

Adaptation of the Star Intrapreneur Framework to Team Performance with Knowledge Sharing Behavior Mediation and Moderations of Organizational Culture, Job Level, and Length of Employment: A Study at PT. XYZ Division XYZ-01

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Abstract

In an era of dynamic industrial competition, organizations must adopt innovative strategies to enhance team performance. The *Intrapreneur Bintang Framework* emerges as a strategic approach to fostering intrapreneurial behavior within organizations, though its effectiveness has mostly been examined in *SMEs*, with limited empirical evidence in large-scale industries like biotechnology. This study, grounded in the *Knowledge-Based View (KBV)*, investigates the impact of the *Intrapreneur Bintang Framework* on team performance, considering *Knowledge Sharing Behavior (KSB)* as a mediating variable and organizational culture as a moderating variable. A quantitative survey was conducted among 106 employees from five strategic divisions at PT. XYZ (*XYZ-01*), utilizing *PLS-SEM* analysis, a method commonly used in human resource management research.

Findings reveal that the framework significantly influences both *KSB* and team performance, directly and indirectly. However, the mediating effect of *KSB* is partial and weaker than the direct effect. Organizational culture did not significantly moderate the relationship, and variables such as job level and length of employment were also non-significant, although junior and non-managerial employees appeared more receptive to intrapreneurial values. Theoretically, these results extend the *KBV* by highlighting the role of social and cultural dynamics in knowledge sharing within human resource management. Practically, organizations are encouraged to cultivate a systematic, organization-wide knowledge-sharing culture. Future research should explore how each dimension of the *Intrapreneur Bintang Framework* can be adapted for various employee levels, ensuring its relevance and effectiveness across all organizational layers.

Keywords: Intrapreneurship, Team Performance, Knowledge Sharing, Organizational Culture, KBV, Biotechnology

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INTRODUCTION

In an increasingly complex global competition, organizations are required to continue to adapt and innovate. At PT XYZ (*XYZ-01*), a biotechnology company with a strong reputation in the fermentation sector, challenges arise in the form of low initiative, limited collaboration, and lack of courage to innovate. The Star Intrapreneur Framework (Bernardus et al., 2023) comes as a strategic approach to improving intrapreneurship through innovative mindsets, attitudes, and actions. Although the forerunners of its implementation have been seen, such as efficiency efforts in QA-QC and cross-team discussions, the impact has not been comprehensive due to the limitations of work culture and silos between departments.

To strengthen this framework, Knowledge Sharing Behavior can act as a mediator that supports knowledge transfer between teams, improving collaboration and work effectiveness. For example, when the R&D team shares insights with the production division, efficiency increases. XYZ's Organizational Culture also moderates the implementation of the framework

through the values of ONLYONE, TALENT, and SHARED GROWTH that foster motivation, individual development, and cross-divisional cooperation.

However, communication challenges, rigid hierarchical structures, and uneven intrapreneurial literacy are obstacles. In line with Bernardus et al. (2023), the six dimensions in the framework require commitment from all levels of the organization to succeed. Therefore, the integration of organizational culture and knowledge sharing behavior is key in strengthening the impact of the framework on team performance.

This study uses a Knowledge-Based View (KBV) approach that emphasizes the importance of knowledge as a strategic asset to support competitive advantage (Grant, 1996). KBV is relevant in explaining the relationship between variables, with the Star Intrapreneur Framework as a trigger, Knowledge Sharing Behavior as an idea distribution mechanism, and Organizational Culture as an innovative environment reinforcement. KBV also responds to the needs of the dynamic biotechnology industry, where the effectiveness of knowledge sharing is the determinant of innovation sustainability.

This study aims to test the influence of the Star Intrapreneur Framework on team performance in XYZ-01, with Knowledge Sharing Behavior as the mediator and Organizational Culture as the moderator. Its contribution is expected to enrich the intrapreneurship literature in the context of biotechnology and provide practical guidance for knowledge-based performance improvement and work culture. If successful, this model can be replicated to other business units within the group of companies and become a cross-sector reference.

The concept of intrapreneurship, also known as corporate entrepreneurship, refers to entrepreneurial behavior exhibited within established organizations, both large and medium-sized. Gifford Pinchot introduced the term *intra-corporate entrepreneurship* in 1978, emphasizing the importance of individuals developing innovations and transforming ideas into tangible business value. His "10 Intrapreneur Commandments" encouraged risk-taking and the willingness to challenge formal procedures for the sake of innovation, even at personal risk.

The *Star Intrapreneur Framework*, developed by Bernardus et al. (2023), operationalizes corporate entrepreneurship through the dynamics of Internalization, Interaction, and Actualization (DIIA). It features two main dimensions: the personal dimension (constructive thinking, positive attitude, productive action) and the interaction dimension (supportive thinking partner, open interlocutor, committed action partner). These dimensions collectively foster individuals who are optimistic, disciplined, open to feedback, and committed to organizational goals.

Individuals with a constructive mindset perceive challenges as opportunities, while a positive attitude is demonstrated by openness to new ideas and concern for colleagues. Productive actions are seen in efficient task completion. The interaction dimension is characterized by proactive support, openness to discussion, responsiveness to criticism, and reliability in fulfilling shared responsibilities. Together, these dimensions form the "star" symbol, representing the synergy between individual character and collaborative contribution.

Research at PT. XYZ Division XYZ-01 examines how the adaptation of the *Star Intrapreneur Framework* influences Knowledge Sharing Behavior (KSB), organizational culture, and team performance. Studies show that proactive innovation adoption, especially during crises, leads to superior business performance and broader social and environmental benefits. However, rigid corporate structures can hinder innovation, making a flexible and collaborative organizational culture essential for optimizing the framework's impact. Thus, the framework's effectiveness is maximized when paired with a culture that encourages knowledge sharing and collaboration.

