

## The Impact of Upskilling and Reskilling Programs on Improving Employees' Digital Competence

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**Abstract.** *This study aims to analyze the effect of Upskilling and Reskilling programs on the Digital Competence of organic employees at the Cash Management Department of Bank Indonesia, and to examine the role of Work Environment as a moderating variable. The study employed a quantitative approach using the PLS-SEM method, with questionnaires as the primary data collection instrument. The results indicate that: (1) the Reskilling program has a positive and significant effect on employees' digital competence; (2) the Upskilling program has a positive but non-significant effect; (3) the work environment positively and significantly moderates the effect of Reskilling on digital competence, but does not significantly moderate the effect of Upskilling. These findings suggest that the effectiveness of digital competence development programs depends not only on the training program itself but also on a supportive work environment. The study implies the importance for management to continuously develop Reskilling programs aligned with employees' digital needs, adjust Upskilling programs accordingly, and foster a work culture that supports the application of digital skills.*

**Keywords:** Competence; Digital; Environment; Reskilling; Upskilling.

### 1. Introduction

Rapid technological developments, digital transformation, and disruption across various industrial sectors have drastically changed the way organizations work and the demands on workforce competencies. In the midst of the Industry 4.0 era and the transition to Society 5.0, companies are required not only to adapt systematically but also to empower their human resources through relevant skill development. In this context, two of the most widely implemented strategies are reskilling and upskilling.

Reskilling is a retraining process to equip employees with new skills to perform different job functions, while upskilling aims to enhance existing skills to better align with technological developments and business needs. Both strategies are believed to improve employee competency, including technical skills, adaptability, and work effectiveness.

This rapid digital transformation and technological development also pose both challenges and opportunities for the banking sector in Indonesia, including for Bank Indonesia (BI) as the central bank. The era of Industry 4.0 and the transition to Society 5.0, characterized by IT-based technology, the internet, and digitalization, are forcing financial institutions to adapt to significant changes. According to a 2023 World Economic Forum report, digital technology has impacted more than 50% of jobs worldwide, and Indonesia is no exception. Rapid developments in information technology and data analysis require a competent workforce capable of adapting.

In line with this, Bank Indonesia, as an institution that plays a crucial role in the country's economic stability, faces the challenge of strengthening its human resources (HR). Bank Indonesia's 2020–2025 Vision, which aims to become "a Leading Digital Central Bank that Makes a Real Contribution to the National Economy and the Best among Emerging Markets," demands significant changes in employee competency and ability to manage data and information digitally.

To realize this vision and mission, Bank Indonesia is crucial to having competent and adaptable human resources. According to a 2020 World Economic Forum report, approximately 85 million jobs will be lost and 97 million new jobs will be created by 2025 due to digital transformation. This demonstrates the necessity of improving employee competency through upskilling and reskilling programs.

The challenges of digitalization in the financial sector are increasing, as information and communication technology (ICT) continues to develop rapidly. Bank Indonesia, particularly its Money Management Department, must adapt to new technologies such as blockchain and artificial intelligence to improve operational efficiency and effectiveness. Furthermore, information systems and robotics will be used in future operations, which previously required significant human resources for recording, documentation, and transportation. New knowledge and skills are needed, which employees will need to adapt to Bank Indonesia's digital transformation. According to a 2021 survey by McKinsey, 87% of executives worldwide consider new skills critical to the future success of their businesses. In this context, upskilling and reskilling are strategic solutions to improve employee competency in facing digital challenges.

A report from West Monroe (2020) states that 70% of organizations have implemented new technologies to increase employee capacity and efficiency. To maximize the benefits of these technologies, employees need to be trained and "upskilled" to utilize new technologies and take on more complex tasks. This demonstrates that investing in employee skills development not only benefits individuals but also positively impacts organizations. Furthermore, research by Johnson (2021) found that reskilling significantly contributes to employee adaptability in the face of industry changes. Therefore, both programs are crucial to ensuring employee relevance in a constantly changing job market. In the Indonesian context, research on the effectiveness of upskilling and reskilling programs has also shown

positive results. A study by Maslina Siagian (2023) conducted in Medan City on vocational high school teachers showed that the program successfully improved their competency in facing educational challenges in the digital era.

