

Antecedents of Employee Performance: The Roles of Employee Engagement and Knowledge Creation through Pro-Growth Employee Interaction as an Intervening Variable (A Study of BSI North Sumatra Employees)

Joli Afriany*, Prihatin Lumbanraja, Yeni Absah, Ritha F Dalimunthe

Faculty of Economics and Business, Doctoral Management Science Study Program, Universitas Sumatera Utara, Medan
Indonesia

Email: ^{1,*}joliafriani@gmail.com, ²prihatin@usu.ac.id, ³yeni.absah@usu.ac.id, ⁴ritha.dalimunthe@usu.ac.id

Correspondence Author Email: joliafriani@gmail.com

Submitted: 01/01/2026; Accepted: 09/01/2026; Published: 28/01/2028

Abstract-This study aims to analyze:(1)the magnitudeof the effect of employee engagement on employee performance, (2) the magnitude of the effect of employee engagement on Pro-Growth Employee Interaction, (3) the magnitude of the effect of knowledge creation on Pro-Growth Employee Interaction, (4) the magnitude of the effect of knowledge creation on employee performance, and (5) the magnitude of the effect of Pro-Growth Employee Interaction on the performance of employees at Bank BSI North Sumatra (Sumut). The population in this study consisted of Bank BSI North Sumatra employees, totaling 1,650 employees, with a sample of 100 employees. The results indicate that employee engagement has a positive and significant effect on employee performance by 76.6 percent, and Pro-Growth Employee Interaction has a positive and significant effect on employee performance by 65.5 percent. These direct effects show that employee engagement has a positive and significant effect on employee performance; employee engagement has a positive and significant effect on Pro-Growth Employee Interaction; knowledge creation has a positive and significant effect on Pro-Growth Employee Interaction; knowledge creation has no effect on employee performance; and Pro-Growth Employee Interaction has a positive and significant effect on employee performance.

Keyword: Employee Engagement; Knowledge Creation; Pro-Growth Employee Interaction; Employee Performance

1. INTRODUCTION

Indonesia's Islamic banking industry continues to expand; however, it simultaneously faces intensifying challenges stemming from competition, digital transformation, and mounting efficiency pressures. Data from the Financial Services Authority (Otoritas Jasa Keuangan/OJK) indicate that Islamic banking assets reached IDR 980.30 trillion in December 2024, representing a 7.72% market share of the national banking sector. During the same period, Financing Disbursed (Pembiayaan yang Disalurkan/PYD) amounted to IDR 643.55 trillion, while Third-Party Funds (Dana Pihak Ketiga/DPK) totaled IDR 753.60 trillion, with year-on-year growth rates of 9.92% and 10.09%, respectively (OJK Portal). This situation confirms that the industry is growing, yet it also requires banks to sustain service performance, productivity, and intermediation quality consistently.

At the firm level, Bank Syariah Indonesia (BSI) as one of the key players in the Islamic banking sector has likewise reported improving corporate performance. For example, 2024 performance coverage reported a net profit of IDR 7.01 trillion (up 22.83% year-on-year), accompanied by increases in core business indicators such as financing and total assets (as reflected in issuer analysis reports) (Bareksa.com). Such business growth typically depends not only on capital and technology, but also on the quality of operational execution an area in which banking performance is strongly supported by frontliner and back-office employee performance, process discipline, and cross-unit collaboration.

Nevertheless, growth and transformation also generate human resource implications. A PwC survey (*Indonesia Workforce Hopes and Fears Survey 2024*) highlights substantial pressures associated with change and workload: more than half of employees perceive there is "too much change" in the workplace, 46% report that their workload has increased over the past year, and 19% plan to change jobs (PwC). At the same time, technology adoption has become increasingly pervasive; PwC reports that 84% of Indonesian workers have used GenAI for work at least once, and more than 40% use it regularly (daily/weekly) (PwC). This phenomenon is particularly relevant for banking including Islamic banking because changes in work processes (e.g., digital onboarding, app-based services, automation, and heightened compliance requirements) often increase coordination complexity. In the context of regional offices/areas such as BSI North Sumatra, process changes and growth targets may create new demands: maintaining work energy, service quality, and output consistency amid a rapid pace of change.

In such circumstances, employee engagement becomes a critical issue. The *Gallup State of the Global Workplace 2024* report shows that globally only 23% of employees are "engaged" (involved and enthusiastic about their work), and only around 30% of managers are engaged (Healthy Work Company). Gallup further emphasizes that work units with high engagement tend to realize better business outcomes among others, lower absenteeism and higher profitability (as evidenced in Gallup's meta-analytic findings) (Healthy Work Company). This suggests that engagement is not merely "job satisfaction," but rather a strategic asset for sustaining performance, especially in service organizations such as banks that demand accuracy, speed, and high-quality customer interaction.

Beyond engagement, employee performance in banking is closely linked to the organization's ability to create, disseminate, and utilize work-related knowledge. Banking is a knowledge-intensive industry: employees must understand

products (financing, funding, digital services), regulations, risk management, and service standards. Nonaka’s theory of organizational knowledge creation emphasizes that knowledge emerges through the dynamic conversion of tacit and explicit knowledge (e.g., through Socialization, Externalization, Combination, and Internalization/SECI) and develops from the individual level to the organizational level (Joseph Mahoney’s Home Page). In banking practice, knowledge creation may occur through coaching, sharing sessions, learning from service cases, SOP improvements, and best-practice documentation. The challenge is that when change accelerates and workloads increase, knowledge-creation processes often weaken because employees become “execution-heavy,” potentially affecting service decision quality and risk outcomes.

This is where the concept of Pro-Growth Employee Interaction becomes highly relevant. In essence, “pro-growth interaction” can be understood as work interactions that foster individual and team growth such as interactions that generate positive energy, learning, support, and trust. The positive organizational scholarship literature underscores the importance of high-quality connections in the workplace: even brief yet positive interactions can improve coordination, strengthen learning, and support performance (Center for Positive Organizations). In a banking environment (particularly at branch/area levels), the quality of interactions among employees frontliners and supervisors, tellers and customer service staff, branches and operational/risk units can determine the speed of customer problem resolution, process accuracy, and compliance consistency. If internal interactions do not support growth (e.g., limited feedback, defensive communication, or siloed work patterns), knowledge creation may weaken and, ultimately, employee performance may decline.

Based on these considerations, examining the influence of employee engagement and knowledge creation on pro-growth employee interaction, and its subsequent impact on employee performance, is particularly important in the context of BSI North Sumatra. First, the Islamic banking industry is expanding and demands consistent service execution (OJK Portal). Second, organizations face pressure from rapid change and increasing workloads, which may reduce engagement and collaboration quality (PwC). Third, global evidence indicates that engagement is correlated with multiple performance outcomes (Healthy Work Company). Fourth, banks require robust knowledge-creation mechanisms and growth-supportive work interactions to enable rapid learning so that growth targets can be achieved without compromising service quality and risk management (Joseph Mahoney’s Home Page). Accordingly, this study can clarify which HR-related factors most strongly shape employee performance and provide a practical basis for recommendations to strengthen work culture, organizational learning systems, and internal interaction quality within BSI North Sumatra.