Knowledge Sharing Behavior acts as a crucial mediator in this relationship. Cultures that empower, engage, and grant autonomy to employees foster both intrapreneurial engagement and knowledge-sharing behaviors. When employees feel safe to experiment and share ideas, team adaptability and creativity increase. Therefore, the first two hypotheses are: H1: The application of the Star Intrapreneur Framework has a significant effect on Knowledge Sharing Behavior in XYZ-01. H2: Knowledge Sharing Behavior significantly mediates the relationship between the Star Intrapreneur Framework and Team Performance in XYZ-01.

Organizational culture further moderates these dynamics. Studies highlight that collaborative, open, and adaptive cultures amplify knowledge sharing and team performance. Trust, effective communication, and a culture supportive of experimentation are vital. Thus, the third hypothesis is: H3: Organizational Culture moderates the relationship between the Star Intrapreneur Framework and Team Performance at XYZ-01.

Intrapreneurial competencies—such as proactivity, risk-taking, and flexibility—directly impact organizational performance by driving innovation and continuous improvement. Research supports that implementing a robust intrapreneurial framework enhances team performance through increased innovation, collaboration, and adaptability. The fourth hypothesis is: H4: The Star Intrapreneur Framework has a significant impact on Team Performance in XYZ-01.

Finally, job level and length of employment are important moderators. These factors influence access to resources, decision-making, trust, and flexibility within teams. Psychological safety and empowering leadership also play significant roles. Therefore, the fifth and sixth hypotheses are: H5: The Job Level moderates the relationship between the Star Intrapreneur Framework and Team Performance at XYZ-01; and H6: Duration of work moderates the relationship between the Star Intrapreneur Framework and Team Performance in XYZ-01.

Organizational success is shaped by the synergy among a supportive culture, knowledge-sharing behavior, and intrapreneurial competence. This study at PT XYZ Division XYZ-01 aims to explore how these elements interact to influence team performance, providing insights into building adaptive, high-performing teams capable of sustained innovation and strategic responsiveness.

RESEARCH METHODS

This study aims to test the influence of the Star Intrapreneur Framework on Team Performance at PT XYZ Division XYZ-01, with Knowledge Sharing Behavior as the mediator and Organizational Culture as the moderator. Two variables, namely Job level and Length of employment, were also analyzed to see if these structural and demographic factors moderated the relationship between the framework and team performance. This study not only examines the main theoretical relationship and the mediation-moderation effect, but also examines the organizational context through the influence of formal Job Levels and the duration of employees' work experience.

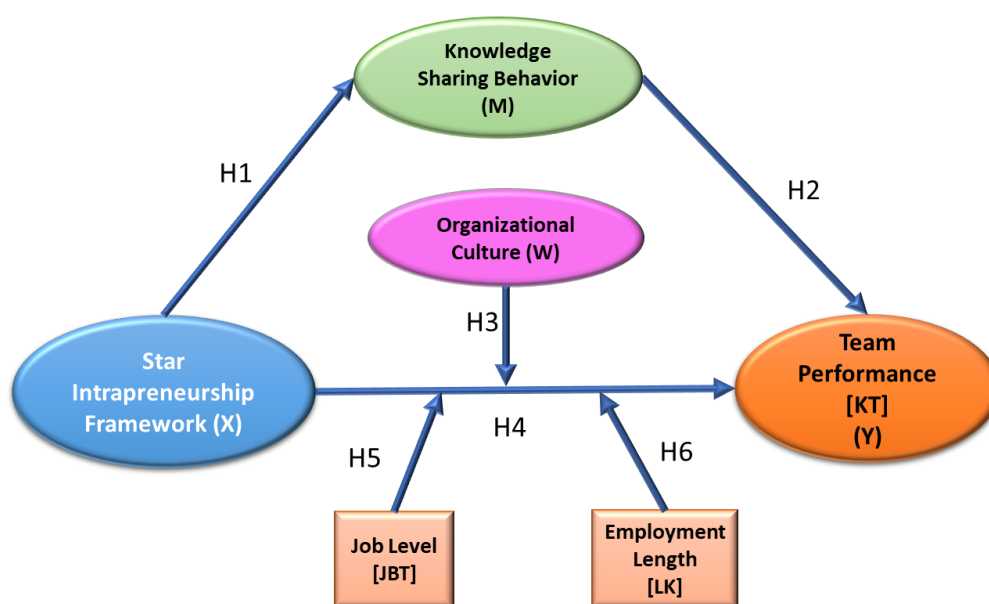


Figure 1. Research Model

Source: Adapted by Authors (2025)

The conceptual model in this study includes independent, mediating, and dependent variables that interact with each other to test the influence of the adaptation of the Star Intrapreneur Framework on team performance at PT XYZ Division XYZ-01. Team performance measurement was carried out quantitatively to identify causal relationships between variables. Given that this framework was previously tested more in the SME sector (Bernardus et al., 2023), this study fills the gap by examining its effectiveness in the context of large and complex industries such as biotechnology.

In addition, the role of Knowledge Sharing Behavior as a mediator has not been widely discussed in the previous literature (Maina, 2024), so it needs to be explored further. Using survey methods, this study highlights how supportive organizational cultures, active knowledge-sharing behaviors, and strong intrapreneurial practices can shape internal dynamics that improve team performance. This research also aims to provide empirical insights for designing more appropriate intervention strategies in maximizing the potential of intrapreneurship in the corporate environment.