However, although training, upskilling, and reskilling programs are widely discussed regarding their impact on performance, there are still few studies or programs that discuss the influence of reskilling and upskilling on employee competency. Rikala, P., et al. (2024) pointed out that the definition and measurement of competency gaps vary widely, indicating that empirical research on how reskilling/upskilling concretely addresses them still needs to be developed. Herawati, E. et al. (2025) only found 11 articles related to upskilling/reskilling vocational high school teachers (marketing) in the period 2020–2025. This indicates that empirical literature discussing teacher professional competency through reskilling/upskilling is still very limited. Cieslak, V., & colleagues (2025) mentioned reskilling and upskilling as strategies to overcome employee resistance to digital transformation, but highlighted that empirical research on how upskilling/reskilling specifically reduces resistance and improves competency is very limited.

Therefore, it is important to conduct further research on the impact of upskilling and reskilling programs on improving employee competencies more broadly, especially in sectors impacted by digital transformation.

## 2. Research Methods

The type of research conducted in this study is quantitative research with a survey approach. Quantitative research was chosen because it can provide measurable data and a more objective analysis regarding the effect of upskilling and reskilling programs on improving employee digital competence. According to Creswell (2014), quantitative research allows researchers to test hypotheses and explain the relationship between variables statistically. In this context, the independent variables are upskilling and reskilling programs, while the dependent variable is employee digital competence. This study uses a quantitative approach with the main objective of testing hypotheses formulated based on theory and previous research results. Quantitative research is used to measure the relationship and influence between variables through statistically analyzed numerical data. This type of research is associative causal, namely to determine the cause-and-effect relationship between the independent variables, namely the upskilling program ( $X_1$ ) and the reskilling program ( $X_2$ ), on the dependent variable, namely digital competence ( $Y$ ), by considering the role of the work environment ( $Z$ ) as a moderating variable. The method used is a survey with data collection through questionnaires distributed to employees who have participated in the upskilling and reskilling programs in the Money Management Department of Bank Indonesia. The questionnaire will be designed to measure various aspects of digital competence, including understanding of information technology, the ability to use related software, and other digital skills. The data obtained will be analyzed using descriptive and inferential statistical methods, such as regression analysis and moderation interaction tests, to determine the

extent of the influence of each variable and to determine the extent of the program's influence on improving digital competence. According to Babbie (2010), using surveys as a data collection method in quantitative research is very effective in reaching large populations.

### **3. Results and Discussion**

#### **3.1. Description of the Research Object**

##### **1) General Description of Research Object**

The Currency Management Department (DPU) is a unit within Bank Indonesia (BI) that plays a crucial role in maintaining the smooth operation of the cash payment system in Indonesia. This department is responsible for all activities related to Rupiah currency management, from demand planning and procurement, printing, distribution, sorting, to the destruction and recall of unfit currency, in accordance with Law Number 7 of 2011 concerning Currency.

The DPU plays a role in maintaining the smooth operation of the cash payment system and supporting the stability of the exchange rate and financial system, which is located at Jl. MH Thamrin No. 2, Central Jakarta, Special Capital Region of Jakarta.

##### **2) Vision and Mission of the Bank Indonesia Money Management Department**

The Bank Indonesia Money Management Department has a vision and mission to support the achievement of Bank Indonesia's overall tasks, including the following:

###### **a. Vision:**

The availability of Rupiah currency fit for circulation throughout the territory of the Unitary State of the Republic of Indonesia (NKRI) as a manifestation of state sovereignty.

###### **b. Mission:**

Providing currency fit for circulation in sufficient nominal amounts, appropriate denominations in line with the direction of the Central Bank's policy ("central-bank-driven") and in line with the national strategy of non-currency policy-cash

##### **3) Objectives of the Bank Indonesia Money Management Department**

The Bank Indonesia Money Management Department has the following objectives:

###### **a. Planning and Procurement of Rupiah Currency**

a) Prepare projections of Rupiah currency needs and ensure the availability of currency in sufficient nominal amounts, appropriate denominations, on time and in a condition fit for circulation.

b) Manage the process of printing banknotes and coins, in collaboration with Perum Peruri.

b. Distribution and Withdrawal of Money

- a) Organize and implement the distribution of money to BI representative offices throughout Indonesia.
- b) Implementing and developing strategic policies for the national money distribution network through CCNP (centralized cash network planning) to ensure the availability of money throughout the territory of the Unitary State of the Republic of Indonesia.
- c) Withdrawing money that is no longer fit for circulation (worn, damaged) to be destroyed.