Figure 1. Employee Performance Achievement at BSI North Sumatra in 2024
 Source: Employee Performance Report of BSI North Sumatra, 2024

Based on Figure 1.1, the overall employee performance achievement at BSI North Sumatra in 2024 was 89.41%. Meanwhile, the performance target set by management for 2024 was 91.71%. When actual performance falls short of the established target, overall performance cannot be fully optimized as expected, and the achievement of organizational targets may be disrupted. Employees’ willingness to go beyond traditional transaction-based tasks through proactive work relationships and engagement has been recognized as a source of contemporary competitive advantage (Chou & Stauffer, 2021; Ugaddan & Park, 2023). Further empirical evidence also indicates that employee work engagement may serve as a *sine qua non* for the survival and growth of modern business organizations in the near future (Gallup, 2023; Schaufeli, 2023; Vadera, Pratt, & Mishra, 2023). In relation to the performance achievement targets described above which are likely to affect employees’ KPI attainment at BSI North Sumatra these KPI outcomes are presented in the following figure.

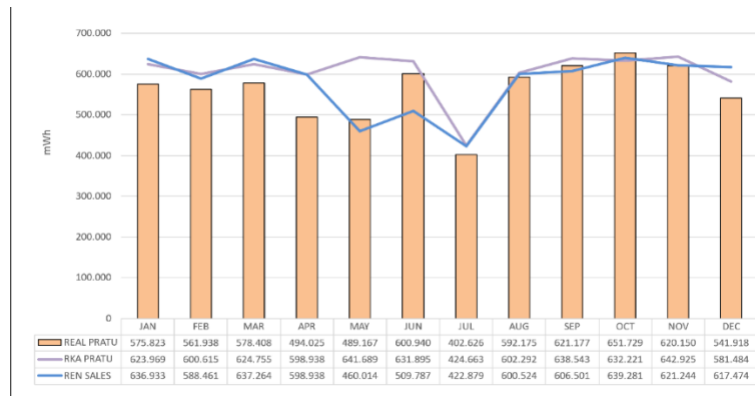


Figure 2. Employee KPI Target Achievement at BSI North Sumatra in 2024

Source: Employee Performance Report of BSI North Sumatra, 2024

In Figure 1.2, it can be observed that, on a monthly basis, the expected performance targets did not align with the realized production outcomes, based on the aggregate plans of branches across different regions. One critical issue that warrants further examination is the extent to which employee performance in executing assigned tasks contributes to achieving the targets established by the company. Research supported by Sihag (2020) indicates that engaged employees enhance their performance and provide organizations with competitive advantage by promoting talent retention. It has also been found that engaged employees are more energetic, enthusiastic, and dedicated to their organizations than their disengaged counterparts (Rothbard & Patil, 2021). Given the importance of organizational commitment in shaping employee performance, it is also evident that knowledge creation may exert either a positive or a negative influence on employee performance. Positive knowledge creation supports improvements in employee performance, whereas negative knowledge creation can contribute to poor performance outcomes (Massie et al., 2024).

Moreover, ineffective HRM practices may trigger adverse psychological factors (Joarder, 2022). For instance, when employees experience insufficient pro-growth employee interaction, their commitment to work and growth-oriented interaction within the organization may become weak and fragile. Over time, this condition may increase employees' intention to leave in pursuit of better opportunities in other organizations (Chan & Ao, 2024; Sabiu et al., 2022). To assess factors contributing to employee turnover, the company conducts an annual HRIE (Human Resource Interaction and Engagement) survey to measure the level of employee engagement and growth-oriented interaction. This survey evaluates employees' attachment and interaction with the organization, including perceptions of organizational policies and rules. Employee interaction reflects an individual's work-related attitude. The table below presents the results of the 2024 HRIE survey, as follows:

Table 1. Results of the HRIE Survey at BSI North Sumatra, 2024

No	Aspek-Aspek Faktor Interaksi Pegawai	Indeks Kinerja 2024	No	Aspek-Aspek Keterikatan	Indeks Keterikatan 2024
1	Kerjasama	3,27	1	Kepuasan Terhadap Rekan Kerja	3,31
2	Iklm Perusahaan	3,16	2	Job Content	3,27
3	Pendidikan & Pelatihan	3,14	3	Komunikasi Yang Efektif Dan Terbuka	3,11
4	Partisipasi	3,14	4	Ketersediaan Sumber Daya Dan Peralatan Kerja	3,04
5	Uraian Jabatan	3,06	5	Kemampuan Atasan Langsung	3,04
6	Sistem & Prosedur Manajemen	3,03	6	Strategi Dan Misi	3
7	Penilaian Kinerja	2,97	7	Budaya Organisasi & Nilai Perusahaan	2,98
8	Kemampuan Pimpnan Perusahaan	2,85	8	Pengembangan Karir	2,95
9	Rekrutmen, Seleksi Dan Penempatan	2,83	9	Rekognisi	2,92
10	Sistem Penggajian	2,46	10	Hubungan Manajemen Senior Dengan Pegawai	2,61

Based on Table 1, the payroll system (the *interaction* variable) and the relationship between top management and employees (the *engagement* variable) are the two dimensions with the lowest index scores. The survey results also indicate that most employee interaction dimensions score above the 2.85 index threshold, meaning that the interaction aspects are generally perceived to support positive employee interaction—with the exception of the payroll system, whose score falls below 2.85. The payroll system is also among the top three factors with the greatest influence on employee engagement;

therefore, it becomes a priority area for follow-up programs aimed at strengthening engagement and pro-growth employee interaction, so that the company's performance targets can be achieved more optimally.

The company's efforts to improve productivity have been primarily directed toward frontliners and customer service, with the intention of motivating employees to enhance work efficiency. However, this approach alone is insufficient to increase productivity. The organization must also cultivate productive work behaviors among its employees. Any method that fails to generate productive work behavior will not contribute meaningfully to the organization or to the employees themselves (Widodo & Sami'an, 2023).

Employee engagement refers to a positive, persistent, and pervasive work-related psychological state, characterized by vigor, dedication, and absorption toward one's job and organization. It represents a form of proactive and voluntary employee behavior that goes beyond formal job requirements (Anita, 2022; Gupta & Sharma, 2023; Rana, Ardichvili, & Tkachenko, 2024). In today's competitive business environment, organizations require proactive employees who can adapt, respond, and engage rapidly in order to navigate uncertain market conditions (Chen, 2020; Gallup, 2020; Paulsen, 2021).

The concept of employee engagement has attracted substantial attention in the academic literature. According to Aktar and Pangil (2021), engagement was initially conceptualized as the extent to which employees are physically involved, cognitively attentive, and emotionally connected to their work. Over time, engagement research has expanded considerably within organizational contexts. Engagement has been described as employees' psychological presence while performing their work, highlighting two essential components: attention and absorption. Accordingly, employee engagement can be defined as a psychological state of presence in a specific work role involving both attention and absorption. Engagement has also been framed as a combination of cognitive and emotional work experiences, along with work activities that shape how individuals behave while working. Most prominently, employee engagement is defined as a positive and fulfilling work-related state of mind, characterized by vigor (i.e., high levels of energy and mental resilience), dedication (i.e., enthusiasm), and absorption (i.e., full concentration while working).