Table 1. Research and Measurement Variables

Variables	Indicator	Reference	Score
Intrapreneur Bintang	<i>Personal Dimension 1: Constructive Thinking</i>	(Bernardus et al., 2023)	4
	<i>Personal Dimension 2: Positive Attitude</i>		4
	<i>Personal Dimension 3: Productive action</i>		4
	<i>Interaction Dimension 1: Friend in Thinking</i>		3
	<i>Interaction Dimension 2: Interlocutor</i>		3
	<i>Interaction Dimension 3: Partner in Action</i>		3
Knowledge Sharing Behaviour	<i>Reciprocal benefits</i>	(Lin, 2007)	4
	<i>Knowledge self-efficacy</i>		2
	<i>Enjoyment in helping others</i>		4
	<i>Attitude toward Knowledge Sharing</i>		3
	<i>Knowledge sharing intentions</i>		3
Organizational Culture	<i>Dominant Characteristics</i>	(Cameron & Quinn, 2006)	2
	<i>Organizational Leadership</i>		2
	<i>Management of Employees</i>		2
	<i>Organization Glue</i>		3
	<i>Strategic Emphases</i>		3
	<i>Criteria of Success</i>		3
Team Performance	<i>Open Climate</i>	(Woodcock & Francis, 2017)	2
	<i>Strong Power Base</i>		2
	<i>Effective Team Meetings</i>		2
	<i>Cooperative Relationships</i>		2
	<i>Adequate Backup</i>		1
	<i>Appropriate Team Leadership</i>		3
	<i>Strategic Orientation</i>		3
	<i>Strong Analytical Skills</i>		3
	<i>Deep Business Know-How</i>		2
	<i>High Creativity</i>		3
	<i>Reality Orientation</i>		3
	<i>In Command</i>		1

Source: Adapted from Bernardus et al. (2023); Lin (2007); Cameron & Quinn (2006); Woodcock & Francis (2017)

This study examined four main variables. The independent variable is the Star Intrapreneur Framework, measured on a 6-dimensional scale from Bernardus et al. (2023), namely constructive mindset, positive attitude, productive action, thinking partners, interlocutors, and action partners. The mediation variable is Knowledge Sharing Behavior based on Lin (2007), including expected rewards, reciprocal benefits, self-efficacy, and enjoyment in helping. The moderation variable is Organizational Culture using the Competing Values Framework (Cameron & Quinn, 2006), with six indicators such as leadership and

strategic emphases. The dependent variable is Team Performance according to Woodcock & Francis (2017), with 12 indicators such as open climate, leadership, analytical skills, and creativity.

To maintain respondents' comfort and data validity, the researchers simplified the number of items: Star Intrapreneur (from 93 to 21), Knowledge Sharing (24 to 16), Organizational Culture (24 to 15), and Team Performance (84 to 26). Simplification is done selectively so that each dimension remains represented without sacrificing conceptual meaning.

Two variables were added: Job level (managerial vs. non-managerial) and Length of Employment (≤ 10 years vs. > 10 years) to reveal whether differences in organizational structure and work experience moderate the framework's relationship to team performance. This approach allows for a more comprehensive analysis in the context of large organizations with complex demographic dynamics.

The population in this study consisted of all employees of PT. XYZ Division XYZ-01, which was located in several key departments, namely Marketing, Sales, Production, QA-QC, and Export. The total population was estimated to reach 200 people. The sampling technique used was Stratified Random Sampling, where the population was divided into strata by department and samples were randomly taken from each stratum. Using the Slovin formula and a 5% margin of error, a minimum sample of 133 respondents was obtained.

Data were collected using a questionnaire based on a 5-point Likert Scale to measure the research variables. The questionnaires used were adapted from scales that had been tested in previous studies, including the Star Intrapreneur Scale (Bernardus et al., 2023), the Knowledge Sharing Behavior scale from Lin (2007), and the Organizational Culture scale from Cameron & Quinn (2006). Prior to distribution, the questionnaire underwent a validity test through content validity involving experts, and construct validity using Product Moment correlation. The reliability test was conducted using the Cronbach's Alpha method, with values greater than 0.6 considered reliable.

This study employed the Partial Least Square - Structural Equation Modelling (PLS-SEM) method, as it accommodated small sample sizes and non-normal data (Hair et al., 2011). The analysis process began with the specification of the structural model to describe the relationships between variables. Subsequently, an outer model test was conducted to assess the validity and reliability of the constructs, followed by an inner model test to evaluate the predictive power and the relationships between constructs through path coefficients and R-square values. The final stage involved hypothesis testing to assess the direct and indirect influence of the Star Intrapreneur Framework on Team Performance through Knowledge Sharing Behavior and Organizational Culture.

RESULTS AND DISCUSSION

This study involved 106 respondents out of a total of about 200 XYZ-01 employees spread across the Marketing, Production, QA-QC, and Export divisions. Respondents were selected through stratified random sampling so that the representation of each division and Job Level was guaranteed. Of the 137 data collected, only 106 passed the feasibility test after the

data cleaning process, which included validation of completeness, consistency, as well as the detection of outliers and illogical answers.

Although this number is slightly below Slovin's calculation (133 respondents, 5% margin of error), the sample size remains adequate for PLS-SEM analysis which emphasizes more model complexity and data quality (Hair et al., 2011). In terms of distribution, there were 22 managerial and 84 non-managerial respondents, as well as 53 respondents with a working period of less than and above 10 years. This composition allows for representative analysis of Job Level- and experience-based moderation.