c. Sorting and Destruction of Money

- a) Sorting money based on suitability for circulation.
- b) Carrying out the destruction of money that is not fit for circulation through a secure system and in accordance with procedures.

d. Supervision of Third Party Money Management

Providing regulation and supervision to institutions such as banks and Rupiah Money Management Companies (PPUR) regarding money processing.

e. Education and Socialization of Rupiah Currency

- a) Increasing public understanding regarding the characteristics of authentic money, how to treat money well, and the importance of loving the Rupiah.
- b) Implementing and developing strategic policies and coordination to combat counterfeiting, including education and outreach to the public, collaborating with stakeholders, and strengthening the Bank Indonesia Counterfeit Analysis Center (BI-CAC).

f. Technology and System Development

- a) Implementing technology such as automatic money sorting machines for efficiency.
- b) Developing a cash management information system.

The data obtained in this study were based on an online questionnaire administered via Google Form to employees of the Money Management Department at Bank Indonesia. The sample size can be seen in Table, as follows:

Respondent Demographics Table			
No.	Information	Total	Percentage
1.	Gender		
	a. Man	134	89
	b. Woman	17	11



<b>2. Age</b>		
a. < 25 Years	0	0
b. 25-35 Years	38	25.2
c. 36-45 Years	81	53.6
d. 46-45 Years	24	15.9
e. > 55 Years	8	5.3
<b>3. Position or Title</b>		
a. Deputy Director	2	1.3
b. Assistant Director	8	5.3
c. Manager	10	6.6
d. Assistant manager	27	17.9
e. Staff/Executor	104	68.9
<b>4. Years of service</b>		
a. 1-3 Years	1	0.7
b. 3-6 Years	4	2.6
c. > 6 Years	146	96.7
<b>5. Have participated in Upskilling/Reskilling in the last 2 years</b>		
a. Yes	104	68.9
b. No	47	31.1

*Source: Processed primary data, 2025*

Based on the respondent demographic table, the majority of respondents were male, as much as 89%, because in the Cash Management Department the majority of organic employees are male who are needed for operational work activities, while the number of female respondents was only 11%.

Looking at the age criteria, the majority of respondents were aged 36-45 years old, amounting to 53.6%, which is dominated by middle-aged human resources, this indicates a balance between young and more experienced human resources. Furthermore, respondents aged 25-35 years were also quite large, amounting to 25.2%, indicating that the organization has young human resources who tend to be more productive and innovative. Furthermore, there are a few employees aged 46-55 years old, amounting to 15.9% and only a few employees aged over 55 years old, amounting to 5.3% who are likely employees with managerial positions or division heads in the Money Management Department.

Then, looking at various positions or positions in large organizations/companies, respondents are staff/executors with a total of 68.9%, which shows that the majority of respondents are direct implementers of operational activities. Followed by the assistant manager level with a total of 17.9%, quite a lot of respondents come from this position which is a liaison between operational staff and management. Next, respondents at the manager level with a total of 6.6% are usually responsible for the implementation of

operations in their respective fields. Furthermore, only a few employees have the level of assistant director with a total of 5.3% and deputy director with a total of only 1.3%, which shows the presence of representation from the upper managerial level.

Based on length of service, 96.7% of respondents have worked for more than 6 years, followed by 2.6% with 3-6 years and 0.7% with 1-3 years. This indicates stability within the organization and that its human resources possess sufficient expertise in their respective fields. Meanwhile, only 3.3% of employees have worked for less than 6 years, a form of organizational regeneration to replace employees who have retired.

Based on respondents' experience with competency development activities through upskilling or reskilling in the past two years, the majority (68.9%) had participated, while only a small minority (31.1%) had never participated. This indicates that most respondents have had the opportunity or are aware of the need to improve or update their skills, in line with organizational needs and developments in the workplace.

Overall, the data in this study indicates that the Cash Management Department's human resources are predominantly male, young, experienced, operationally experienced, have extensive experience, frequently participate in upskilling and reskilling programs, and are accustomed to working with digital technology. This has created stability within the organization.

Descriptive variable analysis was conducted based on a summary of respondents' answers to all questions in the research questionnaire, which was constructed based on the indicators of the variables studied. This analysis aimed to obtain a quantitative overview of respondents' perceptions of each variable in the study.