According to Anitha (2024), there are three types of employees: engaged employees, disengaged employees, and actively disengaged employees. Engaged employees are "builders" who consistently strive to deliver excellence in their roles. Disengaged employees focus primarily on tasks assigned to them rather than on organizational goals; they do what they are told to do. Actively disengaged employees are harmful individuals who not only perform poorly but also undermine the motivation of others within the organization. This conceptualization suggests that engaged employees are intellectually and emotionally connected to the organization, feel energized by its purpose, and are committed to living its values. The indicators used in this study include enthusiasm, vigor, full concentration, proactivity, and rapid responsiveness (Chen, 2021; Gallup, 2021; Paulsen, 2022; Aktar & Pangil, 2023).

Knowledge creation refers to organizational processes through which new knowledge is generated, existing knowledge is updated, and knowledge is transformed into forms that can be understood, shared, and utilized to support decision-making, process improvement, and innovation. In knowledge management theory, knowledge creation is not merely an individual activity; it is a social and organizational process that emerges through interaction and collective learning. Nonaka (2024) emphasizes that organizational knowledge is produced through an ongoing dialogue between personal (tacit) knowledge and documented (explicit) knowledge, and then develops from the individual level to the group and organizational levels and even across organizations in the form of a knowledge spiral.

A key foundation of knowledge creation is the distinction between tacit knowledge and explicit knowledge. Tacit knowledge is subjective, difficult to formalize, and typically acquired through experience (e.g., service intuition, a "feel" for handling customer cases, or skills in resolving operational issues). By contrast, explicit knowledge is formal, documented, and relatively easy to transfer (e.g., SOPs, service guidelines, risk policies, and training modules). In *The Knowledge-Creating Company*, Nonaka and Takeuchi argue that organizational advantage is largely determined by the ability to manage the tacit-explicit relationship dynamically in order to produce innovation and continuous improvement.

The most widely used framework for explaining knowledge creation is the SECI model (Socialization-Externalization-Combination-Internalization). Nonaka (2024) describes four modes of knowledge conversion as follows: Socialization (Tacit → Tacit): Tacit knowledge is transferred through shared experience, observation, mentoring, coaching, informal discussions, or working side-by-side. In service organizations such as banking, socialization may occur through daily briefings, onboarding support for new employees, or supervisors' discussions of customer service cases. Externalization (Tacit → Explicit): Experience and intuition are articulated into concepts, procedures, or documents. Examples include "lessons learned" from customer complaints that are converted into handling guidelines, communication templates, or SOP revisions. Combination (Explicit → Explicit): Organizations integrate multiple explicit knowledge sources (documents, reports, policies, data) to form new knowledge systems. For instance, developing updated service SOPs by integrating regulations, internal policies, and audit findings. Internalization (Explicit → Tacit): Explicit knowledge is learned and applied until it becomes work skills and routines. Examples include product or compliance training that becomes embedded through repeated practice.

These processes form a "spiral" because knowledge does not remain at the individual level; it expands and becomes enriched through ongoing interaction within work communities. Nonaka (2024) also highlights an ontological dimension: the broader the interacting community involved, the stronger the potential for newly created knowledge to become organizational knowledge.

Nonaka and Konno introduce the concept of "Ba" as a "space/context" (physical, virtual, or mental) in which interactions facilitate knowledge creation. "Ba" matters because knowledge is context-bound; without an appropriate

interaction space, tacit knowledge is difficult to share and transform into organizational knowledge. In modern organizations, “Ba” may take the form of coordination meetings, sharing sessions, cross-unit communities, knowledge portals, or digital collaboration spaces. This concept is also relevant for explaining pro-growth employee interaction: growth-oriented interaction (e.g., mutual support, constructive feedback, collaboration, and learning orientation) effectively creates a healthy “Ba” that strengthens the SECI process.

Beyond SECI, Wenger’s Communities of Practice (CoP) theory explains that knowledge develops through social participation in communities that share a common practice. Wenger views learning as engagement in social practice; knowledge is constructed and maintained through mutual engagement, joint enterprise, and a shared repertoire (shared language, tools, stories, and procedures). Within organizations, CoPs can be an effective mechanism for accelerating knowledge creation across individuals and teams especially for knowledge that is difficult to codify (tacit). Wenger, McDermott, and Snyder also emphasize the importance of systematically developing CoPs so that knowledge can be created, shared, and applied to solve problems and enhance organizational capability.

As a complementary perspective, Cohen and Levinthal (2020) introduce absorptive capacity, defined as an organization’s ability to recognize the value of external knowledge, assimilate it, and apply it. This capability is strongly influenced by prior knowledge. The concept helps explain why organizations that actively create internal knowledge tend to adapt more quickly to changes in regulation, technology, and customer needs because they possess a “knowledge base” that enables the absorption of new knowledge. In line with this view, Kogut and Zander (2022) argue that organizational advantage is also shaped by the ability to combine knowledge (combinative capabilities) in order to replicate and develop practices/technologies effectively.

Within the context of this study focusing on employee engagement, pro-growth employee interaction, and employee performance knowledge creation can be positioned as a variable that strengthens the quality of work processes. Theoretically, knowledge creation is highly dependent on interaction, particularly in the phases of socialization and externalization. Therefore, it is reasonable to expect that knowledge creation exerts a strong influence on Pro-Growth Employee Interaction (PGEI). When new knowledge is successfully created and internalized, organizations benefit through improved service standards, reduced errors, faster problem resolution, and stronger compliance outcomes that ultimately contribute to higher employee performance. However, the effect of knowledge creation on performance tends to become more salient when the newly created knowledge is genuinely “activated” through high-quality interactions and consistent application (internalization). Consequently, it is empirically plausible that the influence of knowledge creation on performance is stronger through the mediating pathway of work interaction than through a direct effect.

Pro-Growth Employee Interaction (PGEI) refers to the quality of employee interactions that consistently foster growth whether in the form of enhanced capability (learning), increased work energy (vitality), or improvements in work practices thereby supporting coordination effectiveness and performance. Although the term “pro-growth employee interaction” is not always formalized as a single standardized construct in the literature, its substance can be robustly grounded in three well-established streams: High-Quality Connections, Relational Coordination, and Thriving at Work.

The concept of High-Quality Connections (HQC) emphasizes that even brief workplace interactions can generate substantial effects when characterized by mutual regard, trust, and active engagement (Dutton & Heaphy; Stephens, Heaphy, & Dutton). HQC is not merely about being “friendly”; rather, it describes connections that expand individuals’ psychological and social capacity. Employees become more open to information exchange, more willing to ask for or provide help, and more prepared to collaborate.

In service organizations such as banking, HQC is particularly important because work is interaction-intensive: the coordination quality among frontliners, operations staff, and control functions (e.g., risk and compliance) strongly determines the speed of problem resolution and service consistency. Accordingly, PGEI can be understood as interaction patterns that reflect HQC characteristics interactions that build psychological safety, mutual respect, and active involvement, thereby promoting learning and work energy.

PGEI can also be explained through Relational Coordination (RC) theory (Gittell). RC argues that high process performance emerges from working relationships supported by three relational elements shared goals, shared knowledge, and mutual respect combined with communication that is frequent, timely, accurate, and problem-solving-oriented (Gittell). This perspective is highly relevant because banking work is fundamentally interdependent: achieving service targets and ensuring procedural compliance require rapid and accurate information flows across roles.

