level of alpha 0.05. Thus, H4 is Accepted.

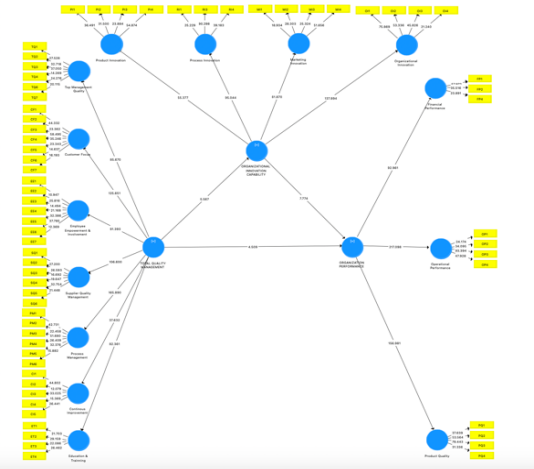

Figure 1. Bootstrapping Results
Source: Processed Data (2025)

The Effect of Total Quality Management on Organizational Performance

The results of the study indicate that Total Quality Management (TQM) has a positive and significant effect on Organizational Performance with a path coefficient of 0.384 and a p-value of 0.000. This confirms that the implementation of TQM has made a real contribution to improving organizational performance in the construction sector of East Java. This finding is consistent with previous studies that confirmed the positive relationship between TQM and organizational performance in various industrial sectors. In the context of intense competition, TQM becomes an important strategy to differentiate companies that are able to survive and thrive.

The implementation of TQM in construction companies has been shown to be highly dependent on top management commitment. The Top Management Support (TQ1) indicator obtained the highest average score (4.17), indicating the importance of leadership support in achieving quality goals. Furthermore, the Process Management (PM2) indicator, with a score of 4.16, shows that efficient process management can increase productivity and reduce errors. The F-square analysis result of 0.424 indicates that the influence of TQM on Organizational Performance is in the strong category. Thus, TQM can be seen as a strategic foundation that strengthens the company's performance and competitiveness.

The Effect of Total Quality Management on Organizational Innovation Capability

The results of the second hypothesis test show that TQM also has a significant positive effect on Organizational Innovation Capability with a path coefficient of 0.482 and a t-statistic of 6.025. This finding is in line with the literature stating that TQM not only improves quality but also opens up space for more sustainable innovation. In the construction industry, TQM is an important foundation for overcoming the limitations of outdated technology and encouraging the adoption of new, more competitive practices.

The most prominent indicators supporting innovation are Supplier Quality Management (SQ3) and Employee Empowerment & Involvement (EE1), each with a score of 4.08. Strong supplier relationships provide companies with access to innovative materials and technologies, while employee empowerment encourages the contribution of creative ideas for product and process improvements. More mature companies, aged between 10–15 years and medium-sized (100–500 employees), demonstrate greater readiness to integrate TQM principles and innovate effectively.

The Influence of Organizational Innovation Capability on Organizational Performance

The third hypothesis found that Organizational Innovation Capability has the strongest influence on Organizational Performance with a path coefficient of 0.601 and an F-square of 1.037. This indicates that the ability to innovate contributes more to performance than the direct implementation of TQM. Innovation is not only related to new technology or products, but also includes process changes, operational efficiency, and marketing strategies.

Organizational Innovation (OI4) indicator, with an average score of 4.26, emphasizes the importance of a company's ability to respond to competitors' innovative strategies. Furthermore, Process Innovation (RI4), with a score of 4.15, indicates that improvements in work methods and production technology play a significant role in reducing costs, increasing efficiency, and maintaining project timeliness. This aligns with the *Resource-Based View* (RBV) theory, where innovation is viewed as a valuable, rare, and difficult-to-imitate resource, thus providing a sustainable competitive advantage.

The Mediating Role of Organizational Innovation Capability

The results of the fourth hypothesis reveal that Organizational Innovation Capability plays a partial mediation role in the relationship between TQM and Organizational Performance,

with an indirect path coefficient of 0.285. This means that TQM accompanied by increased organizational innovation produces a greater impact on performance. In dynamic market conditions, TQM is not enough to focus only on quality control; companies must also encourage innovation to remain competitive.

These findings are highly relevant to the characteristics of the construction industry in East Java, which is not only required to complete projects on time but also to adapt to environmentally friendly technologies and efficient construction methods. Without innovation, TQM implementation risks stagnation. Conversely, when TQM is integrated with innovation, companies can maximize quality while strengthening sustainable performance.

From the RBV perspective, organizational innovation driven by TQM is a strategic resource that is difficult to imitate and provides a sustainable competitive advantage. Construction companies that successfully integrate TQM practices with a culture of innovation will excel in managing projects, maintaining efficiency, and improving the quality of work. Thus, TQM integrated with innovation is not only a short-term strategy for improving performance, but also the foundation for long-term sustainability and growth in the construction industry.

5. Conclusion

1. This study confirms that Total Quality Management (TQM) plays a strategic role in enhancing organizational performance in construction service companies in East Java. The findings demonstrate that performance improvement is achieved not only through direct quality management practices but also through the development of organizational innovation capability, which acts as a crucial partial mediator. This highlights the importance of integrating quality management and innovation to achieve sustainable competitive advantage.
2. Organizational innovation capability emerges as a key mechanism that amplifies the impact of TQM on performance. The ability to transform continuous improvement initiatives into product, process, marketing, and organizational innovations enables firms to respond more effectively to competitive pressures and industry dynamics. This result strengthens the Resource-Based View by positioning TQM-driven innovation as a valuable internal capability.
3. From a managerial perspective, the study underscores the need for holistic and practical TQM implementation. Construction companies should embed quality principles across all project stages, strengthen leadership commitment and employee involvement, and support innovation through structured R&D initiatives, technology adoption, and integrated performance monitoring systems. Such alignment ensures that quality management initiatives translate into measurable performance outcomes.
4. Despite its contributions, this study has several limitations related to sample scope, respondent characteristics, and data collection methods. Future research is encouraged to focus on specific company sizes, incorporate demographic-based comparative analyses, and adopt mixed-method approaches to deepen understanding and enhance the generalizability of findings.

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