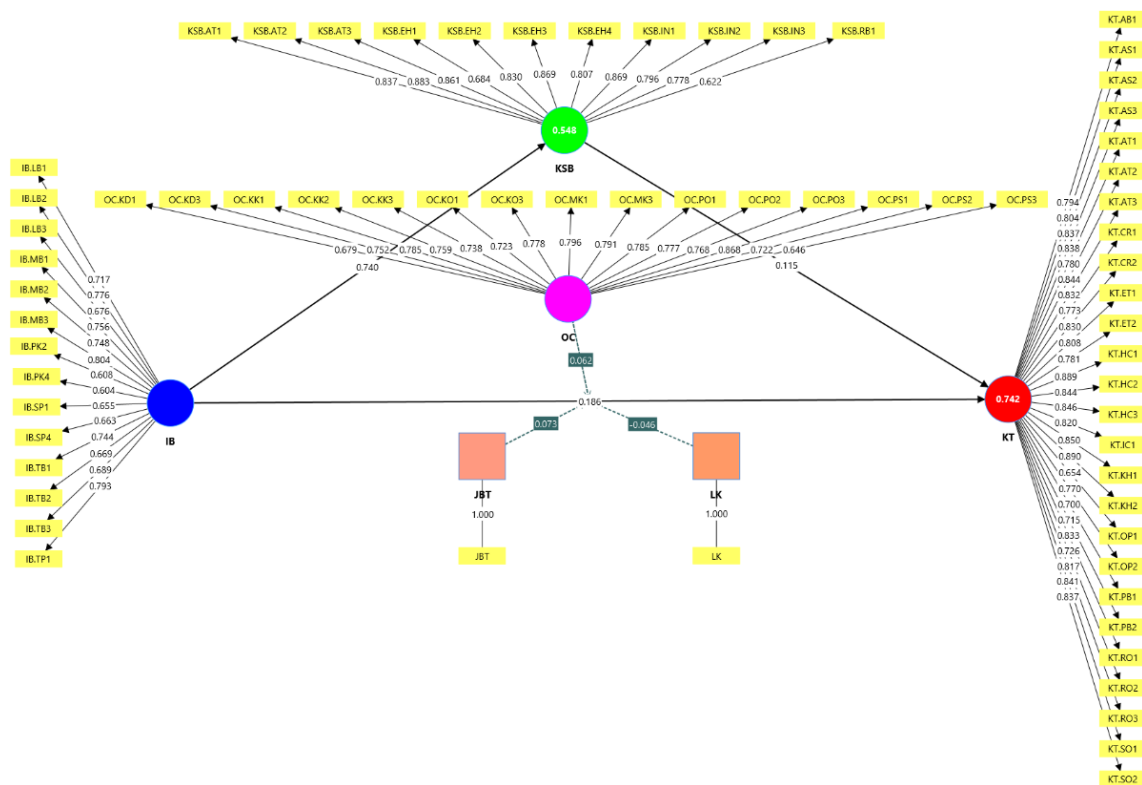


Figure 2. PLS-SEM Chart Results

Source: PLS-SEM SmartPLS Output v.4.1.1.1 (2025)

Figure 2 shows the PLS-SEM structural model that illustrates the relationship between the constructs of Intrapreneur Bintang (IB), Knowledge Sharing Behavior (KSB), Organizational Culture (OC), and Team Performance (KT), as well as the two variables of Job Level (JBT) and Length of Service (LK). This model was analyzed using SmartPLS v.4.1.1.1 based on data from 106 respondents.

IB has a direct influence on KSB, OC, and KT, and is involved in moderation interactions with OC, JBT, and LK. IB also affects KT indirectly through KSB. The value on the line indicates the path coefficient, while the number in the circle indicates the value R^2 . For example, an R^2 value of 0.742 on KT indicates that 74.2 percent of the variation in team performance is explained by IB, KSB, OC, JBT, and LK.

This model is the basis for quantitative analysis in research, visually showing the flow of empirically tested theoretical relationships, and making it easier for readers to understand before exploring the results of further analysis such as validity, reliability, and hypothesis testing.

Table 2. Construct Validity

Variables	IB	KT	KSB	OC
IB. LB1	0,717			
IB. LB2	0,776			
IB. LB3	0,676			
IB. MB1	0,756			
IB. MB2	0,748			
IB. MB3	0,804			
IB. PK2	0,608			
IB. PK4	0,604			
IB. SP1	0,655			
IB. SP4	0,663			
IB. TB1	0,744			
IB. TB2	0,669			
IB. TB3	0,689			
IB. TP1	0,793			
KT. AB1		0,794		
KT. AS1		0,804		
KT. AS2		0,837		
KT. AS3		0,838		
KT. AT1		0,780		
KT. AT2		0,844		
KT. AT3		0,832		
KT. CR1		0,773		
KT. CR2		0,830		
KT. ET1		0,808		
KT. ET2		0,781		
KT. HC1		0,889		
KT. HC2		0,844		
KT. HC3		0,846		
KT. IC1		0,820		
KT. KH1		0,850		
KT. KH2		0,890		
KT. OP1		0,654		
KT. OP2		0,770		
KT. PB1		0,700		
KT. PB2		0,715		
KT. RO1		0,833		

Variables	IB	KT	KSB	OC
KT. RO2		0,726		
KT. RO3		0,817		
KT. SO1		0,841		
KT. SO2		0,837		
KSB. AT1			0,837	
KSB. AT2			0,883	
KSB. AT3			0,861	
KSB. EH1			0,684	
KSB. EH2			0,830	
KSB. EH3			0,869	
KSB. EH4			0,807	
KSB. IN1			0,869	
KSB. IN2			0,796	
KSB. IN3			0,778	
KSB. RB1			0,622	
OC. KD1				0,679
OC. KD3				0,752
OC. KK1				0,785
OC. KK2				0,759
OC. KK3				0,738
OC. KO1				0,723
OC. KO3				0,778
OC. MK1				0,796
OC. MK3				0,791
OC. PO1				0,785
OC. PO2				0,777
OC. PO3				0,768
OC. PS1				0,868
OC. PS2				0,722
OC. PS3				0,646

Source: SmartPLS Output v.4.1.1.1 (2025)

Table 2 presents the outer loading values of each indicator in the construct of Intrapreneur Bintang, Team Performance, Knowledge Sharing Behavior, and Organizational Culture. This value indicates the validity of the indicator in measuring related constructs.