From an RC perspective, pro-growth interaction is not limited to information exchange; it also builds cross-functional understanding, aligns goals, and encourages problem-solving without a blame-oriented culture. The stronger the relational foundation and problem-solving communication, the more likely the organization is to reduce friction, errors, and service delays thereby contributing to improved performance.

The “growth” dimension of PGEI can be further strengthened by the Thriving at Work framework proposed by Spreitzer et al. (2024), which defines thriving as a positive psychological state comprising vitality (feeling energized) and learning (a sense of continual development) simultaneously. Growth-supportive interactions create a social context that enhances both components: employees are more motivated and learn more quickly through feedback, case discussions, coaching, and best-practice exchanges. Thus, PGEI may be positioned as a social mechanism that facilitates thriving, which in turn is associated with more adaptive, proactive, and quality-oriented work behaviors.

Drawing on these three foundations, PGEI can be formulated as a pattern of workplace interactions characterized by mutual respect and trust, active engagement, problem-solving communication, and knowledge exchange—which together strengthen learning and vitality and ultimately support coordination effectiveness and performance. Within the

research framework, PGEI is highly relevant as a bridging variable that explains how psychological factors and knowledge processes translate into work outcomes. Engaged employees tend to be psychologically present, proactive, and initiative taking in their interactions, thereby enhancing connection quality (HQC) and problem-solving communication (RC). Meanwhile, knowledge creation requires interaction-rich spaces (e.g., discussions, experience sharing, and practice documentation), which conceptually strengthen shared knowledge and coordination quality. Ultimately, strong PGEI facilitates cross-role coordination, accelerates learning, and sustains work energy forming a logical pathway toward higher employee performance in service-based organizations such as banks.

The proposed dimensions of Pro-Growth Employee Interaction (PGEI) in this study are as follows: Mutual Respect & Trust (grounded in HQC & RC: respect and trust as the foundation of high-quality interaction). Shared Goals & Shared Knowledge (grounded in RC: shared objectives and cross-role understanding). Problem-Solving Communication (grounded in RC: communication that is frequent, timely, accurate, and oriented toward problem solving). Active Engagement & Supportive Exchange (grounded in HQC: active involvement and supportive exchange in interaction). Growth Outcome in Interaction (pro-growth orientation: interaction that stimulates learning and vitality).

Employee performance is often conflated with the notion of work achievement. Performance refers to work achievement as reflected in the comparison between actual work outcomes and established work standards. Performance can be understood as the result of employee capability multiplied by effort and organizational support. Accordingly, performance will decline if any of these factors is reduced or absent. An individual's capability is influenced by talent and interest, whereas effort is shaped by motivation, incentives, and job design. Organizational support includes, among others, human resource development training and the availability of adequate organizational equipment and resources.

Salminen et al. (2021) argue that performance should be viewed as a multidimensional construct. A common distinction is made between task performance and contextual performance (Demerouti et al., 2024). Task performance refers to performance required by a specific job role (in-role performance), whereas contextual performance describes interpersonal job performance (extra-role performance) or citizenship behaviors that go beyond what is formally required (Demerouti et al., 2024). Other forms of performance have also been examined, including adaptive performance, withdrawal behavior, counterproductive behavior, and creative performance (Judge & Kammeyer-Mueller, 2022), as well as innovative performance (Lee et al., 2020). More recently, safety performance, measured through indicators such as the prevalence of workplace injuries, has been identified as another dimension of employee performance.

Studies investigating the relationship between job-related attitudes (e.g., organizational commitment and job satisfaction) and individual-level performance have relied on various performance data sources, including employee self-reported performance (Schoemmel & Jönsson, 2022), managerial evaluations of individual performance (Lee et al., 2020), and objective performance data. Subjective performance measures are commonly used when objective performance data are not available. A meta-analysis reviewing studies over a 25-year period found that only 1 out of 51 studies examining the relationship between organizational commitment and job performance used objective performance data; the remainder relied on subjective performance measures (self-reports or supervisor ratings).

Performance appraisal refers to procedures such as establishing work standards, evaluating employees' actual performance relative to those standards, and providing feedback and motivation to encourage improvement. Individual performance measurement is often influenced by the sector and the nature of the job. For example, a study by Furtmueller et al. (2021) indicates that performance measurement for financial professionals is based on sales figures, customer satisfaction, and the achievement of specific targets.

According to Pawirosumarto et al. (2021), performance essentially reflects what employees do or fail to do; employee performance affects the extent of their contribution to the organization, including output quantity, output quality, work attendance, and cooperative attitudes. In this study, the performance indicators include work standards, employees' actual performance, feedback, employee motivation, customer satisfaction, and goal attainment (Schoemmel & Jönsson, 2020; Lee et al., 2020; Furtmueller et al., 2021).

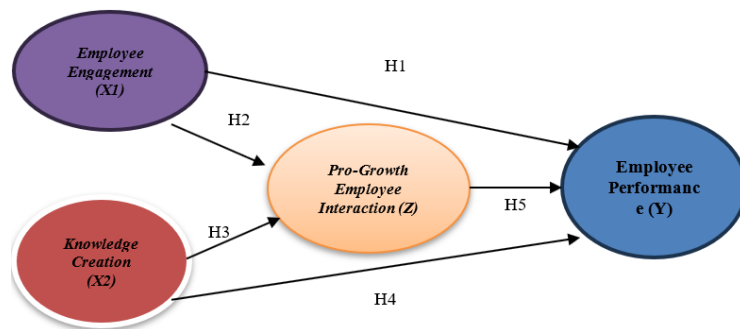


Figure 2. Research Model

Based on the theoretical framework and prior empirical studies discussed above, the researcher formulates the following provisional conclusions (hypotheses):

H1: Higher employee engagement leads to higher employee performance at BSI North Sumatra.

H2: Higher employee engagement leads to higher Pro-Growth Employee Interaction (PGEI) among employees at BSI

North Sumatra.

H3: Higher knowledge creation leads to higher Pro-Growth Employee Interaction (PGEI) at BSI North Sumatra.

H4: Higher knowledge creation leads to higher employee performance at BSI North Sumatra.

H5: Higher Pro-Growth Employee Interaction (PGEI) leads to higher employee performance at BSI North Sumatra.

2. RESEARCH METHOD

This study adopts a quantitative explanatory approach (explanatory/causal research), namely a research design aimed at explaining and testing cause–effect relationships among variables/constructs based on hypotheses derived from theory. Unlike descriptive research, which primarily portrays existing conditions, an explanatory approach emphasizes the testing of effects and the mechanisms of relationships (e.g., direct and indirect/mediated relationships). Within the quantitative paradigm, theory is tested objectively through the operationalization of constructs into measurable indicators, the collection of numerical data, and the application of statistical analyses to assess whether empirical evidence supports the proposed hypotheses. This framework aligns with the study’s objective of theory verification (theory testing) that is, examining whether constructs such as employee engagement, workplace interaction, and knowledge creation influence other constructs (e.g., PGEI and employee performance), rather than exploring the subjective meaning of respondents’ experiences as in qualitative approaches.

