The Role of Organizational Culture in Driving Knowledge Management and Reducing Customer Complaints: A PLS-Sem Study at PT Xyz

Rizki Kurniawan[1], Aji Baskoro[2], Dana Indra Sensuse[3], Nadya Safitri[4], Sofian Lusa[5]

[1,2,3,4] Universitas Indonesia, Indonesia,
[5] Institut Pariwisata Trisakti, Indonesia
Email: rizki.kurniawan31@ui.ac.id, aji.baskoro@ui.ac.id, dana@cs.ui.ac.id, nadya.safitri@ui.ac.id, sofian.lusa@iptrisakti.ac.id

ABSTRACT

High rates of unresolved customer complaints and the absence of structured Key Performance Indicators (KPI) and transparent incentives present significant challenges for PT XYZ, a telecommunications company. These issues undermine employee motivation, operational efficiency, and customer satisfaction, ultimately threatening the company's profitability and competitive positioning. This study analyzes how Organizational Culture influences Knowledge Management, impacting KPI, System Incentives, and Customer Complaints in a telecommunications company. Using the Partial Least Squares Structural Equation Modeling (PLS-SEM) approach, the findings reveal that Organizational Culture significantly enhances Knowledge Management, which serves as a critical mediator in driving organizational effectiveness. The study highlights the strong and significant relationships between Knowledge Management and internal processes, such as KPI and incentive systems, as well as its moderate impact on reducing customer complaints. The results confirm the mediating role of Knowledge Management in linking Organizational Culture to both operational efficiency and customer satisfaction. These findings emphasize the importance of fostering a strong organizational culture to support knowledge-sharing practices, enabling companies to achieve their strategic goals. Future research could expand on these findings by exploring additional mediating variables or applying the model to other industries.

INTRODUCTION

The telecommunications industry thrives in a dynamic environment characterized by intense competition, rapid technological advancements, and evolving customer expectations (Grajek et al., 2019; Henry et al., 2019; Mozer et al., 2000; Peters, 2022). To succeed in this landscape, companies must not only deliver high-quality services and innovative solutions but also foster an organizational culture that promotes agility, customer-centricity, and continuous improvement (Malik et al., 2021). A strong organizational culture—defined as the shared values, beliefs, and norms that guide employee behavior—plays a pivotal role in shaping organizational effectiveness, driving employee engagement, and ultimately influencing customer satisfaction (Al-Ali et al., 2020).

This research examines the critical relationship between organizational culture, knowledge management, Key Performance Indicators (KPIs), and customer satisfaction within a telecommunications company. Organizational culture is broadly understood as the shared values, beliefs, and norms that influence how employees behave and interact within an organization. It shapes how firms approach knowledge management and aligns organizational goals with employee behavior to drive efficiency and innovation. Prior research emphasizes that a strong organizational culture fosters mutual trust, collaboration, and learning, enabling effective knowledge sharing and application across teams (Lam et al., 2021). However, many organizations struggle to leverage their culture effectively, which can hinder the success of knowledge management initiatives and negatively impact customer satisfaction (Lam et al., 2021).

PT XYZ, the telecommunications company under study, faces significant challenges that hinder its ability to effectively meet customer needs and achieve its strategic objectives. Internal data reveals a high rate of customer complaints, exceeding the company's target significantly. Specifically, the complaint rate for active customers is 15.3%, surpassing the target of 5%, while prospective customers report a complaint rate of 56%, against an expected target of 1% (Z, 2024). These figures highlight a critical gap between customer expectations and service delivery, potentially impacting the company's reputation and market share (Keiningham et al., 2021). Furthermore, the company lacks a structured and transparent performance appraisal system (KPIs) and a clear incentive framework for its employees. This deficiency can lead to demotivation, reduced productivity, and hinder knowledge-sharing practices crucial for organizational learning and innovation (Bohlander & Snell, 2023).

PT XYZ faces significant strategic challenges in enhancing profitability through effective customer management and employee performance. The high rate of unresolved customer complaints not only diminishes customer loyalty but also contributes to increased churn, directly impacting revenue and market share. Furthermore, the absence of a structured performance appraisal system (KPIs) and transparent incentive mechanisms undermines employee accountability and motivation, leading to inefficiencies in customer handling and operational processes (Aguinis, 2013; DeNisi & Murphy, 2017). Ineffective knowledge management practices exacerbate these issues by hindering the organization's ability to address customer concerns proactively and foster innovation. Consequently, these challenges jeopardize the company's reputation in a competitive market, weakening its strategic positioning and necessitating additional resources for customer acquisition to offset losses from existing customers.