From the results of 106 respondents, the majority of indicators met the criteria of convergent validity with a loading value above 0.7. Indicators with a value of ≥ 0.6 are maintained according to the minimum limit suggested by Chin (1998) and Hair et al. (2021), because they are still considered to be theoretically and statistically valid. Some indicators such as IB. PK2 (0.608), IB. PK4 (0.604), IB. SP1 (0.655), and KSB. RB1 (0.622) falls into this category.

Indicators that have a < value of 0.6 have been eliminated because they are considered not sufficiently representative. These results ensure that all indicators used are eligible for convergent validity and are suitable for subsequent structural analysis with an adequate level of reliability.

Table 3. Construct Reliability

Variables	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
IB	0,923	0,927	0,934	0,504
KT	0,978	0,979	0,980	0,653
KSB	0,945	0,951	0,953	0,652
OC	0,947	0,949	0,953	0,577

Source: SmartPLS Output v.4.1.1.1 (2025)

Table 3 shows the results of the construct reliability test using Cronbach's Alpha, rho_A, Composite Reliability (rho_C), and Average Variance Extracted (AVE). All constructs show Cronbach's Alpha and Composite Reliability values above 0.7, indicating good internal consistency (Hair et al., 2021). Cronbach's Alpha values were highest in Team Performance (0.978) and lowest in Star Intrapreneur (0.923), remaining in the highly reliable category.

The overall rho_A and rho_C values also exceeded 0.90, strengthening the reliability of the construct. In terms of convergent validity, the entire AVE value exceeded the 0.50 threshold, indicating that more than 50% of the indicator's variance is explained by its construct. The highest AVE was recorded in Team Performance (0.653), followed by Knowledge Sharing Behavior (0.652), Organizational Culture (0.577), and Star Intrapreneur (0.504).

Thus, all constructs in this study were proven to be valid and reliable, providing a solid basis for proceeding to the next stage of structural analysis.

Table 4. Hypothesis Test

Hypothesis	Relationships Between Variables	Original Sample (O)	T Statistics	P Values	Information
H ₁	IB → KSB	0,740	16,907	0,000	Significant (p < 0.01)
H ₂	KSB → KT	0,115	1,469	0,071	* Significant (p < 0.10)
H ₃	OC × IB → KT	0,062	1,059	0,145	Insignificant
H ₄	IB → KT	0,186	1,345	0,089	* Significant (p < 0.10)
	OC → KT	0,675	6,785	0,000	Significant (p < 0.01)

Note:

p < 0.01 (significant at the level of 1%)

*p < 0.10 (significant at the level of 10%, minimum limit of statistical significance)

Source: SmartPLS Output v.4.1.1.1 (2025)

Table 4 presents the results of the PLS-SEM structural model hypothesis test on four main paths between variables. All coefficients are positive, indicating the direction of the relationship according to the theory. Three pathways were statistically

significant: $IB \rightarrow KSB$ (H_1 , $\beta = 0.740$; $p < 0.01$), $KSB \rightarrow KT$ (H_2), and $IB \rightarrow KT$ (H_4), both significant at $p < 0.10$. These results confirm that the adaptation of the Star Intrapreneur Framework encourages knowledge sharing behavior, which in turn has a positive impact on team performance. These findings support the argument that an intrapreneurial work environment can trigger openness in sharing ideas and solutions (Grant, 1996; Lin, 2007).

In contrast, the $OC \times IB \rightarrow KT$ (H_3) moderation pathway was not significant ($p = 0.145$), indicating that the role of organizational culture as a moderator has not been confirmed. However, $OC \rightarrow KT$ showed a strong and significant direct influence ($\beta = 0.675$; $p = 0.000$), indicating that organizational culture has underpinned team performance, although it has not been optimal in supporting the effectiveness of intrapreneurial value.

Like nutrition without equitable distribution, a strong organizational culture needs to be aligned with intrapreneurial pathways in order for innovative value to be disseminated and influenced systemically.

1. Knowledge Sharing Behavior Mediation

Based on the results of the mediation pathway analysis using the PLS-SEM approach, it is known that the indirect influence of the Star Intrapreneur on Team Performance through Knowledge Sharing Behavior (KSB) has a coefficient value of 0.085. This value indicates the direction of a positive relationship, indicating that improvements in the application of intrapreneurship principles tend to encourage improved knowledge-sharing behaviors, which can further contribute to improved team performance.

Table 5. The Role of Mediating Knowledge Sharing Behavior

Mediation Pathway	Original sample (O)	Standard deviation	T statistics	P values	Information
A $\rightarrow$ KSB $\rightarrow$ KT	0,085	0,061	1,400	0,081*	* Significant ($p < 0.10$)

Note:

* $p < 0.10$ (significant at the level of 10%, minimum limit of statistical significance)

Source: SmartPLS Output v.4.1.1.1 (2025)

The results of the comparison between the direct pathway $IB \rightarrow KT$ and the indirect pathway through KSB mediation showed that the direct influence ($\beta = 0.186$) was stronger than the mediation pathway ($\beta = 0.085$), although both were significant at the $p < 0.10$ level. This indicates that the Intrapreneur Bintang framework has a greater impact on team performance when implemented directly, without intermediaries sharing knowledge.

In theory, this phenomenon can be explained through the organizational authority approach. In a hierarchical structure like XYZ-01, initiatives from leaders are responded to more quickly because there are fewer social barriers. On the other hand, the effectiveness of KSB as a mediator can be hampered if the organizational culture is not open or knowledge transfer is not evenly distributed across generations.