According to Augusty Ferdinand (2006), a numerical index can be used to measure the extent to which respondents view a research variable. In this study, the analysis was conducted based on the average (mean) value of respondents' answers for each variable, which were then categorized into three groups based on the following interval scale:

Scale Interval Calculation:

$$\text{Interval} = \frac{\text{Nilai Maksimal} - \text{Nilai Minimal}}{\text{Jumlah Kelas}} = \frac{5 - 1}{3} = 1,33$$

Assessment Category Criteria:

Low: 1.00 – 2.33

Currently: 2.34 – 3.67

Tall: 3.68 – 5.00

Using this approach, the average value of each variable (both independent, intermediate, and dependent) will be analyzed and grouped into Low, Medium, or High categories, according to a predetermined value range. This category will provide an initial understanding of respondents' perceptions of the variables studied, before further analysis such as validity and reliability tests, or structural model testing, is conducted.

The Work Environment (Z) variable in this study is reflected through four main indicators representing various aspects of the working conditions and atmosphere in the organization. Each indicator is measured using several questions in a questionnaire to obtain a comprehensive picture of respondents' perceptions of their work environment.

Overall, there are four questions representing the four indicators in the Work Environment variable. Data collected from respondents' responses related to this variable are presented in the following table:

**Work Environment Descriptive Table**

No.	Question	Mean	Category
1.	My immediate supervisor supports the use of digital technology in completing tasks.	4.48	Tall
2	The company provides adequate technological facilities and infrastructure to support digital work.	4.34	Tall
3	Collaboration occurs between coworkers in using digital technology in daily work.	3.89	Tall
4	The company's work culture encourages learning and development of digital skills.	4.21	Tall
<b>Total average</b>		4.23	

*Source: Processed primary data, 2025*

The table presents the results of a descriptive analysis of the Work Environment variable (Z), which reflects respondents' perceptions of organizational support for the implementation and development of digital technology-based skills. This variable was measured through four questions reflecting four key indicators, with the following results:

Question Z.1, "My immediate supervisor supports the use of digital technology in completing tasks," received the highest average score, at 4.48, which is considered high. This indicates that the majority of respondents perceive direct support from their superiors for the use of digital technology in their work.

Furthermore, Z.2, "The company provides adequate technological facilities and infrastructure to support digital work," received an average score of 4.34, also in the High category. This indicates that respondents believe the company has provided sufficient infrastructure support to support digital work processes, such as hardware, software, and internet access.

Meanwhile, Z.3, "Collaboration occurs among coworkers in using digital technology in daily work," achieved an average score of 3.89. Although this score is the lowest of the four



indicators, it remains in the high category, indicating that digital-based collaboration among employees is already quite good, although it still has room for improvement.

The final question, Z.4, "The company's work culture encourages learning and digital skills development," recorded an average score of 4.21, also in the High category. This indicates that the organizational culture is sufficiently supportive of continuous learning and the development of employees' digital competencies.

The total average score for the four questions was 4.23, which falls into the High category based on the mean score interpretation scale (1.00–5.00). This indicates that, in general, respondents felt their work environment strongly supported digital competency, both in terms of leadership, facilities, work culture, and collaboration among colleagues.

The Digital Competence (Y) variable in this study is reflected through four main indicators, which aim to measure the extent to which respondents' digital skills support the implementation of tasks and responsibilities in the workplace. Each indicator is measured with a single statement in the questionnaire.

Overall, there are four questions in the questionnaire that describe these indicators. Data from respondents' responses to these variables are presented in the following table:

**Digital Competence Descriptive Table**

No.	Question	Mean	Category
1.	I am able to use the software and digital applications required in my work well.	4.04	Tall
2	I can operate the digital hardware used in the workplace well.	3.87	Tall
3	I quickly adapt to new digital technologies introduced in the workplace.	4.16	Tall
4	My digital-based work productivity has increased significantly in the last two years.	4.38	Tall
<b>Total average</b>		4.11	

*Source: Processed primary data, 2025*

Table presents the results of descriptive analysis of the Digital Competence variable (Y), which is measured through four questions that reflect respondents' ability to use digital technology in a work context.

The table above shows that Y.1, "I am able to use the digital software and applications required for my work well," achieved an average score of 4.04, falling into the high category. This indicates that the majority of respondents feel confident in using the necessary work applications and software efficiently.