Industry-wide data show that these issues are not unique to PT XYZ. For example, a 2023 report by GSMA and Deloitte indicated that over 60% of telecom operators in Southeast Asia struggle with implementing transparent KPIs and face rising volumes of unresolved customer complaints. Additionally, McKinsey (2022) noted that poor alignment between culture and performance systems is a top contributor to churn and low employee productivity in telecom firms globally. These trends highlight a growing need for structured, culture- and knowledge-driven approaches to performance and customer management (McKinsey, 2025). Moreover, this research contributes to the broader body of knowledge in organizational studies by examining the complex interplay between organizational culture and key organizational processes in a dynamic industry context.

METHOD

This research employs a quantitative approach utilizing Partial Least Squares Structural Equation Modeling (*PLS-SEM*) to analyze the relationships among organizational culture, knowledge management, Key Performance Indicators (*KPIs*), and customer complaints. This approach enables the study to evaluate both direct and indirect effects, with a focus on the mediating role of knowledge sharing and application in influencing organizational outcomes.
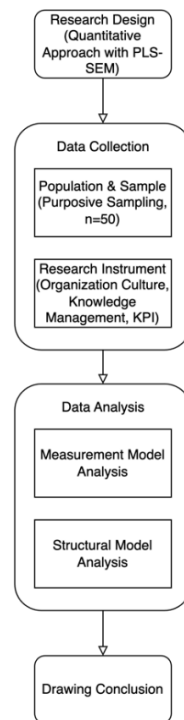
Figure 1. The Research Process.

Figure 1 illustrates the research process employed in this study. Following a quantitative approach, the research utilizes *Partial Least Squares Structural Equation Modeling (PLS-SEM)* for data analysis. The process commenced with data collection from a purposive sample of 66 participants. Data were gathered using a research instrument designed to measure organizational culture, knowledge management, and Key Performance Indicators (*KPIs*). Subsequently, the collected data underwent a rigorous analysis process, beginning with the evaluation of the measurement model to assess the reliability and validity of the constructs. This was followed by an examination of the structural model to determine the relationships between the constructs. The final step involved drawing conclusions based on the findings obtained from the analysis.

This structured approach reflects a *deductive* methodology, where existing theories and models guide hypothesis testing through empirical data. Compared to exploratory approaches, which often start with open-ended data to develop theories, this model emphasizes theory validation, making it especially suitable for studies using *PLS-SEM*. Furthermore, the division between measurement model analysis and structural model analysis is a standard practice in *PLS-SEM* studies, allowing for separate evaluations of construct validity and hypothesis testing. This reinforces methodological rigor and ensures the reliability of results before interpreting causal relationships between variables (J. F. Jr. Hair et al., 2020).

Data Collection

The data for this study were collected through a structured survey distributed to employees across various departments within the Telecommunication Industry:

1. Population and Sample
   The population targeted in this study included employees with involvement in project management, KPI design, or customer interactions. Using purposive sampling, a minimum sample size of 40 respondents was determined to ensure adequate statistical power for PLS-SEM analysis.

2. Instrument

The survey instrument was designed based on the organization's culture and extended to include indicators measuring knowledge management, KPI, and customer complaints. All items were measured on a 5-point Likert scale, ranging from 1 ("Strongly Disagree") to 5 ("Strongly Agree").

3. Data Collection Procedure

The survey was distributed electronically via email and organizational communication channels. To encourage honest responses, participants were assured of confidentiality and anonymity.

Construction and Indicators

The constructs measured in this study included the following:

1. Independent Variable

Organizational Culture (6 items, e.g., "Our organization members are satisfied by the degree of collaboration").

2. Mediating Variables

Knowledge Management (4 items, e.g., "Employees actively share knowledge and experiences").

3. Dependent Variables

a. KPI (3 items, e.g., "I understand the objectives of the KPI applied in the organization").

b. System Incentives (3 items, e.g., "Incentives are awarded transparently based on measurable performance").

c. Customer Complaints (3 items, e.g., "Customer complaints are handled effectively and promptly").