These findings suggest that the implementation of the intrapreneur framework should be focused directly on improving the competencies and roles of team leaders. While the mediation function of KSB remains relevant, it needs to be strengthened through training, coaching, or incentives to have a more real impact.

2. Organizational Culture Moderation

Table 6 shows that Organizational Culture has a positive interaction coefficient of 0.062 to the relationship between Star Intrapreneur and Team Performance, which theoretically indicates the potential for positive moderation. The more open and collaborative the organizational culture is, the stronger the influence of the IB framework on team performance.

However, statistically, this relationship is not yet significant ($t = 1.059$; $p = 0.145$), so the moderation hypothesis is not yet acceptable. The f-square value of 0.014 also indicates a weak moderation effect. This means that the role of Organizational Culture as a moderator is still limited and not strong enough to strengthen the impact of the IB framework on the effectiveness of the team in this context.

Table 6. The Role of Organizational Culture Moderation

Moderation Path	Original sample	T statistics	P values	F-Square
OC x IB → KT	0,062	1,059	0,145	0,014

Source: SmartPLS Output v.4.1.1.1 (2025)

Interpretation of these findings suggests that the Organizational Culture in XYZ-01 has not been proven to significantly strengthen the influence of the Star Intrapreneur Framework on Team Performance. Nonetheless, the positive coefficient remains an important signal that the role of culture cannot be ignored. This opens up space for further exploration qualitatively or through a more contextual approach.

In other words, organizational culture may first require reinforcement internally for example through training, alignment of values between departments, or more open leadership, before it can serve as an effective catalyst in accelerating the implementation of intrapreneurship values in the work environment.

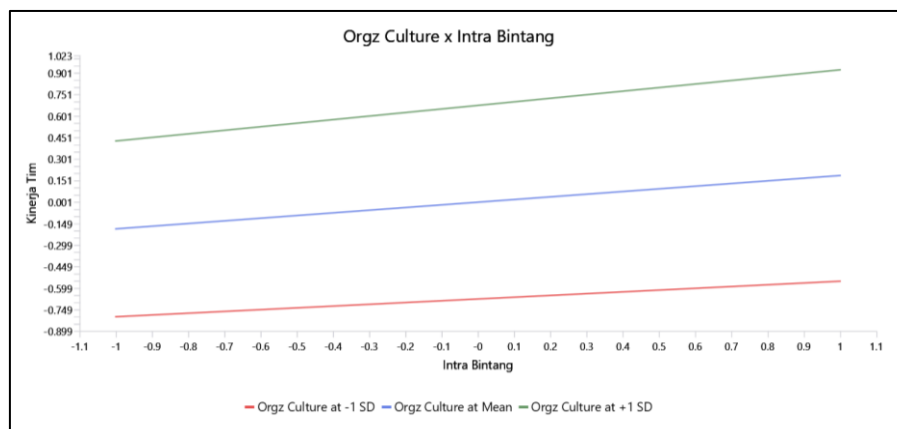


Figure 3. Simple Tilt Analysis of the Role of Organizational Culture Moderation

Source: PLS-SEM SmartPLS Output v.4.1.1.1 (2025)

Figure 3 shows the results of a simple slope analysis to illustrate the role of Organizational Culture moderation in the relationship between Star Intrapreneurs and Team Performance. The green line (+1 SD) has the steepest slope, followed by the blue line (mean), and the red line (-1 SD), all of which point positively. This indicates that the Star Intrapreneur Framework tends to improve team performance at all levels of organizational culture, with the most powerful effect when organizational culture is high.

Although not statistically significant, the sloping of the line supports previous findings that Organizational Culture has the potential to strengthen the relationship of IB to KT. Conceptually, OC remains relevant as a value booster of intrapreneurship. These findings encourage further exploration, particularly through qualitative or longitudinal studies, to understand how internal culture can be optimized as a catalyst for improved team performance.

3. Moderation of Job Level and Length of Employment Variables

Based on Table 7, the moderation analysis of two variables, namely Job level (JBT) and Length of Employment (LK) on the relationship between Star Intrapreneur (IB) and Team Performance (KT) showed results that were not statistically significant. The JBT x IB → KT moderation pathway had an original sample value of 0.073 with a T-statistic of only 0.505 and a p-value of 0.307, while LK x IB → KT showed a negative coefficient of -0.046 with a T-statistic of 0.431 and a p-value of 0.333. Both p-values were well above the significance threshold of 0.05, which suggests that statistically, the influence of the interaction of variables on the main relationship was not significant.

Table 7. The Role of Moderation of Job Level Variables and Length of Employment

Hypothesis	Moderation Path	Original sample (O)	T statistics	P values	F-Square
H5	JBT x A → KT	0,073	0,505	0,307	0,003
H6	LK x IB → KT	-0,046	0,431	0,333	0,002

Source: SmartPLS Output v.4.1.1.1 (2025)

The results of the moderation test showed that the Job Level had a positive influence on the relationship between the Star Intrapreneur and Team Performance ($\beta = 0.073$), while the length of employment had a negative direction ($\beta = -0.046$), although the two were not statistically significant. This difference in direction indicates that non-managerial employees are more responsive to intrapreneurial values, while senior employees tend to be more skeptical of change.

The interaction of the × IB with negative KT although not significant, can be interpreted that employees with longer working periods tend to be less affected by intrapreneurial values. Factors such as resistance to change and work habits that have been formed can be the cause. This suggests the importance of adaptive approaches such as retraining or strengthening innovative mindsets for senior employees.

The f-square values for Job level (0.003) and Length of Employment (0.002) fall into the category of very small effects (Cohen, 2013), which means that there is no strong evidence that these two variables significantly strengthen or weaken the relationship between IB and KT. These findings confirm that the influence of intrapreneurship in this context tends to be universal and is likely to be influenced by other factors such as team culture, leadership style, or organizational readiness to innovate.