Statement Y.2, "I can operate the digital hardware used at work well," had a mean score of 3.87, also considered high, although it was the lowest among the other indicators. This indicates that respondents were quite skilled in using digital hardware, although there was room for improvement.

Furthermore, Y.3's statement, "I adapt quickly to new digital technologies introduced at work," scored 4.16, which is in the high category. This means the respondent feels capable of adapting to the ever-evolving technological changes.

Lastly, Statement Y.4, "My digital-based work productivity has increased significantly in the last two years" received the highest average score, namely 4.38, indicating that respondents felt the positive impact of using digital technology on increasing their productivity.

The total average score for the four questions was 4.11, which falls into the High category based on the 1.00–5.00 interpretation scale. This indicates that overall, the respondents' digital competency level is good and adequate to support their work in the digital age.

Next, path coefficients are measured between constructs to determine the significance and strength of the relationship and to test the hypothesis. Path coefficients range from -1 to +1. The closer to +1, the stronger the relationship between the two constructs. A relationship closer to -1 indicates a negative relationship (Sarstedt d.Y., 2017).

The results of the analysis at the inner level are as follows: (T value calculated from loading factor and t value calculated from path coefficient directs effects).

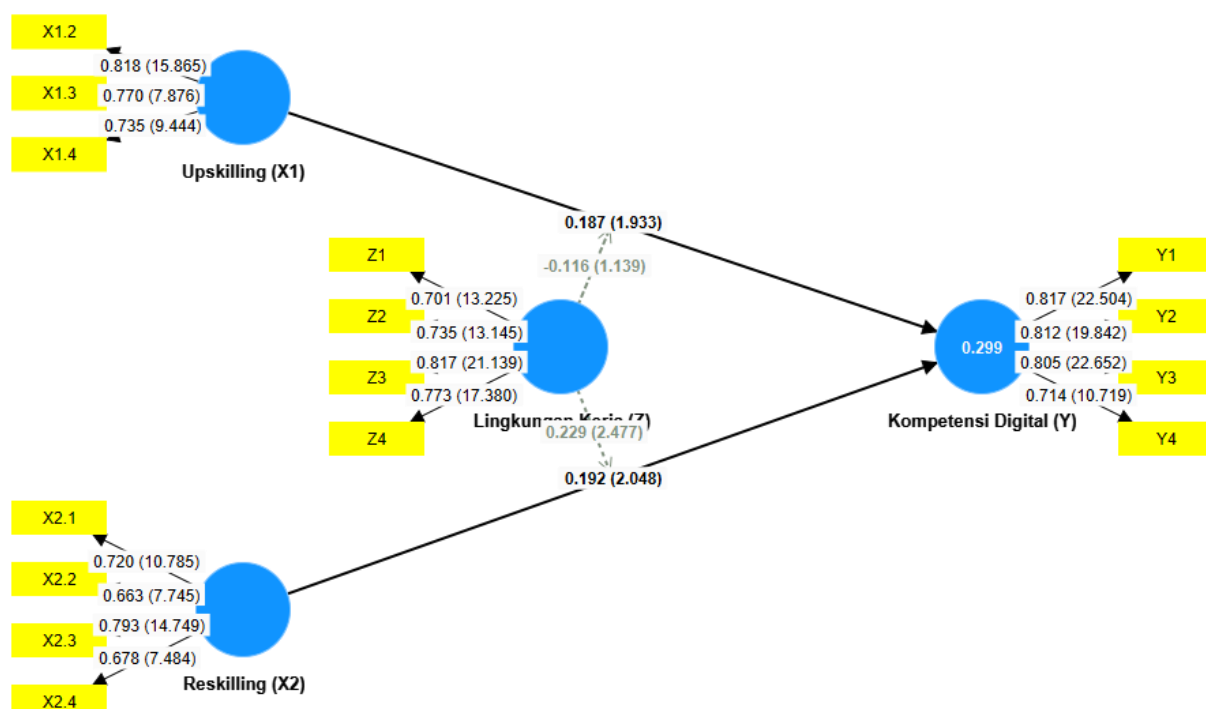


Image of T Value Bootstrapping Model Diagram

Results from the analysis at the inner level is as follows: (P Value of the path coefficient directs effects).

