

THE IMPACT OF DIGITAL SERVICE AND INNOVATIVE WORK BEHAVIOR ON EMPLOYEE PERFORMANCE : THE MEDIATING ROLE OF JOB SATISFACTION

Harsaningsih¹, Indah Sulistyowati², Yuli Isnaeni³, Agus Sukandar⁴, Ali Mursid⁵

Magister Manajemen BPD University

Jl. Soekarno Hatta No. 88 Semarang, Central Java, Indonesia

Correspondent email: harsaningsihnadyra@gmail.com

ABSTRACT

This study investigates "The Impact of Digital Service and Innovative Work Behavior on Employee Performance: The Mediating Role of Job Satisfaction." It aims to explore how Digital Service and Innovative Work Behavior influence Employee Performance, with Job Satisfaction acting as a mediating variable. The research proposes five hypotheses: H1 posits that Digital Service positively affects Job Satisfaction; H2 suggests that Digital Service enhances Employee Performance; H3 indicates that Innovative Work Behavior positively influences Job Satisfaction; H4 asserts that Innovative Work Behavior improves Employee Performance; and H5 evaluates the mediating effect of Job Satisfaction on the relationships between Digital Service, Innovative Work Behavior, and Employee Performance. Using a questionnaire distributed to 200 respondents, this study seeks to provide valuable insights into the interconnectedness of these factors and their collective impact on enhancing employee performance.

Keywords: Digital Service, Innovative Work Behavior, Employee Performance, Job Satisfaction

ABSTRAK

Studi ini menyelidiki “Dampak Layanan Digital dan Perilaku Kerja Inovatif terhadap Kinerja Karyawan: Peran Mediasi Kepuasan Kerja.” Tujuannya adalah untuk mengeksplorasi bagaimana Layanan Digital dan Perilaku Kerja Inovatif memengaruhi Kinerja Karyawan, dengan Kepuasan Kerja sebagai variabel mediasi. Penelitian ini mengajukan lima hipotesis yaitu, H1 menyatakan bahwa Layanan Digital berpengaruh positif terhadap Kepuasan Kerja; H2 menyarankan bahwa Layanan Digital meningkatkan Kinerja Karyawan; H3 menunjukkan bahwa Perilaku Kerja Inovatif berpengaruh positif terhadap Kepuasan Kerja; H4 menyatakan bahwa Perilaku Kerja Inovatif meningkatkan Kinerja Karyawan; dan H5 mengevaluasi efek mediasi Kepuasan Kerja dalam hubungan antara Layanan Digital, Perilaku Kerja Inovatif, dan Kinerja Karyawan. Dengan menggunakan kuesioner yang dibagikan kepada 80 responden, studi ini bertujuan untuk memberikan wawasan yang berharga mengenai keterkaitan antar faktor-faktor tersebut dan dampak kolektifnya dalam meningkatkan kinerja karyawan.

Kata kunci: Layanan Digital, Perilaku Kerja Inovatif, Kinerja Karyawan, Kepuasan Kerja.

1. Introduction

In today's highly dynamic and competitive environment, particularly within the Information Technology (IT) sector, organizations must continuously adapt to rapid technological changes, global competition, and evolving customer demands. As innovation becomes a critical driver of organizational success, the role of leadership in fostering innovative work behaviour (IWB) and enhancing employee performance is more significant than ever. One leadership style that has garnered increasing attention in this context is ambidextrous leadership—the capacity of leaders to balance and switch between exploratory (opening) and exploitative (closing) behaviours to meet the complex demands of innovation and performance.

Ambidextrous leadership is grounded in the notion that effective leaders must simultaneously encourage creativity and innovation while ensuring efficiency and goal orientation. This duality is particularly relevant in the IT sector, where innovation cycles are short, and the pressure to deliver high-quality, timely solutions is immense. By effectively managing this balance, ambidextrous leaders can create a supportive environment that stimulates novel ideas and experimentation while also driving task completion and performance optimization. Previous research has explored various leadership styles, such as transformational and transactional leadership, in relation to innovation and performance. However, there is still a growing need to investigate how the unique qualities of

ambidextrous leadership influence innovative work behaviour—defined as the generation, promotion, and realization of new ideas within a role or organization—and employee performance, which includes both task performance and contextual performance. This study aims to fill this gap by examining the impact of ambidextrous leadership on innovative work behaviour and employee performance in the IT sector. Understanding this relationship is crucial not only for leadership development but also for shaping organizational strategies that foster innovation and maintain competitive advantage. Ultimately, the findings of this research are expected to provide valuable insights for IT firms seeking to enhance their human capital capabilities through effective leadership practices. Let me know if you want this tailored more to a specific country, company, or if you'd like it expanded into a full chapter. Certainly! Below is a comprehensive Literature Review in English, covering the theoretical foundation, key definitions, and literature insights related to “The Impact of Ambidextrous Leadership on Innovative Work Behaviour and Employee Performance in the IT Sector.