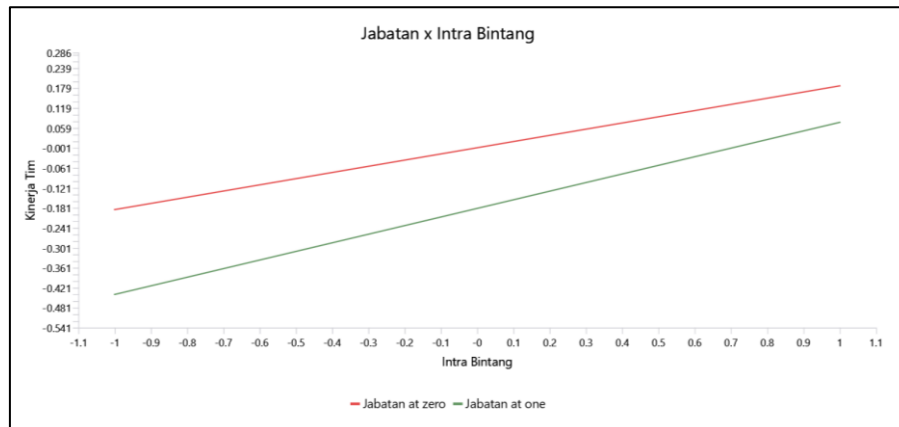
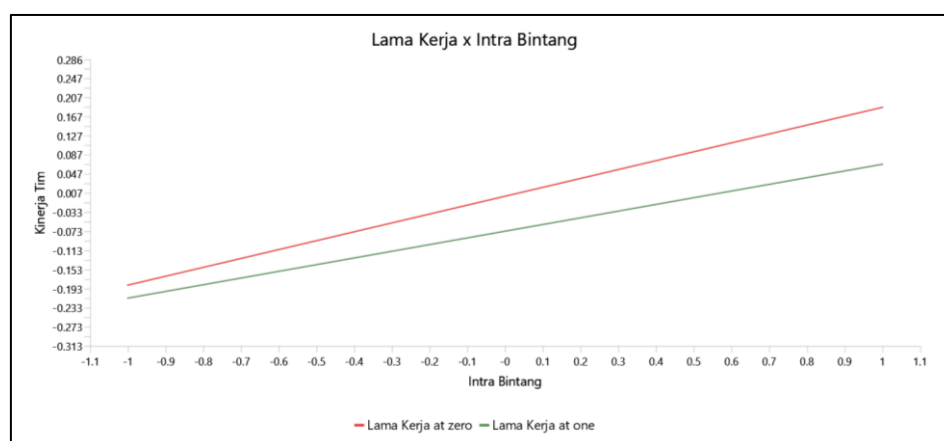


Figure 4. Simple Tilt Analysis of the Role of Job Level Moderation

Source: PLS-SEM SmartPLS Output v.4.1.1.1 (2025)

Figure 4 shows the results of a simple slope analysis of job moderation in the relationship between Star Intrapreneur and Team Performance. The red line represents the non-managerial group, while the green line represents the managerial group. Both lines show positive trends, but the red line is consistently at the top, indicating that the influence of intrapreneurship value on performance is stronger in the non-managerial group.

These findings imply that staff and contract employees tend to be more motivated to improve performance when empowered intrapreneurially, compared to managers who focus on strategic roles or are bound by formal structures. However, this difference is not statistically significant, so this graph is more appropriate to be read as a preliminary indication that is worth exploring further, especially through a qualitative approach.



Source: PLS-SEM SmartPLS Output v.4.1.1.1 (2025)

Figure 5. Simple Tilt Analysis of the Role of Moderation Long Working

Figure 5 shows the results of a simple tilt analysis of the role of Long Work moderation in the relationship between Star Intrapreneur and Team Performance. The red line represents employees with a length of employment of ≤ 10 years and the green line for > 10 years. Both point in a positive direction, but the red line has a higher slope, indicating that the influence of intrapreneurship value is stronger on new hires.

These findings indicate that employees with shorter working hours tend to be more responsive to intrapreneurial values because they are still in the adaptation phase and more open to innovation. Although these results are not statistically significant, these findings provide practical implications for management, namely the importance of strategies to strengthen intrapreneurial cultures across generations through tailored training and mentoring programs to ensure equitable value transfer across the organization.

4. Evaluation of Knowledge Sharing Behavior Mediation

The results of the analysis showed that Knowledge Sharing Behavior acted as a partial mediator between Star Intrapreneur and Team Performance ($\beta = 0.085$; $p = 0.081$). Although the contribution is at the threshold of minimal significance, these results suggest that the application of intrapreneurial values encourages knowledge-sharing behaviors that positively impact team effectiveness.

However, the direct IB $\rightarrow$ KT pathway had a greater influence ($\beta = 0.186$), indicating that direct intrapreneurship value delivery by leaders is more quickly accepted, especially in hierarchical organizations such as XYZ-01. This reflects the limitations of KSB's function as a mediator, which may not be running optimally due to a sharing culture that has not been fully formed.

These findings reinforce the gap between the potential of the IB framework and the actualization of knowledge culture in the field, confirming the importance of building a conducive work environment for knowledge sharing as emphasized by SECI theory (Nonaka & Takeuchi, 1995) and the Knowledge-Based View approach (Grant, 1996).

Higher responses from non-managerial employees and shorter length of employments (as seen in job control tests and length of employment) also suggest that KSB can be an inclusive channel for the dissemination of intrapreneurial value across the organizational level, supporting the view that collective capabilities are built through cross-structural knowledge sharing (Alghamdi & Badawi, 2023).