Data Analysis

The analysis was conducted in two stages using SmartPLS software:

1. Measurement Model Analysis

To validate the reliability and validity of the constructs:

a. Internal Consistency: Assessed using Cronbach's Alpha, with a threshold value of >0.60 and Composite Reliability (CR), with a threshold value of >0.70.

b. Convergent Validity: Evaluated using Average Variance Extracted (AVE), with values >0.50 indicating sufficient convergence.

c. Discriminant Validity: Verified using the Fornell-Larcker Criterion, ensuring that each construct is distinct from others.

2. Structural Model Analysis

The structural model was evaluated to test the hypothesized relationships:

a. Path Coefficients (β): Significance tested using bootstrapping with 5,000 subsamples. In this study, the bootstrapping procedure in PLS-SEM was conducted using 5,000 subsamples. This number is widely recommended in the literature to ensure the stability and reliability of parameter estimates, particularly when assessing the significance of path coefficients and constructing confidence intervals. Hair et al. (2011) suggest that using 5,000 bootstrap samples provides a robust basis for statistical inference in PLS-SEM analyses (J. F. Hair et al., 2011).

b. Explained Variance (R^2): Indicates the percentage of variance in dependent variables explained by the independent variables.

c. Mediation Analysis: The mediating effects of knowledge management were tested using Variance Accounted For (VAF) to determine the extent of mediation (partial or full).

Research Framework

The research framework positions *Organizational Culture (OC)* as the independent variable, *Knowledge Management (KM)* as the mediator, and *Key Performance Indicators (KPI)*, *System Incentives (SI)*, and *Customer Complaints (CC)* as the dependent variables. The framework outlines two primary hypotheses based on the literature review:

H1: *Organizational Culture (OC)* significantly influences *Knowledge Management (KM)*, which in turn impacts *Customer Complaints (CC)*.

This hypothesis emphasizes the role of *OC* in fostering an environment conducive to knowledge sharing and application, thereby reducing customer dissatisfaction. The pathway suggests both direct and indirect effects, where *OC* enhances *KM*, leading to improved customer outcomes by addressing and resolving complaints more effectively.

H2: *Organizational Culture (OC)* impacts *Knowledge Management (KM)*, which supports the development of *Key Performance Indicators (KPI)* and *System Incentives (SI)*.

This hypothesis highlights the critical role of *KM* as a mediator, enabling *OC* to influence organizational performance measures. Specifically, *KM* facilitates structured *KPI* development that aligns with organizational goals and supports the implementation of transparent and equitable incentive systems. The pathways in this framework validate the mediating role of *KM* in linking *OC* to both internal (*KPI*, *SI*) and external (*CC*) organizational outcomes.

Overall, the framework suggests that *Organizational Culture* serves as a foundational element influencing *Knowledge Management*, which acts as a bridge to achieve both operational and strategic goals. This aligns with prior studies that emphasize the importance of a strong culture and effective knowledge management for organizational success [1], [3], [7], [8], [9], [10].
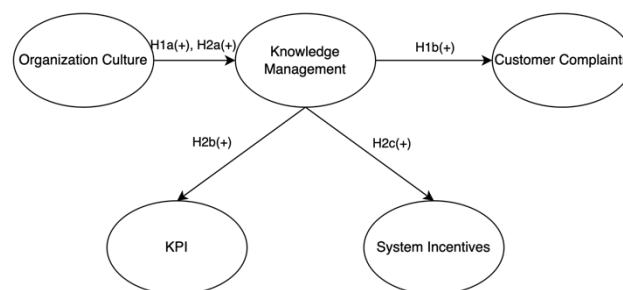

Figure 2. Proposed Research Framework.

RESULT AND DISCUSSION

Demographic Characteristics

Before analyzing the structural model, it is essential to understand the characteristics of the respondents, as these demographic factors can influence how individuals perceive organizational culture, knowledge management practices, and company performance. Examining demographic attributes such as age, gender, education level, and years of service helps ensure the sample is representative and provides insight into the background context of the responses. This information also assists in interpreting patterns in the data and assessing the generalizability of the results.