2. Literatur Review and Hypothesis Development

Ambidextrous Leadership

Ambidextrous leadership is a leadership style that integrates both explorative (opening) and exploitative (closing) behaviors to address complex and dynamic organizational demands. Introduced by Rosing, Frese, and Bausch (2011), this concept emphasizes a leader's ability to flexibly switch between promoting creativity and enforcing discipline, depending on situational needs.

- Explorative (Opening) Behaviors encourage experimentation, idea generation, risk-taking, and autonomy.
- Exploitative (Closing) Behaviors emphasize goal orientation, adherence to rules, monitoring, and performance efficiency.

This duality is particularly important in the IT sector, where innovation and rapid execution must coexist. Leaders who demonstrate ambidextrous traits can create an environment that simultaneously fosters innovation and ensures task performance.

Definition: “Ambidextrous leadership refers to a leader's ability to foster both exploration and exploitation by adapting their behavior to the requirements of the situation.” (Rosing et al., 2011)

Innovative Work Behaviour (IWB)

Innovative Work Behaviour (IWB) involves the intentional generation, promotion, and implementation of new ideas within a work role, team, or organization (Janssen, 2000). IWB is not limited to creativity; it also includes the championing and realization of ideas to improve processes, products, or services.

In the IT sector, IWB is vital due to the constant evolution of technologies and market needs, requiring employees to actively engage in problem-solving, ideation, and innovation-driven activities. Key Dimensions of IWB (De Jong & Den Hartog, 2010):

- Idea Exploration
- Idea Generation
- Idea Championing
- Idea Implementation

Definition: Innovative work behaviour is the intentional creation, introduction, and application of new ideas within a work role, group or organization.” (Janssen, 2000)

Employee Performance

Employee performance refers to the level at which employees fulfill job responsibilities and contribute to organizational goals. It is often categorized into two main components:

- Task Performance: The effectiveness with which job-specific duties are carried out.
- Contextual Performance: Extra-role behaviors that contribute to the organizational environment, such as collaboration, flexibility, and initiative.

In IT organizations, employee performance is essential for achieving project milestones, maintaining service quality, and driving business innovation.

Definition: “Employee performance is the degree to which employees accomplish their work tasks and contribute to the organizational goals.” (Campbell, 1990)

Linking Ambidextrous Leadership, IWB, and Employee Performance

Numerous studies have examined the interrelationships between ambidextrous

leadership, innovative work behaviour, and employee performance. Research by Zacher and Rosing (2015) found that ambidextrous leadership positively influences IWB by providing both freedom and structure—elements necessary for employees to innovate while staying aligned with organizational goals.

Similarly, studies conducted in high-tech firms (e.g., Alghamdi, 2018) revealed that leaders who balance exploration and exploitation create psychologically safe environments where employees feel empowered to innovate and perform effectively. This synergy enhances not only individual creativity but also collective productivity and competitiveness.

Digital Service has a positive and significant effect on Employee Performance

The integration of digital services in the workplace such as digital tools, platforms, and systems enhances the efficiency, accuracy, and speed of task execution. In the IT sector, where agility and responsiveness are crucial, digital services enable employees to streamline workflows, collaborate more effectively, and access real-time information. As a result, the implementation of advanced digital services is expected to improve employee productivity and performance.

H1: Digital Service has a positive and significant effect on Employee Performance.

Digital Service has a positive and significant effect on Job Satisfaction, and Job Satisfaction mediates the relationship between Digital Service and Employee Performance

Digital services not only optimize work processes but also improve the overall work experience for employees. When digital tools reduce job-related stress, facilitate communication, and support flexible working arrangements, employees are more likely to experience greater job satisfaction. Satisfied employees are typically more engaged and committed, which positively influences their performance. Thus, job satisfaction is proposed as a mediating variable in the relationship between digital service and employee performance.

H2: Digital Service has a positive and significant effect on Job Satisfaction, and Job Satisfaction mediates the relationship between Digital Service and Employee Performance.