2.1 Data Collection Method: Questionnaire Survey

To obtain representative data from the employee population (e.g., employees of BSI in the North Sumatra region), the most appropriate method is a survey using a structured questionnaire. This choice is justified by several methodological considerations:

- a. Suitability for latent variables (latent constructs): Constructs such as engagement, the quality of workplace interactions, or knowledge-creation processes are latent, meaning they cannot be directly observed in the same way as age or tenure. Latent constructs are typically measured through multiple indicators (questionnaire items) using numerical scales (e.g., Likert 1–5 or 1–7). Accordingly, a survey is well suited to capture respondents’ perceptions, attitudes, and evaluations in a systematic manner.
- b. Standardization and efficiency: Questionnaires enable standardization of questions and response options, making variation in responses easier to compare and analyze. Surveys are also efficient for reaching a sufficiently large number of respondents, thereby ensuring adequate statistical power for inferential analysis, including SEM.
- c. Fit with the organizational context: In organizational research, behavioral and psychological variables are often most feasibly measured through self-report data (employees’ perceptions), particularly when administrative company data do not provide direct measures of the constructs of interest.

2.2 Research Design: Cross-Sectional

The study employs a cross-sectional survey design, meaning that data are collected at one point in time (a snapshot). This design is appropriate because:

- a. The study seeks to capture the pattern of relationships among variables within a specific period in an organizational setting, which is commonly conducted within a single work cycle.
- b. Cross-sectional designs are generally more feasible in terms of time and cost compared to longitudinal designs, especially when the population operates in a dynamic organizational structure and within demanding operational schedules.
- c. Nevertheless, because cross-sectional designs measure variables at a single time point, causal claims should be interpreted as theory- and model-based causality, rather than pure experimental causality. In other words, causal inference is strengthened through: (a) a strong theoretical foundation, (b) logically justified directional relationships, (c) consistent structural model testing, and (d) rigorous measurement quality control.

2.3 Analytical Technique: Structural Equation Modeling (SEM)

From an analytical perspective, the research model contains multiple causal pathways tested simultaneously, for example:

- a. Engagement → PGEI → Performance (indirect/mediated relationship)
- b. Knowledge Creation → PGEI
- c. and other potential direct paths tested within the same model.

Such a structure is more appropriately analyzed using Structural Equation Modeling (SEM) than single or stepwise regression, for several reasons:

- a. Integrating the measurement model and structural model within one framework
 1. The measurement model tests the quality of latent constructs—whether indicators are valid and reliable representations of the constructs.
 2. The structural model tests the relationships among constructs, including the magnitude and significance of effects between latent variables.
- b. Accounting for measurement error: In conventional regression, indicators are often treated as if they are error-free. SEM estimates relationships among constructs while explicitly incorporating measurement error, producing more robust coefficient estimates for psychological and organizational constructs.
- c. Formally testing mediation (indirect effects): Mediation paths such as Engagement → PGEI → Performance can be

examined through the estimation of indirect effects. A stronger and widely accepted practice is to employ bootstrapping to obtain confidence intervals for indirect effects, since their sampling distribution is often non-normal.

- d. Suitability for complex models with latent constructs: When multiple latent constructs are analyzed simultaneously, SEM helps ensure that observed relationships are not merely artifacts of weak measurement, thereby improving the rigor of theory testing.

2.4 Population

According to Fachrudin and Meliza (2023), a population refers to the characteristics of all research objects, and these characteristics are associated with the entire population, events, or objects that constitute the researcher’s main focus. In this study, the population comprises employees of Bank Syariah Indonesia (BSI) North Sumatra units, totaling 1,650 employees.

2.5 Sample

A sample is a subset of a population consisting of a number of its members. This subset is selected because, in many cases, it is not feasible to examine all members of the population; therefore, researchers draw a representative portion of the population, referred to as the sample (Ferdinand, 2023). According to Ferdinand (2023), in multivariate research (including studies employing multivariate regression analysis), the recommended sample size is 25 times the number of independent variables. Thus, a regression analysis with four independent variables requires a minimum sample size of 100 respondents to ensure adequate sample sufficiency.

3. RESULT AND DISCUSSION

3.1 Result

Before conducting hypothesis testing, it is necessary to perform a validity test to determine how well a model or measurement process captures the intended construct. In this study, validity is assessed by examining convergent validity and discriminant validity. This validity testing is conducted to evaluate the measurement instrument used in this research namely, to assess whether the questionnaire items appropriately measure the constructs under investigation. The results of the validity testing are presented in the figure below:

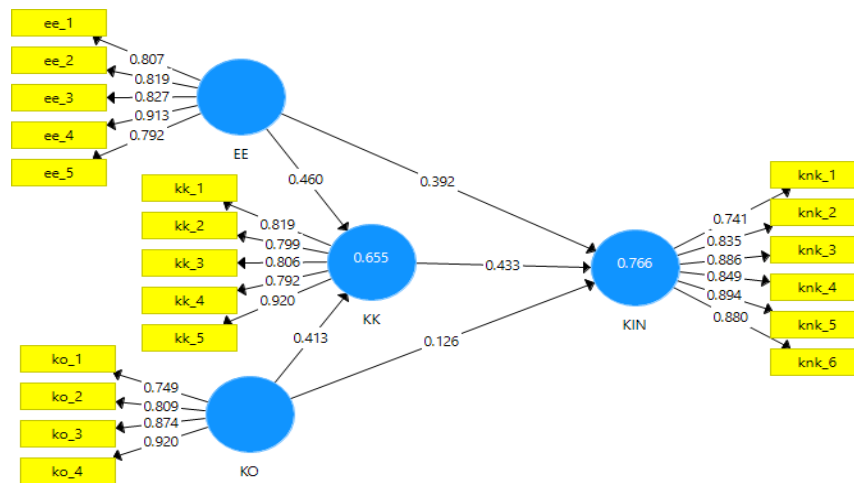


Figure 2. Outer Model Test

Source: SmartPLS output, processed by the authors (2025).

Based on Figure 2, all indicator loadings for each variable are greater than 0.70, indicating that the measurement model satisfies the validity criteria. According to Ghazali and Latan (204), an indicator is considered valid when its loading factor exceeds 0.70. In addition to examining loading factors, convergent validity can also be evaluated using the Average Variance Extracted (AVE), which should be greater than 0.50 (Ghozali & Latan, 2024). In this model, the AVE values for each construct are above 0.50, as shown in Table 2 below:

Table 2. Average Variance Extracted (AVE)

Variabel	Average Variance Extracted (AVE)
Employee Engagement	0.693
Kinerja Pegawai	0.721
Pro-Growth Employee Interaction	0.687
Knowledge Creation	0.707

Source: SmartPLS output, processed by the authors (2025).

Based on Table 2, since no issues are identified with convergent validity, the next step is to evaluate discriminant validity. Discriminant validity is based on the principle that the measurements (manifest variables) of different constructs should not be highly correlated with one another. Discriminant validity can be assessed by examining the square root of the AVE for each construct. The expected criterion is that the square root of AVE should be higher than the inter-construct correlation values. These results are presented in Table 2 below.

Table 3. Results of the Square Root of Average Variance Extracted (AVE)

Variable	Discriminant Validity			
	Employee Engagement	Knowledge Creation	Employee Performance	Pro-Growth Employee Interaction
Employee Engagement	0.833			
Knowledge Creation	0.757	0.829		
Employee Performance	0.810	0.823	0.849	
Pro-Growth Employee Interaction	0.719	0.743	0.730	0.841

Source: SmartPLS output, processed by the authors (2025).