The proposed research framework illustrates the relationship between Organizational Culture, Knowledge Management, and three key performance dimensions: Customer

Complaints, Key Performance Indicators (KPIs), and System Incentives (SI). At the core of the model, Knowledge Management (KM) acts as a mediating variable that links organizational culture to these performance outcomes. Organizational Culture (OC) refers to the shared values, norms, and practices within an organization that shape how employees interact, make decisions, and engage in knowledge-related behaviors. A culture that promotes trust, openness, and continuous learning tends to foster more effective knowledge-sharing practices.

Knowledge Management is conceptualized in this research as the process through which organizational knowledge is created, shared, and applied to improve operations and decision-making. The quality and intensity of KM practices are expected to directly influence both employee performance metrics and external customer outcomes. One of the outcome variables, Customer Complaints (CC), serves as an indicator of service quality and customer satisfaction. It reflects the frequency and severity of issues raised by customers, which can often be mitigated through better organizational learning and knowledge dissemination.

The framework also examines how KM affects Key Performance Indicators (KPIs)—quantifiable metrics that assess how well employees or departments meet strategic goals, such as productivity levels, response times, or customer satisfaction rates. Finally, the concept of System Incentives (SI) is integrated to understand how knowledge-related behaviors are influenced by reward mechanisms. SI in this context includes both financial incentives (e.g., bonuses, raises, performance-based pay) and non-financial incentives (e.g., recognition, career advancement, training opportunities). By including both forms, the study acknowledges that employee motivation is driven not only by material rewards but also by intrinsic and social recognition. This comprehensive model aims to explore how an enabling culture fosters effective KM, which in turn contributes to improved organizational performance and employee engagement.

The demographic characteristics of respondents in this study are summarized in Table 1, which provides a detailed overview of the distribution based on gender, age, years of service, and division/department. The analysis highlights that 65.15% of respondents are male, while 34.85% are female, reflecting a relatively balanced gender composition. Regarding age, the largest group of respondents (66.67%) falls within the >25 years category, followed by 27.27% who are 25-35 years, and 6.06% between 35-44 years, suggesting that the workforce is predominantly young adults.

In terms of years of service, the majority of respondents (59.09%) have been with the organization for less than 1 year, highlighting a workforce with a significant proportion of new hires. Additionally, 28.79% of employees have 1-3 years of experience, suggesting a growing group of relatively experienced professionals. Meanwhile, 12.12% of respondents have been with the company for 4-5 years, indicating a smaller but stable portion of long-term employees. This distribution reflects a dynamic workforce with a strong influx of new talent and a developing core of experienced personnel.

Division and department representation is well-distributed, with the Sales & Marketing division having the highest proportion of respondents (46.97%), indicating its dominant role in the organization. Other divisions with significant representation include Business Development (19.70%), Finance & Accounting (9.09%), and Administration (6.06%). Additionally, departments such as Network Engineer (6.06%), Marcom (Marketing Communication)

(6.06%), Human Resources (4.55%), and Cloud Engineer (1.52%) contribute to the overall workforce composition, showcasing a diverse range of expertise across different functions.

Table 1. Demographic Characteristic

Category	Subcategory	Count	Percentage (%)
Gender	Male	43	65.15%
	Female	23	34.85%
Age	<25 Years	44	66.67%
	25-35 Years	18	27.27%
	35-44 Years	4	6.06%
Years of Service	<1 Year	39	59.09%
	1-3 Years	19	28.79%
	4-5 Years	8	12.12%
Division/ Department	Sales & Marketing	31	46.97%
	Finance & Accounting	6	9.09%
	Human Resources	3	4.55%
	Administration	4	6.06%
	Business Development	13	19.70%
	Network Engineer	4	6.06%
	Cloud Engineer	1	1.52%
	Marcom (Marketing Communication)	4	6.06%