Innovative Work Behavior has a positive and significant effect on Job Satisfaction, and Job Satisfaction mediates the relationship between Innovative Work Behavior and Employee Performance

Employees who engage in innovative work behavior such as generating and implementing new ideas tend to feel more valued and fulfilled in their roles. Innovation often leads to problem-solving and meaningful contributions, which enhance job satisfaction. Furthermore, employees who are both innovative and satisfied are more likely to perform at a higher level. Hence, job satisfaction is posited to mediate the relationship between innovative work behavior and employee performance.

H3: Innovative Work Behavior has a positive and significant effect on Job Satisfaction, and Job Satisfaction mediates the relationship between Innovative Work Behavior and Employee Performance.

Innovative Work Behavior has a positive and significant effect on Employee Performance

Innovative work behavior is widely regarded as a driver of organizational success, especially in the IT sector where technological change is constant. Employees who actively seek better solutions and implement improvements are instrumental in achieving efficiency and innovation. Therefore, it is hypothesized that innovative work behavior directly contributes to higher levels of employee performance.

H4: Innovative Work Behavior has a positive and significant effect on Employee Performance.

Job Satisfaction has a positive and significant effect on Employee Performance

Job satisfaction has been consistently linked to positive work outcomes in organizational behavior literature. Employees who are satisfied with their jobs are more likely to demonstrate higher motivation, reduced absenteeism, and greater overall performance. In fast-paced industries like IT,

maintaining high levels of job satisfaction is essential for sustaining workforce productivity and morale.

H5: Job Satisfaction has a positive and significant effect on Employee Performance.

3. Research Model

The following is the framework of the hypothesis:



the framework of the hypothesis

hypothesis framework model of The Impact of Digital Service and Innovative Work Behavior on Employee Performance : The Mediating Role of Job Satisfaction

4. Research Framework

This framework investigates the effect of digital services and innovative work behavior on employee performance through job satisfaction. First, this study attempts to verify the relationship between digital service and employee performance. Second, it examines the influence of digital service on job satisfaction. Third, this study examines the effect of innovative work behavior on job satisfaction and employee performance. Finally, the effect of job satisfaction on employee performance. Figure 1 depicts the purposed model.

5. Measurement

This survey employs structured questionnaires to identify digital service and innovative work behavior on employee performance via job satisfaction. The framework includes four constructs that were measured by multiple items. All the responses of the respondents were measured using a seven-point scale ranging from 1 (strongly disagree) to 5 (strongly agree). For the data collection, Google Forms were distributed to participants selected using the purposive sampling methods via online media such as WhatsApp, Facebook, or email from May to July 2025. A total of 80 respondents participated in this survey. All the data are complete and available for analysis.

Table.1. Validity test

Outer Model (Model Pengukuran)

Validity Test

Outer loadings		
KK1 <- Kinerja Karyawan	0,868	Valid
KK2 <- Kinerja Karyawan	0,735	Valid
KK3 <- Kinerja Karyawan	0,860	Valid
KK4 <- Kinerja Karyawan	0,887	Valid
KK5 <- Kinerja Karyawan	0,828	Valid
KP1 <- Job Satisfaction	0,790	Valid
KP2 <- Job Satisfaction	0,866	Valid
KP3 <- Job Satisfaction	0,827	Valid
KP4 <- Job Satisfaction	0,811	Valid
KP5 <- Job Satisfaction	0,890	Valid
LD1 <- Digital Service	0,872	Valid
LD2 <- Digital Service	0,879	Valid
LD3 <- Digital Service	0,734	Valid
LD4 <- Digital Service	0,856	Valid
LD5 <- Digital Service	0,816	Valid
PK1 <- Innovative Work Behavior	0,761	Valid
PK2 <- Innovative Work Behavior	0,780	Valid
PK3 <- Perilaku Kerja Inovatif	0,765	Valid
PK4 <- Perilaku Kerja Inovatif	0,830	Valid
PK5 <- Perilaku Kerja Inovatif	0,781	Valid

Table.2. Discriminant validity

Reliability Test

	Cronbach's alpha	Composite reliability	Average variance extracted (AVE)
			(AVE)
Job Satisfaction	0,894	0,922	0,702
Employee Performance	0,892	0,921	0,701
Digital Service	0,888	0,919	0,694
Innovative Work Behavior	0,844	0,888	0,614

Table.3. Direct Influence

Mean, STDEV, T-value, p-value

Inner Model (Model Struktural)