Based on Table 3, it can be concluded that the square root of the AVE for each construct is greater than the correlations between that construct and the other constructs. The square root of AVE values appears on the diagonal, while the values below the diagonal represent the inter-construct correlations. The results show that the square root of AVE is consistently higher than the corresponding correlation values. Therefore, all constructs in this study can be considered valid, as they satisfy the discriminant validity requirement.

3.1.1 Reliability Test Results

After establishing validity, the next step is to assess reliability. Reliability testing is conducted to demonstrate the accuracy, consistency, and precision of the instrument in measuring the variables. Reliability can be evaluated using two measures: Cronbach’s alpha and composite reliability (often referred to as Dillon–Goldstein’s rule of thumb). A construct is considered reliable when these values are above 0.70 (Ghozali & Latan, 2015: 75–77). The results of the reliability test are presented in Table 4 below.

Table 4. Construct Reliability and Validity

Variabel	Cronbach’s Alpha	Composite Reliability
Employee Engagement	0.889	0.919
Employee Performance	0.922	0.939
Knowledge Creation	0.886	0.916
Pro-Growth Employee Interaction	0.859	0.906

Source: SmartPLS output, processed by the authors (2025).

Based on Table 4, the reliability test results show that Cronbach’s Alpha and Composite Reliability for all variables are above 0.70. Therefore, it can be concluded that all constructs are reliable and have met the reliability criteria.

3.1.2 Structural Model (Inner Model) Assessment

After the measurement model meets the required criteria, the next step is to evaluate the inner model (structural model) to determine the magnitude of the relationships among variables as proposed in the hypotheses. The first stage of structural model assessment is to examine the R-square (R^2) values, which are presented in Table 5 below.

Table 5. R-Square

Variabel	R-Square	R-Square Adjusted
Kinerja Pegawai	0.766	0.759
Pro-Growth Employee Interaction	0.655	0.648

Source: SmartPLS output, processed by the authors (2025)

Based on Table 5, the R-square (R^2) value for the employee performance construct is 0.766, which indicates a strong explanatory power. Likewise, the R^2 value for Pro-Growth Employee Interaction (PGEI) is 0.655, which also falls into the strong category. These results imply that PGEI is explained by 65.5% of the variance in employee engagement and knowledge creation, while employee performance is explained by 76.6% of the variance in the model.

3.1.3 Hypothesis Testing Results

The direct-effect hypothesis testing in this study is conducted by examining the T-statistics and P-values. In SmartPLS, T-statistics and P-values are obtained through a bootstrapping procedure applied to a model that has already been confirmed as valid and reliable. A hypothesis is accepted if the T-statistic exceeds the critical value ($t\text{-table} = 1.960$) or if the P-value is below 0.05. The results are presented in the table below.

Table 6. Result Test *Bootstapping Direct Effect*

Hypothesis	Path Coefficient Direct Effect			
	Path Coefficients	Original Smaple	T Statistic	P Value
H1	Employee Engagemenet -> Employee Performance	0.392	3.098	0.002
H2	Employee Engagement -> Pro-Growth Employee	0.460	3.948	0.000
H3	Pro-Growth Employee -> Employee Performance	0.433	3.729	0.000
H4	Knowledge Creation -> Employee Performance	0.126	1.226	0.221
H5	Knowledge Creation -> Pro-Growth Employee	0.413	3.636	0.000

Source: SmartPLS output, processed by the authors (2025)

Based on Table 6, the SmartPLS 3.29 bootstrapping results can be interpreted as follows:

- Hypothesis 1 (H1): Employee engagement has a positive and significant effect on employee performance, as indicated by t-statistic = 3.098 (> 1.96) and p-value = 0.002 (< 0.05). Therefore, H1 is supported, confirming that higher employee engagement is associated with improved employee performance at BSI North Sumatra.
- Hypothesis 2 (H2): Employee engagement has a positive and significant effect on Pro-Growth Employee Interaction (PGEI), with t-statistic = 3.948 (> 1.96) and p-value = 0.000 (< 0.05). Thus, H2 is supported, indicating that stronger employee engagement leads to higher levels of PGEI among employees at BSI North Sumatra.
- Hypothesis 3 (H3): Pro-Growth Employee Interaction (PGEI) has a positive and significant effect on employee performance, as shown by t-statistic = 3.729 (> 1.96) and p-value = 0.000 (< 0.05). Accordingly, H3 is supported, suggesting that higher PGEI contributes to better employee performance at BSI North Sumatra.
- Hypothesis 4 (H4): Knowledge creation has a positive and significant effect on employee performance, with t-statistic = 3.636 (> 1.96) and p-value = 0.000 (< 0.05). Therefore, H4 is supported, indicating that stronger knowledge creation is associated with higher employee performance at BSI North Sumatra.
- Hypothesis 5 (H5): Knowledge creation does not have a significant effect on Pro-Growth Employee Interaction (PGEI), since t-statistic = 0.122 (< 1.96) and p-value = 0.221 (> 0.05). Thus, H5 is not supported. In other words, the assumption that better knowledge creation leads to higher PGEI among employees at BSI North Sumatra is not empirically confirmed in this model.

3.1.4 Indirect Effect (Mediation) Testing

To examine whether Pro-Growth Employee Interaction (PGEI) acts as an intervening (mediating) variable mediating the effects of employee engagement and knowledge creation on employee performance the study evaluates the indirect effects. In other words, the mediation test assesses how the exogenous variables (employee engagement and knowledge creation) influence the endogenous variable (employee performance) through PGEI. The indirect effect results are presented in Table 7 below.

Table 7. Result Test *Bootstrapping (Indirect Effect)*

Hubungan Pengaruh Variabel	Spesific Indirect Effect		
	Original Sample	T Statistic	P value
Employee Engagement -> Pro-Growth Employee Interaction -> Kinerja pegawai	0.199	2.823	0.005
Knowledge Creation -> Pro-Growth Employee Interaction -> Kinerja pegawai	0.179	2.327	0.020

Source: SmartPLS output, processed by the authors (2025)

Based on Table 7, two indirect (mediated) relationships are identified. The presence or absence of significant indirect effects among the variables can be explained as follows:

- Indirect Effect 1: Employee engagement, through Pro-Growth Employee Interaction (PGEI), has a positive and significant effect on employee performance, as indicated by t-statistic = 2.823 (> 1.96) and p-value = 0.005 (< 0.05). This means that stronger employee engagement increases employees' PGEI, which in turn enhances employee performance.
- Indirect Effect 2: Knowledge creation, through Pro-Growth Employee Interaction (PGEI), has a positive and significant effect on employee performance, with t-statistic = 2.237 (> 1.96) and p-value = 0.020 (< 0.05). This suggests that stronger knowledge creation improves PGEI, thereby contributing to higher employee performance.

3.2 Discussion

Based on the study's findings indicating that employee engagement and Pro-Growth Employee Interaction (PGEI) significantly influence employee performance, and that knowledge creation affects performance but does not significantly predict PGEI future researchers are encouraged to expand the conceptual model in the following directions:

- Simultaneously examining employee engagement and organizational commitment in predicting employee performance: Future studies may test the simultaneous effects of employee engagement and organizational commitment on employee performance. Organizational commitment is theoretically relevant because it may function as an attitudinal resource that strengthens employees' attachment to organizational goals, thereby potentially increasing their performance contributions. This test is also important to determine whether engagement and

organizational commitment operate as complementary constructs or whether they are substitutive in explaining variance in performance.