Therefore, XYZ-01 needs to strengthen KSB through cross-departmental learning strategies, collaborative reward systems, and technology integration as an enabler of learning organizations (Benitez-Amado et al., 2010; Ashal et al., 2023). In this way, knowledge sharing is not only an administrative function, but part of the work culture DNA that strengthens the organization's intrapreneurial mission.

5. Evaluation of Organizational Culture Moderation

The results of the moderation test showed that Organizational Culture had a positive influence on the relationship between Star Intrapreneur and Team Performance ($\beta = 0.062$; $p = 0.145$), but it was not statistically significant. The value of $t = 1.059$ is still below the general threshold (1.96), and the value of $f\text{-square} = 0.014$ is categorized as a small effect (Cohen, 2013).

Conceptually, a culture that supports innovation, collaboration, and openness has the potential to strengthen the influence of intrapreneurship on team effectiveness. This can be seen in the simple slope analysis (Figure 3), where the high cultural line shows a steeper slope than the low culture line, indicating a greater impact of the framework in the context of progressive culture.

However, the conditions in XYZ-01 show that internal culture has not sufficiently played a catalyst in the application of intrapreneurial values. Cross-departmental value alignment, cross-functional training, and collaborative leadership are needed to strengthen the role of cultural moderation. The literature confirms that flexible and innovative cultures strengthen intrapreneurship and team performance (Körner et al., 2015; Maan & Srivastava, 2023), while rigid culture stifles creativity (Eze et al., 2018). Empowering leadership creates psychological safety that drives ideas and innovation (Ben Hador & Klein, 2019; Huang et al., 2024).

The culture of knowledge sharing also strengthens the dynamics of innovative and agile teams (Gejam & Yıldız, 2023). In a multigenerational context, a culture that is not adaptive to differences in expectations will inhibit intrapreneurship (Pandey et al., 2021). So, to strengthen the culture as a moderator, organizations need to encourage cross-generational learning, an idea-based reward system, and collaborative work design.

Theoretically, organizational culture needs to be strengthened through leadership agility, learning culture, and psychological safety to act as an effective moderator. Practically, XYZ-01 can implement cultural training, work process redesign, and collaboration-based management system. Although not statistically significant, the positive direction of culture is still meaningful and the basis for further exploration.

An important addition: although not formulated as an initial hypothesis, the $OC \rightarrow KT$ pathway proved to be significant ($\beta = 0.675$; $p = 0.000$), stronger than the $IB \rightarrow KT$ ($\beta = 0.174$; $p = 0.045$). This shows that the organizational culture at XYZ-01 has become a solid foundation of teamwork. However, the role of OC moderation towards $IB \rightarrow KT$ remains insignificant. Relevant analogy: OC is like an organization's nutritional fluid, IB is an infusion that delivers it. Without an OC, the IB becomes empty. In contrast, without an IB, OC is stagnant.

The integration of the two is important. OC forms the basis of value, while IB injects the dynamics of innovation. An integrated approach is needed so that the framework can synergize with culture in encouraging adaptive and sustainable team performance.

6. Evaluation of Moderation of Job Level and Length of Service Variables

The test results showed that two variables, Job Level and Length of employment, did not play a significant role in moderating the relationship between Star Intrapreneur and Team Performance ($p > 0.05$). However, the direction of the $JBT \text{ coefficient} \times IB \rightarrow KT$ positive (+0.073) and the $LK \times IB \rightarrow KT$ negative (-0.046), indicates a pattern that is worth conceptually analyzing.

The department reflects the structural dimension. Managerial employees tend to be tied to formal regulations and processes, so the acceptance of intrapreneurial value is slower. In contrast, non-managerial employees who are closer to operations show a faster response to a bottom-up approach. This is seen in Figure 4, where the relationship between IB and KT is stronger in the non-managerial group.

Length of employment reflects the psychological dimension. Senior employees tend to retain old ways of working, while new hires are more adaptive and open to change, as seen in Figure 5. Carter et al. (2019) said that job level affect innovation capacity, while Jadhav et al. (2023) explained that long working hours can strengthen organizational understanding but also create resistance to innovation.

The practical implications of these findings are the importance of contextual intrapreneurial value implementation strategies, such as reskilling training for seniors, reverse mentoring, or value communication tailored to job levels and job generations. This approach is in line with the importance of diversifying HR development strategies in complex and multigenerational organizations.

CONCLUSION

This study confirms that the Star Intrapreneur (IB) Framework significantly enhances team performance by fostering values like proactiveness, collaboration, and informal leadership, particularly among non-managerial employees in dynamic sectors such as biotechnology at XYZ-01. The stronger impact at the operational level suggests that bottom-up approaches are more effective for embedding intrapreneurial values, while managerial staff may benefit from more strategic, context-sensitive interventions. Knowledge Sharing Behaviour (KSB) emerges as a meaningful mediator, facilitating the diffusion of intrapreneurial spirit across teams, though its influence remains moderate; thus, reinforcing a

culture of knowledge sharing through cross-functional forums and supportive incentives is recommended to boost team adaptability and innovation. Organizational Culture (OC), while not a significant moderator between IB and team performance, exerts the strongest direct influence on effectiveness, highlighting that the success of intrapreneurial initiatives is fundamentally rooted in the strength of the organizational culture itself. Furthermore, although Job Level and Length of employment were not statistically significant, newer and non-managerial employees demonstrated greater receptivity to intrapreneurial values, underscoring the need for tailored training and development programs across all organizational layers. For future research, it is suggested to explore how targeted interventions for managerial staff and longitudinal studies on the evolution of intrapreneurial culture can further optimize the adoption and impact of the IB Framework, ensuring its relevance and effectiveness in diverse organizational contexts.

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