Testing for Convergent and Discriminant Validity

Table 2 presents the outer loadings analysis, which evaluates the reliability of each observed variable within its respective construct. The loadings indicate the correlation between each indicator and its latent variable, with values above 0.7 generally considered acceptable. For Organizational Culture (OC), all six indicators (OC1 to OC6) exhibit strong outer loadings, ranging from 0.770 to 0.929, confirming their reliability in representing the construct. Similarly, Knowledge Management (KM) is measured by four indicators (KM1 to KM4), with loadings between 0.779 and 0.824, supporting its validity. The KPI construct is supported by three indicators (KP1 to KP3), with loadings from 0.760 to 0.947, demonstrating strong relationships between the indicators and the construct. For System Incentives (SI), the loadings range from 0.707 to 0.845, indicating acceptable reliability despite SI3 being slightly lower. Finally, Customer Commitment (CC) is the most strongly represented construct, with CC1, CC2, and CC3 having exceptionally high loadings between 0.975 and 0.992, reinforcing the robustness of this construct. Overall, the results confirm that the reflective measurement model meets reliability standards, ensuring that each construct is effectively measured by its respective indicators. (J. Hair et al., 2014).

Table 2. Other Loading Analysis

	Org. Culture	Knowledge Management	KPI	Syst. Incent.	Cust. Com.
OC1	0.831				
OC2	0.915				
OC3	0.770				
OC4	0.827				
OC5	0.929				
OC6	0.846				
KM1		0.779			

	Org. Culture	Knowledge Management	KPI	Syst. Incent.	Cust. Com.
KM2		0.820			
KM3		0.785			
KM4		0.824			
KPI1			0.760		
KPI2			0.911		
KPI3			0.947		
SI1				0.845	
SI2				0.831	
SI3				0.707	
CC1					0.986
CC2					0.975
CC3					0.992

Table 3 presents the results of the Confirmatory Factor Analysis (CFA), which evaluates the reliability and validity of the constructs within the research model. The table includes values for Cronbach's Alpha, Rho_A, Composite Reliability (CR), and Average Variance Extracted (AVE). Cronbach's Alpha values above 0.7 indicate acceptable internal consistency reliability across constructs. (J. Hair et al., 2014). Customer Complaint (CC) demonstrates the highest reliability with a value of 0.984, while Organization Culture (0.926), Knowledge Management (0.815), and KPI (0.846) also meet the required threshold. System Incentives (SI) has a slightly lower value of 0.719 but remains within an acceptable range. Rho_A, a reliability measure that considers the number of indicators, follows a similar pattern, with values above 0.7 for all constructs, further reinforcing their internal consistency. Additionally, Composite Reliability (CR) values exceed the recommended threshold of 0.7, confirming strong reliability across all constructs. Customer Complaint (0.989) and Organization Culture (0.942) exhibit the highest CR values, ensuring that the measurement model is robust. The AVE values assess convergent validity, with all constructs exceeding the 0.5 threshold, indicating that each construct explains more than 50% of the variance in its respective indicators. Customer Complaint records the highest AVE value at 0.969, while System Incentives, with the lowest AVE of 0.635, still meets the acceptable criteria (Fornell & Larcker, 1981). These findings confirm that the model satisfies the required reliability and validity conditions, supporting the robustness of the research framework.

Table 3. Confirmation Factor Analysis (CFA)

	Cronbach's alpha	Rho_A	Composite reliability	AVE
Customer Complain (CC)	0.984	0.985	0.989	0.969
Organization Culture (OC)	0.926	0.936	0.942	0.731
Knowledge Management (KM)	0.815	0.817	0.878	0.643
KPI (KPI)	0.846	0.869	0.908	0.768
System Incent. (SI)	0.719	0.754	0.838	0.635

Table 4 presents the Fornell-Larcker Criterion, a statistical approach used to assess the discriminant validity of constructs within the research model. Discriminant validity ensures that each construct is empirically distinct from others by confirming that it shares more variance with its indicators than with other constructs. The diagonal values in the table represent the square root of the Average Variance Extracted (AVE) for each construct, while

the off-diagonal values indicate the correlations between constructs (Fornell & Larcker, 1981). For discriminant validity to be established, the square root of the AVE for each construct should be greater than its correlations with any other construct. In this table, Customer Complaints (0.984), KPI (0.876), Knowledge Management (0.802), Organizational Culture (0.855), and System Incentives (0.797) all display higher diagonal values compared to their correlations with other constructs. This confirms that the constructs meet the Fornell-Larcker criterion, supporting the adequacy of the measurement model. These findings reinforce the structural integrity of the research framework and validate that each construct is distinct and well-defined.