- b. Including job satisfaction and compensation systems as intervening or moderating variables: In line with this study's emphasis on the importance of social-process mechanisms (i.e., workplace interaction) in enhancing performance, future research is advised to incorporate job satisfaction and the compensation system as intervening variables or moderators. This aims to examine whether engagement and knowledge-creation processes can be translated more effectively into interaction quality and performance when supported by high job satisfaction and strong perceptions of compensation fairness. Theoretically, compensation and job satisfaction may be positioned as motivational reinforcement mechanisms that strengthen employees' behavioral intentions to engage actively, share knowledge, and collaborate productively.
- c. Testing a more complex mediation framework (serial mediation): Future research may also examine a more complex mediation model by placing PGEI as the primary mediator, and subsequently testing whether job satisfaction or compensation acts as a secondary mediator (serial mediation). Such an approach can provide a more detailed explanation of how psychological conditions and organizational systems operate sequentially in shaping performance, thereby strengthening the theoretical contribution of the research—particularly within service organizations such as banking.

Accordingly, future studies are expected to enrich theoretical development on how psychological resources (employee engagement), knowledge assets (knowledge creation), and social mechanisms (pro-growth interaction) are converted into performance outcomes, while taking into account reinforcing factors such as job satisfaction and compensation systems.

3.2.1 Managerial Recommendations

Based on the results indicating that employee engagement positively affects employee performance, employee engagement significantly influences PGEI, knowledge creation positively affects employee performance, and PGEI strongly influences employee performance, the following managerial recommendations are proposed for BSI North Sumatra:

a. Strengthening Employee Engagement to Improve Employee Performance

The findings demonstrate that employee engagement has a positive and significant effect on employee performance. This implies that the stronger employees' attachment to the organization, the higher the performance outputs they produce. Therefore, BSI North Sumatra's management should cultivate a work environment that promotes engagement through structured and consistent strategies.

Managerial recommendations:

1. Clear competency and career development programs: Employees who perceive clear development pathways and career opportunities tend to be more engaged, develop a stronger sense of ownership, and strive to deliver their best contributions.
2. Employee involvement in work processes and service improvement: Management can strengthen engagement by involving employees in process-improvement forums, service evaluations, and operational decision-making within the scope of their authority.
3. Strengthening supervisors' roles as motivators and support systems: Supervisors should be more proactive in providing reinforcement, attention, feedback, and recognition so that employees experience psychological support and appreciation.
4. Creating a conducive and healthy work climate: A safe, comfortable, and supportive work environment reinforces engagement by enabling employees to work with stable focus and energy.

Through these initiatives, engagement becomes not only a psychological condition but also a measurable organizational asset reflected in improved performance.

b. Strengthening Employee Engagement to Enhance Pro-Growth Employee Interaction

The study also shows that employee engagement has a positive and significant influence on PGEI. This suggests that employees who feel engaged with the organization are more likely to collaborate actively, share ideas, and support collective work processes.

Managerial recommendations:

1. Building a cross-unit collaboration culture: Management should encourage cross-functional work patterns (e.g., teller–customer service–back office) to ensure interactions are integrated rather than siloed.
2. Institutionalizing internal discussion forums and problem-solving meetings: Regular forums for sharing operational issues, evaluating service quality, and developing solutions can enhance interaction quality.
3. Establishing reward systems for collaborative behaviors: BSI can design reward mechanisms that recognize behaviors fostering productive interaction, such as knowledge sharing, assisting colleagues, or initiating service improvements.
4. Improving organizational communication quality: Clear communication regarding goals, work priorities, and expectations can reduce conflict, strengthen coordination, and improve work efficiency.

In this way, engagement can be converted into productive, growth-oriented interactions that ultimately improve performance.

c. Optimizing Knowledge Creation as a Driver of Employee Performance

The findings indicate that knowledge creation has a positive and significant effect on employee performance. This implies that the stronger the organization's processes of creating, managing, and disseminating knowledge, the more effective employees become in executing their tasks and achieving performance targets.

d. Optimizing Knowledge Creation as a Driver of Employee Performance

Managerial recommendations:

1. Establishing a formal and structured knowledge-sharing system: For example, through a knowledge portal, digital SOPs, regular sharing sessions, and documented service cases that can be revisited for learning.
2. Promoting a learning culture and process innovation: Employees should be facilitated to develop more effective ways of working, including service innovation, procedural simplification, and the use of internal technologies.
3. Developing Communities of Practice (CoP): Function-based employee groups (e.g., financing, teller, customer service, risk) can serve as platforms for knowledge exchange and collective learning.
4. Ensuring knowledge creation is translated into operational implementation: Newly created knowledge should be linked to changes in work practices through coaching, SOP updates, and implementation reviews.

Through these strategies, knowledge creation becomes a source of productivity not merely information that is stored but not utilized.

e. Strengthening Pro-Growth Employee Interaction as a Primary Lever for Performance

This study demonstrates that Pro-Growth Employee Interaction (PGEI) has a significant effect on employee performance. This finding is important because it indicates that the quality of workplace interaction is not merely a supporting factor, but a strategic leverage mechanism that accelerates performance improvement.

Managerial recommendations:

1. Implementing performance- and collaboration-based coaching and mentoring: Supervisors can shape productive work communication patterns through regular mentoring and solution-oriented coaching.
2. Developing team-based work systems (team-based performance): Performance appraisal can incorporate team collaboration elements so employees are encouraged to build productive interactions, rather than focusing solely on individual targets.
3. Enhancing feedback mechanisms and service evaluation: Employees should receive timely feedback on operational errors and opportunities for service improvement so that work interaction becomes an ongoing learning process.
4. Building a culture of mutual support and psychological safety: Employees should feel safe to share ideas and provide feedback without fear of blame, enabling healthier interactions that are oriented toward continuous improvement.

By strengthening growth-oriented interaction, the organization can build a more adaptive and productive work ecosystem, thereby improving employee performance sustainably.

3.2.2 Overall Managerial Implications

Overall, the managerial recommendations from this study emphasize that improving employee performance at BSI North Sumatra requires an integrated approach: strengthening employee engagement, enhancing knowledge creation processes, and building productive, growth-oriented workplace interactions (PGEI). Through these strategies, BSI North Sumatra can improve work effectiveness, service quality, and organizational competitiveness in a sustainable manner.