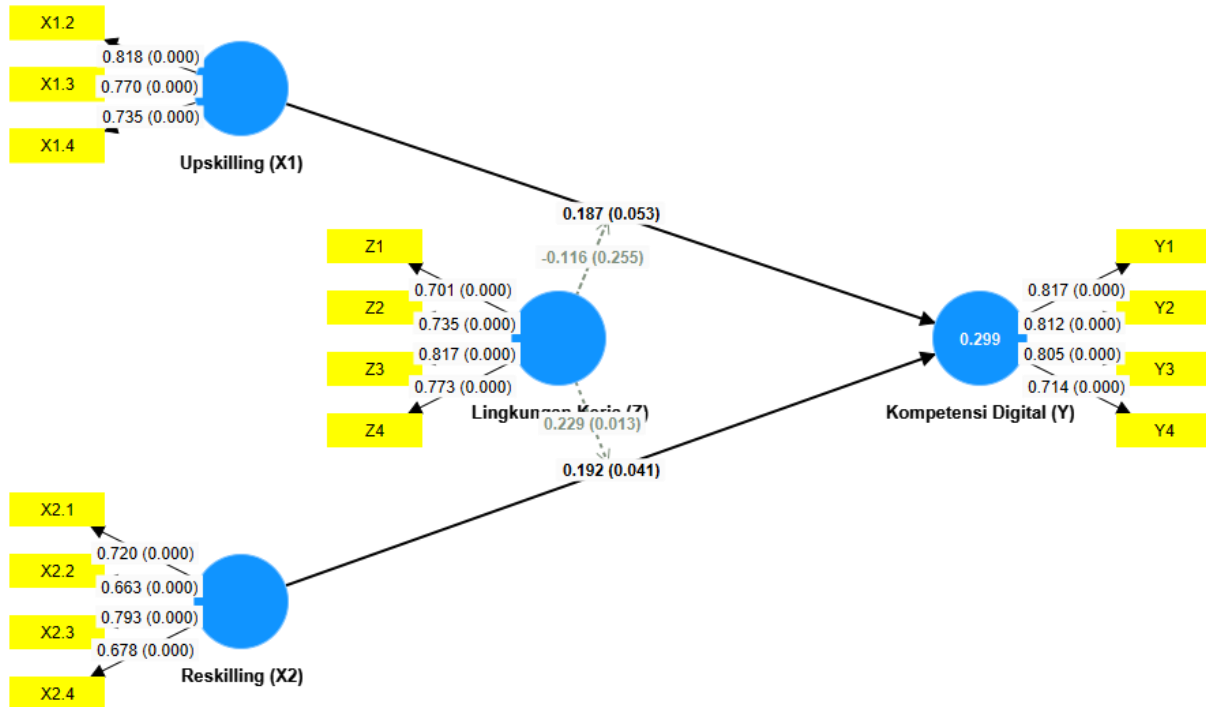


Image of Bootstrapping Model Diagram P Value Path Coefficient Direct Effects

From the diagram above, it can be explained in detail as follows:

Direct Effect Table

		Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics ( O/STDEV )	P values	Conclusion	
Work Environment (Z)	-> Digital Competence (Y)	0.254	0.254	0.080	3,170	0.002	Accept (Significant)	H1
Reskilling (X2)	-> Digital Competence (Y)	0.192	0.205	0.094	2,048	0.041	Accept (Significant)	H1
Upskilling (X1)	-> Digital Competence (Y)	0.187	0.191	0.097	1,933	0.053	Accept (Not Significant)	H0
Work Environment (Z) x Upskilling (X1)	-> Digital Competence (Y)	-0.116	-0.114	0.102	1,139	0.255	Accept (Not Significant)	H0
Work Environment (Z) x Reskilling (X2)	-> Digital Competence (Y)	0.229	0.226	0.092	2,477	0.013	Accept (Significant)	H1

Source: Taken from Inner Phase data, 2025

The Output Path Coefficient, as shown in the table above, looks at the magnitude of the direct influence (DIRECT EFFECT) of each independent (exogenous) variable on the dependent (endogenous) variable.