Table 4. Fornell-Lacker Criterion

	Cust. Com.	KPI	Know. Mgmt.	Org. Culture	System Incent.
Cust. Com.	0.984				
KPI	-0.018	0.876			
Knowledge Mgmt.	0.351	0.352	0.802		
Org. Culture	0.368	0.227	0.620	0.855	
System Incent.	0.300	0.267	0.423	0.346	0.797

Structural Equation Model

Table 5 presents the R-Square and Adjusted R-Square values for the endogenous constructs in the research model, which indicate the explanatory power of the model. R-squared values measure the proportion of variance in the endogenous constructs explained by their predictors. According to Chin (1998), R-Square values of 0.19, 0.33, and 0.67 are categorized as weak, moderate, and substantial, respectively (Chin & Marcoulides, 1998). In this study:

1. Knowledge Management (KM) has an R-squared of 0.384, meaning that 38.4% of its variance is explained by its predictors. This indicates a moderate level of explanatory power, suggesting that Organizational Culture plays a significant role in shaping Knowledge Management practices within the organization.
2. KPI (Key Performance Indicators) has an R-Square of 0.124, suggesting that only 12.4% of its variance is explained by Knowledge Management. This falls into the weak category and implies that other unmeasured factors, such as leadership, employee motivation, technology adoption, or external pressures, could significantly influence KPI outcomes. It also highlights that Knowledge Management, while relevant, does not fully capture the dynamics that drive performance metrics.
3. System Incentives (SI) has an R-Square of 0.179, indicating weak explanatory power. Although Knowledge Management influences SI, the relatively low variance explained suggests that the effectiveness of incentive systems may depend on additional factors, such as organizational policies, fairness perceptions, or individual employee preferences toward different types of rewards.
4. Customer Complaints (CC) has the lowest R-Square value at 0.123, indicating that only 12.3% of its variance is explained by the model. This underscores the complex nature of customer behavior, which is often influenced by external and uncontrollable variables such as customer expectations, market conditions, and competitor actions. The low R-squared does not undermine the significance of the relationship but rather reflects the multifactorial nature of customer satisfaction.

Table 5. R-Square of Endogenous Construction

	R-Square	R-Square Adjusted
Knowledge Management (KM)	0.384	0.374
KPI (KPI)	0.124	0.110
System Incentives (SI)	0.179	0.166
Customer Complaints (CC)	0.123	0.110

The Adjusted R-Square values, which account for the number of predictors in the model, show slight reductions compared to the R-Square values. These findings suggest that while Knowledge Management has a moderate explanatory power, other constructs exhibit weaker relationships, indicating that additional factors may influence their variance.

The diagram illustrates the structural model results from the PLS-SEM analysis, showcasing the relationships among the constructs: Organizational Culture (OC), Knowledge Management (KM), Customer Complaints (CC), KPI (Key Performance Indicators), and System Incentives (SI). The numbers on the paths represent the standardized path coefficients, while the numbers in parentheses indicate the p-values for the statistical significance of these relationships.
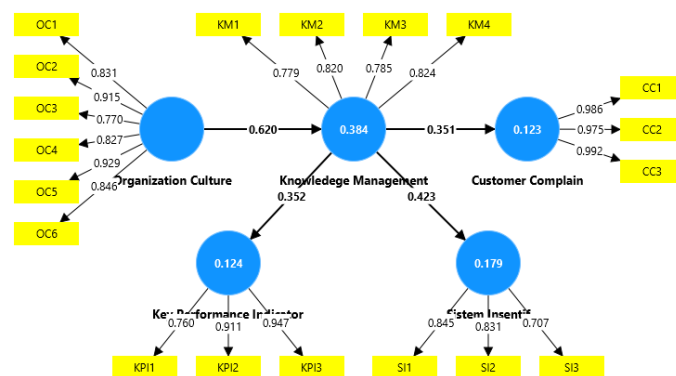

Figure. 3. PLS-SEM Results.

This model supports both research hypotheses. It confirms that Organizational Culture positively influences Knowledge Management, which in turn significantly impacts internal processes (KPI and SI) and external outcomes (Customer Complaints).

Table 6 presents the path coefficients, T-statistics, and p-values derived from the PLS-SEM analysis, which evaluate the strength, significance, and direction of relationships among constructs in the research model. Path coefficients represent the standardized values indicating the strength of the relationships, while T-statistics and p-values determine the statistical significance of these relationships.