4. CONCLUSION

To improve employee performance based on the research findings and discussion presented in the previous chapter, the study concludes that employee engagement and Pro-Growth Employee Interaction (PGEI) influence employee performance. In addition, employee engagement and knowledge creation influence employees' PGEI; however, knowledge creation does not significantly influence employee performance. Accordingly, several conclusions and practical suggestions can be proposed for BSI North Sumatra, as follows: This study demonstrates that employee engagement has a positive and significant effect on employee performance at BSI North Sumatra. This is evidenced by a t -statistic = 3.098, which exceeds the critical value (t -table = 1.96), and a p -value = 0.002, which is below $\alpha = 0.05$. The path coefficient = 0.392 indicates that employee engagement contributes an effect of approximately 39.2% on employee performance. Thus, the stronger employees' attachment to the organization, the higher their performance. The findings also show that employee engagement has a positive and significant effect on PGEI. This is indicated by t -statistic = 3.948 (> 1.96) and p -value = 0.000 (< 0.05). The path coefficient = 0.460 suggests that employee engagement contributes an effect of approximately 46.0% on PGEI. This implies that the higher employees' engagement and work energy, the more likely they are to develop productive, collaborative, and growth-oriented interactions. Furthermore, PGEI is shown to have a positive and significant effect on employee performance. This is supported by t -statistic = 3.729 (> 1.96) and p -value = 0.000 (< 0.05). The path coefficient = 0.413 indicates an effect contribution of approximately 41.3% on employee performance. In practical terms, the higher the quality of growth-supportive work interaction (e.g., collaboration, knowledge sharing, and work support), the higher employee performance. The results indicate that knowledge creation has a positive and significant effect on employee performance at BSI North Sumatra. This is evidenced by t -statistic = 3.636 (> 1.96) and p -value = 0.000 (< 0.05). The path coefficient = 0.433 suggests that knowledge creation contributes an effect of approximately 43.3% on employee performance. Therefore, the better the organization's processes of creating

and managing knowledge, the higher employee performance. In contrast to the other hypotheses, the test results show that knowledge creation does not have a statistically significant effect on PGEI. This is indicated by t -statistic = 0.122 (< 1.96) and p -value = 0.221 (> 0.05). The path coefficient = 0.126 suggests that the contribution of knowledge creation to PGEI is relatively small and statistically non-significant. This finding implies that although the organization may already have knowledge-creation processes, these do not necessarily translate automatically into growth-oriented employee interactions. Therefore, BSI North Sumatra should strengthen mechanisms that convert knowledge into interaction and practice through collaboration systems, structured knowledge-sharing forums, and a learning-based work culture so that knowledge creation can be transformed into more productive workplace interactions.

ACKNOWLEDGMENT

The authors would like to express their sincere gratitude to Bank Syariah Indonesia (BSI) North Sumatra (Sumut) for granting permission and support to conduct this study, and to all employees who willingly participated as respondents and provided valuable information for the research. We also convey our deepest appreciation to the academic community of the Faculty of Economics and Business, Doctoral Program in Management Science, Universitas Sumatera Utara, for the guidance, feedback, and scholarly environment that supported the completion of this work. Special thanks are addressed to colleagues and peers who contributed through discussions, suggestions, and technical assistance during the data collection and analysis process. Finally, we gratefully acknowledge the conference organizers and anonymous reviewers for their constructive comments, which helped improve the quality and clarity of this article.

REFERENCES

- Alavi, M., & Leidner, D. E. (2021). Review: Knowledge management and knowledge management systems: Conceptual foundations and research issues. *MIS Quarterly*, 25(1), 107–136.
- Argote, L., & Ingram, P. (2020). Knowledge transfer: A basis for competitive advantage in firms. *Organizational Behavior and Human Decision Processes*, 82(1), 150–169.
- Armstrong, M. (2014). *Armstrong's handbook of human resource management practice* (13th ed.). Kogan Page.
- Bakker, A. B., & Demerouti, E. (2021). The Job Demands–Resources model: State of the art. *Journal of Managerial Psychology*, 22(3), 309–328.
- Bakker, A. B., Albrecht, S., & Leiter, M. P. (2022). Key questions regarding work engagement. *European Journal of Work and Organizational Psychology*, 20(1), 4–28.
- Bank Syariah Indonesia. (2024). *Annual Report / Sustainability Report*. Jakarta: BSI.
- Borman, W. C., & Motowidlo, S. J. (2023). Expanding the criterion domain to include elements of contextual performance. In N. Schmitt & W. C. Borman (Eds.), *Personnel selection in organizations* (pp. 71–98). Jossey-Bass.
- Campbell, J. P. (2020). Modeling the performance prediction problem in industrial and organizational psychology. In M. D. Dunnette & L. M. Hough (Eds.), *Handbook of industrial and organizational psychology* (Vol. 1, pp. 687–732). Consulting Psychologists Press.
- Cross, R., & Parker, A. (2024). *The hidden power of social networks: Understanding how work really gets done in organizations*. Harvard Business School Press.
- Gittel, J. H. (2022). Coordinating mechanisms in care provider groups: Relational coordination as a mediator and input. *Management Science*, 48(11), 1408–1426.
- Grant, R. M. (2021). Toward a knowledge-based theory of the firm. *Strategic Management Journal*, 17(S2), 109–122.
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2023). *Multivariate data analysis* (8th ed.). Cengage.
- Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2021). *A primer on partial least squares structural equation modeling (PLS-SEM)* (3rd ed.). Sage.
- Hansen, M. T. (2023). The search-transfer problem: The role of weak ties in sharing knowledge across organization subunits. *Administrative Science Quarterly*, 44(1), 82–111.
- Harter, J. K., Schmidt, F. L., & Hayes, T. L. (2022). Business-unit-level relationship between employee satisfaction, employee engagement, and business outcomes: A meta-analysis. *Journal of Applied Psychology*, 87(2), 268–279.
- Kahn, W. A. (2020). Psychological conditions of personal engagement and disengagement at work. *Academy of Management Journal*, 33(4), 692–724.
- Kline, R. B. (2021). *Principles and practice of structural equation modeling* (4th ed.). Guilford Press.
- Kozlowski, S. W. J., & Ilgen, D. R. (2020). Enhancing the effectiveness of work groups and teams. *Psychological Science in the Public Interest*, 7(3), 77–124.
- Macey, W. H., & Schneider, B. (2023). The meaning of employee engagement. *Industrial and Organizational Psychology*, 1(1), 3–30.
- Nahapiet, J., & Ghoshal, S. (2023). Social capital, intellectual capital, and the organizational advantage. *Academy of Management Review*, 23(2), 242–266.
- Nonaka, I. (2024). A dynamic theory of organizational knowledge creation. *Organization Science*, 5(1), 14–37.
- Nonaka, I., & Takeuchi, H. (2023). *The knowledge-creating company: How Japanese companies create the dynamics of innovation*. Oxford University Press.
- Nonaka, I., Toyama, R., & Konno, N. (2022). SECI, ba and leadership: A unified model of dynamic knowledge creation. *Long Range Planning*, 33(1), 5–34.
- Otoritas Jasa Keuangan (OJK). (2025). *Roadmap Pengembangan Perbankan Syariah Indonesia 2025*. Jakarta: OJK.
- Robbins, S. P., & Judge, T. A. (2021). *Organizational behavior* (18th ed.). Pearson.
- Saks, A. M. (2022). Antecedents and consequences of employee engagement. *Journal of Managerial Psychology*, 21(7), 600–619.
- Schaufeli, W. B., Salanova, M., González-Romá, V., & Bakker, A. B. (2022). The measurement of engagement and burnout: A two-

sample confirmatory factor analytic approach. *Journal of Happiness Studies*, 3(1), 71–92.

Tsai, W., & Ghoshal, S. (2022). Social capital and value creation: The role of intrafirm networks. *Academy of Management Journal*, 41(4), 464–476.

Wenger, E. (2023). *Communities of practice: Learning, meaning, and identity*. Cambridge University Press.