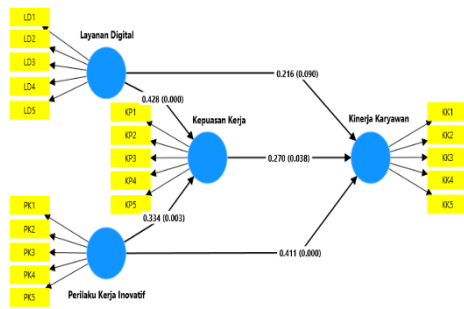
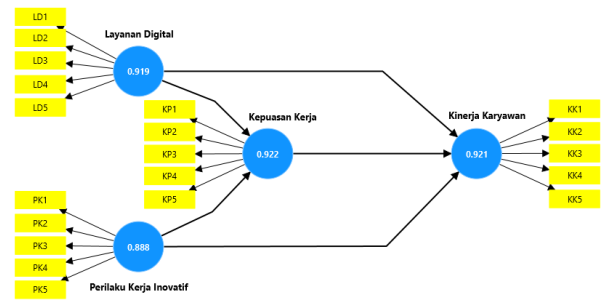
Direct Influence
Mean, STDEV, T-value, p-value

	Koefisien β	Nilai P (P values)	
Job Satisfaction -> Employee Performance	0,270	0,038	Positive and significant impact
Digital Service -> Job Satisfaction	0,428	0,000	Positive and significant impact
Digital Service -> Employee Performance	0,216	0,090	Positive and not significant (No effect)
Innovative Work Behavior -> Job Satisfaction	0,334	0,003	Positive and significant impact
Innovative Work Behavior -> Employee Performance	0,411	0,000	Positive and significant impact

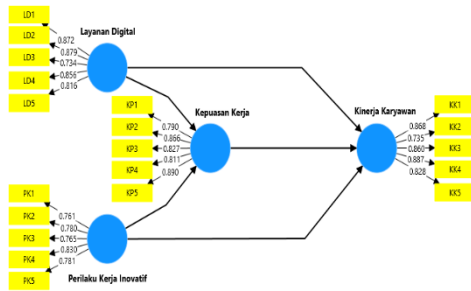
Table.4. Effects of Mediation

Effects of Mediation

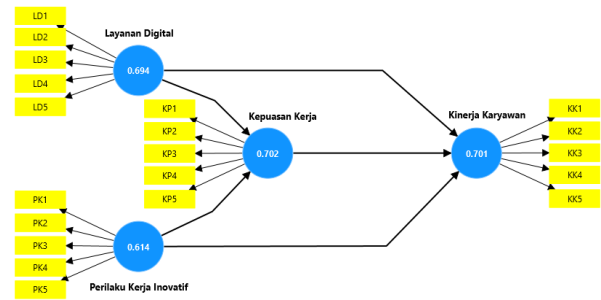
	Nilai P (P values)	
	Original sample (O)	
Digital Service -> Job Satisfaction -> Employee Performance	0,115	0,055 Unable to mediate
Innovative Work Behavior -> Job Satisfaction -> Employee Performance	0,090	0,103 Unable to mediate