The magnitude of the parameter coefficient for the variable X2 to Y of 0.192 which means there is a positive influence X2 to Y. Or it can be interpreted that the better the value X2 so Y will increase. An increase of one unit X2 will improve of 19.2%. Based on calculations using bootstrapping or resampling, where the results of the estimated coefficient test X2 to Y The bootstrap result is 0.205 with a calculated t value of 2.048, so the p value is  $0.041 < 0.05$ , so H1 is accepted, which means a direct effect X2 to Y statistically meaningful or significant.

So the conclusion is:

- 1) The p value of the influence of Z on Y is 0.002 which is  $< 0.05$  so H1 is accepted, meaning the influence of Z on Y is significant.
- 2) The p value of the influence of X2 on Y is 0.041 which is  $< 0.05$  so H1 is accepted, meaning the influence of X2 on Y is significant.
- 3) The p value of the influence of X1 on Y is 0.053 where  $> 0.05$  so H0 is accepted, meaning the influence of X1 on Y is not significant.

Furthermore, the model of variable X1 against Y is moderated by Z.

The magnitude of the parameter coefficient for variable X1 against Y moderated by Z is -0.116, which means that there is a negative influence of variable X1 on Y moderated by Z. Or it can be interpreted that the better the value of X1 so Y will be lower. An increase of one unit of X1 will decrease Y of 11.6%. Based on calculations using bootstrap or resampling, where the results of the coefficient test of the estimated variable X1 on Y moderated by Z bootstrap results are -0.114 with a calculated t value of 1.139 then the p value is  $0.255 > 0.05$  so that Accept H0 or which means the direct effect of X1 on Y moderated by Z is not meaningful or not statistically significant.

So the conclusion is:

- 1) The p value of the influence of X1 on Y moderated by Z is 0.255 where  $> 0.05$  so H0 is accepted, meaning the influence of X1 on Y moderated by Z is not significant.
- 2) The p value of the influence of X2 on Y moderated by Z is 0.013 where  $< 0.05$  so H1 is accepted, meaning the influence of X2 on Y moderated by Z is significant.

Then in this model there are no intermediary variables so indirect effects are not needed.

After being explained in detail in the outer and inner model stages above, the summary is as in the image above, which shows that:

- 1) All p-values of indicators for their latent variables are  $< 0.05$ , so all indicators are valid and reliable for their constructs.
- 2) The direct influence of X1 on Y and X1 on Y moderated by Z is not significant. Meanwhile, the rest are significant.

### 3.2. Discussion

- 1) The influence of the reskilling program on the digital competence of organic employees of the Bank Indonesia Money Management Department.

The analysis results show that the Reskilling program (X2) has a positive and significant influence on the Digital Competence (Y) of organic employees in the Money Management Department of Bank Indonesia. The coefficient is 0.192 with a p-value of  $0.041 < 0.05$ , which means that the H1 hypothesis is accepted. Interpretatively, a one-unit increase in the Reskilling program will increase employees' Digital Competence by 19.2%.

These findings confirm that reskilling is a crucial strategy for improving employees' digital capabilities. Structured reskilling programs help employees adapt to technological developments, update relevant skills, and improve work efficiency. This aligns with previous literature that suggests reskilling plays a role in enhancing individual capacity to meet the demands of digital transformation (Wong, 2013; Sarstedt, 2017).

In the context of Bank Indonesia's Money Management Department, increasing Digital Competence through Reskilling has a direct impact on employees' abilities in:

- a. Operate digital banking systems more efficiently.
- b. Manage transaction data and financial reports accurately.
- c. Improve technology-based analytical and decision-making capabilities.

- 2) The influence of the Upskilling program on the Digital Competence of organic employees of the Bank Indonesia Money Management Department.

Based on the analysis results, the Upskilling program (X1) has a positive influence on employees' Digital Competence (Y), with a coefficient of 0.187. However, this influence is not statistically significant because the p-value is  $0.053 > 0.05$ , so the hypothesis regarding the direct influence of Upskilling on Digital Competence is rejected ( $H_0$  is accepted).

The interpretation shows that although there is a tendency that increasing the Upskilling program can increase Digital Competence, the effect is not strong or consistent enough to show a significant effect in the context of Bank Indonesia's Money Management Department.

These results can be explained by several possibilities:

- a. Existing Upskilling programs are not fully aligned with employees' digital needs, so their impact on Digital Competence is not optimal.
- b. Work environment factors and organizational support may play an important role in determining the effectiveness of an Upskilling program, so that even though training is



provided, employee learning outcomes are not directly reflected in increased digital competency.