Table 6. PLS-SEM Path Coefficient

	Path coeff.	T Statistic	P Values.	Results
OC à KM	0.620	9.204	0.000	Accepted
KM à KPI	0.352	3.688	0.000	Accepted
KM à SI	0.423	4.244	0.000	Accepted
KM à CC	0.351	3.474	0.001	Accepted

The findings highlight the significant relationships between organizational culture, knowledge management, and key performance outcomes, confirming the hypothesized connections in the research model. A strong organizational culture fosters knowledge management practices, which in turn positively influence key performance indicators, system incentives, and customer complaints.

1. OC → KM (0.620, T=9.204, p=0.000): The relationship between Organizational Culture (OC) and Knowledge Management (KM) is strong, indicating that a well-established organizational culture significantly enhances knowledge management practices.
2. KM → KPI (0.352, T=3.688, p=0.000): positively impacts Key Performance Indicators (KPI) with a path coefficient, suggesting that effective knowledge management supports performance measurement and evaluation.
3. KM → SI (0.423, T=4.244, p=0.000): The impact of Knowledge Management (KM) on System Incentives (SI) is also significant, emphasizing the role of knowledge management in ensuring fair and structured incentive systems.
4. KM → CC (0.351, T=3.474, p=0.001): demonstrating that improved knowledge management contributes to reducing customer complaints and enhancing overall customer satisfaction.

These results emphasize the necessity of fostering a knowledge-driven organizational culture and aligning key performance metrics with knowledge management initiatives to achieve better organizational performance and customer-related outcomes.

Table 7. PLS-SEM Indirect Effects

	T Statistic	P Values	Results
OC à CC	3.004	0.003	Accepted
OC à KPI	3.349	0.001	Accepted
OC à SI	3.633	0.000	Accepted

Table 7 presents the results of the indirect effects analysis using PLS-SEM, highlighting the mediating role of Knowledge Management (KM) in the relationship between Organizational Culture (OC) and key performance outcomes. Indirect effects occur when an independent variable influences a dependent variable through one or more mediators. The table reports the T-statistics, p-values, and the significance of each indirect effect in the model.

1. OC → CC (T=3.004, p=0.003): The indirect effect of Organizational Culture (OC) on Customer Complaints (CC) is significant, suggesting that OC influences CC through KM. A strong organizational culture indirectly helps reduce customer complaints by improving knowledge management practices.
2. OC → KPI (T=3.349, p=0.001): OC has a significant indirect effect on Key Performance Indicators (KPI), indicating that OC enhances KPI through KM, reinforcing the role of knowledge management in optimizing performance measurement.
3. OC → SI (T=3.633, p=0.000): Furthermore, the relationship between OC and System Incentives (SI) is also mediated by KM, as indicated by a significant indirect effect. This result underscores that a well-established organizational culture supports knowledge management, which in turn facilitates the development of effective and transparent incentive systems.

These findings confirm that Knowledge Management plays a crucial mediating role, linking Organizational Culture to both internal (KPI, SI) and external (CC) outcomes. This aligns with prior research, emphasizing the importance of knowledge management in

translating cultural attributes into organizational performance improvements (J. Hair et al., 2014).

CONCLUSION

This study examined the impact of *Organizational Culture* on *Knowledge Management* and its subsequent influence on key organizational outcomes, including *Key Performance Indicators (KPI)*, *System Incentives (SI)*, and *Customer Complaints (CC)*. The findings underscore the pivotal role of *Organizational Culture* in fostering effective *Knowledge Management*, which in turn serves as a mediator in improving both internal performance metrics and external customer satisfaction. The structural model confirmed that *Knowledge Management* significantly contributes to the development of performance measurement systems (*KPI*), enhances incentive structures (*SI*), and aids in reducing customer complaints (*CC*). Moreover, the mediating role of *Knowledge Management* reinforces its strategic value in converting cultural strengths into tangible business outcomes. Given these results, PT XYZ is advised to take deliberate actions to strengthen its *Organizational Culture*. This can be achieved by promoting values such as collaboration, openness to innovation, and trust. Initiatives may include leadership development programs that model these values, the establishment of cross-functional knowledge-sharing forums, and embedding cultural values into performance appraisals and training. In particular, creating structured platforms for knowledge exchange—such as communities of practice or digital knowledge repositories—can amplify the benefits of *Knowledge Management*. In addition, PT XYZ should align its incentive system to reward knowledge-sharing behavior, both through financial incentives (e.g., bonuses linked to collaborative projects) and non-financial ones (e.g., public recognition, career advancement opportunities). Addressing these cultural and systemic aspects can drive improvements in *KPI* achievement and reduce *Customer Complaints* through more informed, responsive service delivery. Future research could explore additional mediating or moderating variables, such as leadership styles or digital maturity, and test this framework in different industry settings to broaden its applicability and relevance.