graphic 1. Koefisien β dan p Value

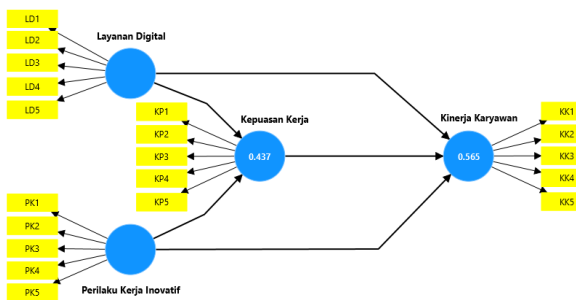
graphic 6. R Square



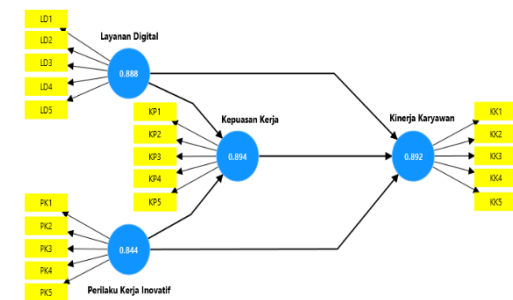
graphic 2. Outer Loading



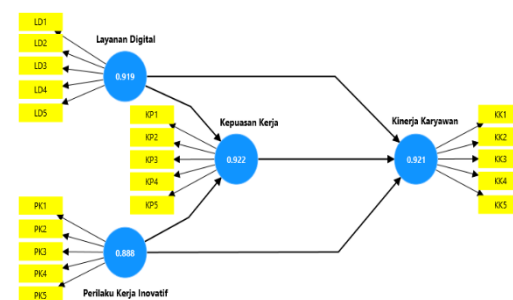
graphic 7 Nilai AVE



graphic 3. Adjusted R Square



graphic 4 Cronbach' Alpha



graphic 5. Reliabilitas Komposit

6. Conclusion

This framework adopted a measurement scale from previous studies with high reliability and validity for all constructs. The construct of digital service was adapted from Lee et al(2011). Innovative work behavior was derived from Lee(2011). Furthermore, the measurement scales for job satisfaction were from Lee and Youn (2009). The items for employee performance were adapted from the measurement scale of Huang (2016). All the items of each construct and the Cronbach alpha exceeded 0.80. The values of Cronbach alpha fell between 0.844 and 0.894, indicating reliability and validity. Table 1, Table 2, Table 3 shows the items scale and the Cronbach alpha of each construct. Job Satisfaction -> Employee Performance, Digital Service -> Job Satisfaction, Innovative Work Behavior -> Job Satisfaction, Innovative Work Behavior -> Employee Performance is Positive and significant impact, Digital Service -> Job Satisfaction is Positive and not significant (No effect). Digital Service -> Job Satisfaction -> Employee Performance and Innovative Work Behavior -> Job Satisfaction -> Employee Performance is Unable to mediate

References

- A. Kumar, K.R. Nayar, COVID 19 and its mental health consequences, *J. Ment. Health* (2020) 1–2, <https://doi.org/10.1080/09638237.2020.1757052>.
- A.M. Amiri, B.P. Kushwaha, R. Singh, Visualisation of global research trends and future research directions of digital marketing in small and medium enterprises using bibliometric analysis, *J. Small Bus. Enterprise Dev.* 30 (2023) 621–641, <https://doi.org/10.1108/JSBED-04-2022-0206/FULL/HTML>.
- B.P. Kushwaha, G. Kaur, N. Singh, A. Sharma, Integrating employees, customers and technology to build an effective sustainable marketing strategy, *Int. J. Sustain. Soc.* 14 (2022) 310, <https://doi.org/10.1504/IJSSOC.2022.127985>.
- B.P. Kushwaha, Paradigm shift in traditional lifestyle to digital lifestyle in Gen Z: a conception of consumer behaviour in the virtual business world, *Int. J. Web Based Communities* 17 (2021) 305–320, <https://doi.org/10.1504/IJWBC.2021.119472>.
- D. Tan, Y. Wu, J. Lv, J. Li, X. Ou, Y. Meng, G. Lan, Y. Chen, Z. Zhang, Performance optimization of a diesel engine fueled with hydrogen/biodiesel with water addition based on the response surface methodology, *Energy* 263 (2023) 125869, <https://doi.org/10.1016/j.energy.2022.125869>.
- M. Mohiya, M.M. Sulphey, Do Saudi Arabian leaders exhibit ambidextrous leadership: a qualitative examination, *Sage Open* 11 (2021) <https://doi.org/10.1177/21582440211054496>.
- P. Pukkeeree, K. Na-Nan, N. Wongsuwan, Effect of attainment value and positive thinking as moderators of employee engagement and innovative work behaviour, *Journal of Open Innovation: Technology, Market, and Complexity* 6 (6) (2020) 69, <https://doi.org/10.3390/JOITMC6030069>.
- S. Karimi, F. Ahmadi Malek, A. Yaghoubi Farani, G. Liobikiene, 'The role of transformational leadership in developing innovative work behaviors: the mediating role of employees' psychological capital, *Sustainability* 15 (2023) 1267, <https://doi.org/10.3390/su15021267>.
- S. Karimi, F. Ahmadi Malek, A. Yaghoubi Farani, G. Liobikiene, 'The role of transformational leadership in developing innovative work behaviors: the mediating role of employees' psychological capital, *Sustainability* 15 (2023), <https://doi.org/10.3390/su15021267>.
- S.A. Al-Shami, S.J. Rafeea, M. Kamalrudin, T. Widiastuti, A. Al Mamun, The Mediating Role of Absorptive Capacity in the Relationship between Transformational Leadership and Corporate Entrepreneurship, vol 10, *Cogent Business & Management*, 2023, <https://doi.org/10.1080/23311975.2023.2226933>.