- c. Individual employee variability in absorbing Upskilling material can vary, so not all participants experience significant improvements.

While not significant, upskilling programs remain important as a means of improving employee capacity, as they can theoretically enhance employees' technical and digital skills. However, for a more tangible impact, the following are necessary:

- a. Adjustment of Upskilling materials according to the digitalization needs of employee tasks.
- b. Increased frequency and intensity of training.
- c. Management support and a work environment that supports the application of new skills.

Thus, although Upskilling shows a positive direction towards Digital Competence, its effectiveness has not been proven to be statistically significant on organic employees of Bank Indonesia's Money Management Department.

- 3) The Role of the Work Environment as a Moderating Variable in the Effect of Upskilling and Reskilling Programs on the Digital Competence of Organic Employees in the Money Management Department of Bank Indonesia.

Based on the analysis results, the Work Environment (Z) is modeled as a moderating variable on the influence of the Upskilling (X1) and Reskilling (X2) programs on Digital Competence (Y). The research results show the following:

- a. Moderation of Work Environment on the Influence of Upskilling (X1) on Digital Competence (Y)
  - a) The parameter coefficient is -0.116, indicating a negative effect. This means that when the work environment is a moderating factor, increasing upskilling programs does not automatically increase digital competence and may even decrease it if the work environment is not supportive.
  - b) A p-value of  $0.255 > 0.05$  indicates that this moderating effect is not statistically significant. In other words, in the context of Bank Indonesia's Money Management Department, the work environment neither significantly strengthens nor weakens the influence of upskilling on digital competence.
  - c) This may be due to a lack of alignment between the work environment and Upskilling materials and practices, or limited application of digital skills in the current work environment.

- b. Moderation of Work Environment on the Influence of Reskilling (X2) on Digital Competence (Y)
  - a) The parameter coefficient is 0.229, indicating that the work environment plays a role in strengthening the influence of Reskilling on Digital Competence.
  - b) A p-value of  $0.013 < 0.05$  indicates that this moderating effect is statistically significant. This means that when the work environment is supportive, reskilling will be more effective in improving employees' digital competence.
  - c) This demonstrates that facilities, superior support, a conducive work culture, and internal systems are crucial factors in the successful implementation of reskilling. A positive work environment allows employees to apply new skills more optimally.

#### Conclusion of Moderation Discussion:

- a. The work environment is not significant in moderating the influence of Upskilling on Digital Competence.
- b. The work environment is significant and positive in moderating the influence of Reskilling on Digital Competence.
- c. This confirms that the effectiveness of digital competency development programs does not only depend on training programs, but is also greatly influenced by the conditions and support of the work environment.

Thus, to effectively improve employees' Digital Competence, organizations need to optimize Reskilling and create a work environment that supports the application of digital skills, while Upskilling programs need to be tailored to real needs in the field and supported by a conducive work environment.

#### 4. Conclusion

Based on the results of data analysis and discussion in Chapter IV, several conclusions can be drawn as follows: The Effect of Upskilling Program on Employee Digital Competence The Upskilling Program (X1) has a positive but insignificant effect on Digital Competence (Y). This means that increasing digital competence through the Upskilling program has not shown statistically significant results, with a p-value  $> 0.05$ . This may be caused by a lack of work environment support or the suitability of Upskilling materials to job requirements. The Effect of Reskilling Program on Employee Digital Competence. The Reskilling Program (X2) has a positive and significant effect on Digital Competence (Y) of organic employees of the Bank Indonesia Money Management Department. This shows that increasing abilities and skills through Reskilling will improve employee digital competence, with a coefficient value of 0.192 and a p-value  $< 0.05$ . The Role of the Work Environment as Moderation The work environment (Z) is not significant in moderating the effect of Upskilling on Digital Competence. The work environment is significant and positive in moderating the effect of

Reskilling on Digital Competence. This means that reskilling effectiveness will be optimal if supported by a conducive work environment, such as facilities, work culture, and support from superiors. Reskilling programs have proven effective in improving employees' digital competence, especially if the work environment is supportive. Meanwhile, upskilling programs have not shown significant impact, and the overall success of digital competence development programs is heavily influenced by the work environment. Therefore, organizations need to tailor training programs to actual needs and ensure the work environment supports the application of digital skills.

## 5. References

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