REFERENCES

Aguinis, H. (2013). *Performance management*. Pearson Education.

Al-Ali, A. A., Singh, S. K., Al-Nahyan, M., & Al-Ali, A. (2020). Organizational culture and organizational performance: A proposed framework for the public sector of the UAE. *International Journal of Productivity and Performance Management*.

Bohlander, G. W., & Snell, S. (2023). *Managing human resources*. Cengage Learning.

Chin, W., & Marcoulides, G. (1998). The Partial Least Squares Approach to Structural Equation Modeling. *Modern Methods for Business Research*, *8*.

DeNisi, A. S., & Murphy, K. R. (2017). *Performance appraisal and performance management* (10th, Ed.). Routledge.

Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, *18*(1), 39–50. https://doi.org/10.2307/3151312

Grajek, M., Gugler, K., Kretschmer, T., & Mişcişin, I. (2019). Static or Dynamic Efficiency: Horizontal Merger Effects in the Wireless Telecommunications Industry. *Review of Industrial Organization*, *55*(3). https://doi.org/10.1007/s11151-019-09723-4

Hair, J. F. Jr., 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/doi.org/10.1016/j.jbusres.2019.11.069

Hair, J. F., Ringle, C. M., & Sarstedt, M. (2011). PLS-SEM: Indeed a Silver Bullet. *Journal of Marketing Theory and Practice*, *19*(2), 139–151.

Hair, J., Sarstedt, M., Hopkins, L., & Kuppelwieser, V. (2014). Partial Least Squares Structural Equation Modeling (PLS-SEM): An Emerging Tool for Business Research. *European Business Review*, *26*, 106–121. https://doi.org/10.1108/EBR-10-2013-0128

Henry, T. F., Mest, D. P., & Safar, M. L. (2019). Pirate Wireless: Revenue Recognition in the Telecommunications Industry. *Accounting Perspectives*, *18*(1). https://doi.org/10.1111/1911-3838.12167

Keiningham, T. L., Aksoy, L., Bruce, H. L., Dube, L., & Rooney, J. A. (2021). Customer experience driven business model innovation. *J Bus Res*, *132*, 813–822.

Lam, L., Nguyen, P., Le, N., & Tran, K. (2021). The relation among organizational culture, knowledge management, and innovation capability: Its implication for open innovation. *Journal of Open Innovation: Technology, Market, and Complexity*, *7*(1), 1–16. https://doi.org/10.3390/joitmc7010066

Malik, A., Nawaz, T., Khan, F., & Ul Abdin, Z. (2021). Impact of digital transformation on telecommunication industry. *International Journal of Engineering Business Management*, *13*, 18479790211039544.

McKinsey. (2025). *Transforming telecom tech: How IT excellence drives innovation and cost efficiency*. https://www.mckinsey.com/industries/technology-media-and-telecommunications/our-insights/transforming-telecom-tech-how-it-excellence-drives-innovation-and-cost-efficiency

Mozer, M. C., Wolniewicz, R., Grimes, D. B., Johnson, E., & Kaushansky, H. (2000). Predicting subscriber dissatisfaction and improving retention in the wireless telecommunications industry. *IEEE Transactions on Neural Networks*, *11*(3). https://doi.org/10.1109/72.846740

Peters, C. (2022). National Sovereignty, Global Policy, and the Liberalization of Telecommunications Markets. *Internet Diplomacy: Shaping the Global Politics of Cyberspace*, 161.

Z, P. T. X. Y. (2024). *Internal Report 2024*.