International Conference on Finance, Economics, Management, Accounting and Informatics

"Digital Transformation and Sustainable Business: Challenges and Opportunities for Higher Education Research and Development"

Bridging The Skills Gap: Examining the Effect of Soft and Digital Competencies on Job Readiness of Management Students

Lira Sofitania Situmorang[1*], Elperida J. Sinurat[2], Junika Napitupulu[3].

[1,2,3] *Universitas Methodist Indonesia*

* *sofitanialira@gmail.com*

Abstract

This study addresses the high rate of educated unemployment in Indonesia and the mismatch between university graduates' skills and industry demands, which hinders students' readiness to enter the workforce. The research investigates the influence of leadership skills, communication skills, adaptability skills, and digital skills on students' job readiness. A quantitative associative approach was applied, involving 179 respondents from the 2021 cohort of the Management Study Program, Faculty of Economics, Universitas Methodist Indonesia, selected through purposive sampling. Data were analyzed using multiple linear regression with SPSS version 26. The results show that leadership, communication, and adaptability skills have a positive and significant impact on job readiness, while digital skills have a positive but not significant effect. Simultaneously, all four skills significantly influence job readiness. These findings suggest that improving these competencies can enhance students' preparedness for the workforce.

Keywords: Human Resource Management, Skill Combination, Educated Unemployment, Quantitative

Introduction

Educated unemployment remains a pressing issue faced by many countries, including Indonesia. Despite having completed higher education, a significant number of graduates struggle to secure employment that aligns with their academic backgrounds. National data from 2018 to 2024 shows fluctuating unemployment rates among diploma and university graduates, reflecting a notable mismatch between graduate competencies and the demands of the labor market. One of the main contributing factors to this situation is the low level of job readiness among students transitioning from academic to the workforce.

Table 1
Unemployment Rate by Education Level (%) 2018–2024

Education Level	Unemployment Rate by Education Level (%) 2018–2024						
	2018	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**
No Schooling/Not Completed & Completed Primary School	2,40	2,39	3,61	3,61	3,59	2,56	2,32
Junior High School	4,77	4,72	6,46	6,45	5,95	4,78	4,11
General Senior High School	7,90	7,87	9,86	9,09	8,57	8,15	7,05
Vocational Senior High School	11,18	10,36	13,55	11,13	9,42	9,31	9,01
Diploma I/II/III	6,00	5,95	8,08	5,87	4,59	4,79	4,83
University (Bachelor's Degree)	5,88	5,64	7,35	5,98	4,80	5,18	5,25

Reference: Central Bureau of Statistics (2025)

Job readiness refers to an individual's preparedness in terms of skills, mentality, and attitudes required to face the increasingly complex challenges of the professional environment. Although theoretically, university

International Conference on Finance, Economics, Management, Accounting and Informatics

"Digital Transformation and Sustainable Business: Challenges and Opportunities for Higher Education Research and Development"

students are expected to possess relevant skills, sufficient internship experiences, and personal preparation such as CV and portfolio development, many still encounter difficulties in applying theoretical knowledge to practical situations. A lack of foundational skills—such as communication, leadership, adaptability, and digital literacy—has become a significant barrier, particularly in the context of the Fourth Industrial Revolution and the Society 5.0 era, both of which demand a more comprehensive level of job preparedness.

This study focuses on four core skills that have been globally recognized as critical determinants of job readiness: leadership skills, communication skills, adaptability skills, and digital skills. These competencies are emphasized in various international reports, such as the QS World Future Skills Index, the LinkedIn Workplace Learning Report, and the World Economic Forum's Future of Jobs report. These sources consistently highlight the persistent gap between industry expectations and graduates' actual capabilities, especially in soft and digital skills.

The urgency of this research is further supported by local data from the Tracer Study conducted by Universitas Methodist Indonesia, which indicates that while most graduates are employed in fields relevant to their studies, there remains a weak vertical alignment in the application of acquired skills. This suggests that academic achievement alone does not necessarily equate to optimal job readiness. Therefore, this study aims to analyze the influence of leadership skills, communication skills, adaptability skills, and digital skills on the job readiness of final-year students in the Management Study Program of the Faculty of Economics at Universitas Methodist Indonesia. The findings of this research are expected to contribute meaningfully to educational institutions, policymakers, and students in bridging the skills gap and enhancing graduate competitiveness in the labor market.
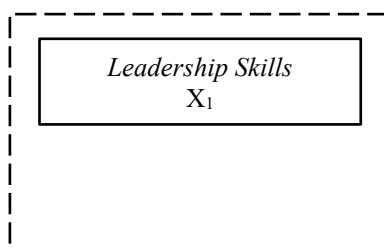
Literature Review

The literature review aims to present relevant theoretical foundations to support this study while also identifying research gaps that warrant further investigation. In the context of the transition from university to the labor market, there exists a significant gap between graduate competencies and the demands of the industry, particularly regarding the mastery of multidimensional work-related skills. Therefore, it is crucial to identify which skills significantly contribute to job readiness in order to formulate effective strategies for improving graduate quality.

Becker's (1964) Human Capital Theory serves as a fundamental framework for understanding the importance of investing in individual skills such as leadership, communication, adaptability, and digital proficiency. This theory posits that such skills constitute a form of human capital that enhances individual productivity and competitiveness in the labor market. Complementing this, Barney's (1991) Resource-Based View (RBV) asserts that competitive advantage is derived from resources that are valuable, rare, inimitable, and non-substitutable. In this regard, the skills possessed by university students can be considered strategic resources that enhance their marketability to potential employers.

Previous research further reinforces the importance of both soft and hard skills in graduate job readiness. Faisal et al. (2024) highlight the significant roles of communication and adaptability for Generation Z students' job preparedness. Similarly, Telaumbanua & Telaumbanua (2024) argue that soft skills, particularly leadership and adaptability, play a more dominant role than hard skills. Meanwhile, Elviana & Sudiana (2023) emphasize the increasing relevance of digital skills, although such competencies may not be fully effective without the support of emotional intelligence.

A notable gap identified from prior studies is the lack of research that integrates four key skill dimensions—leadership skills, communication skills, adaptability skills, and digital skills—within a single model to examine their simultaneous and partial effects on job readiness among final-year students. Moreover, most existing studies focus on only one or two skill areas, thus failing to provide a comprehensive perspective.

In response to these theoretical and empirical gaps, this study aims to develop a model that simultaneously examines the influence of the four aforementioned skills on students' job readiness. To test this model, the following hypotheses are proposed:
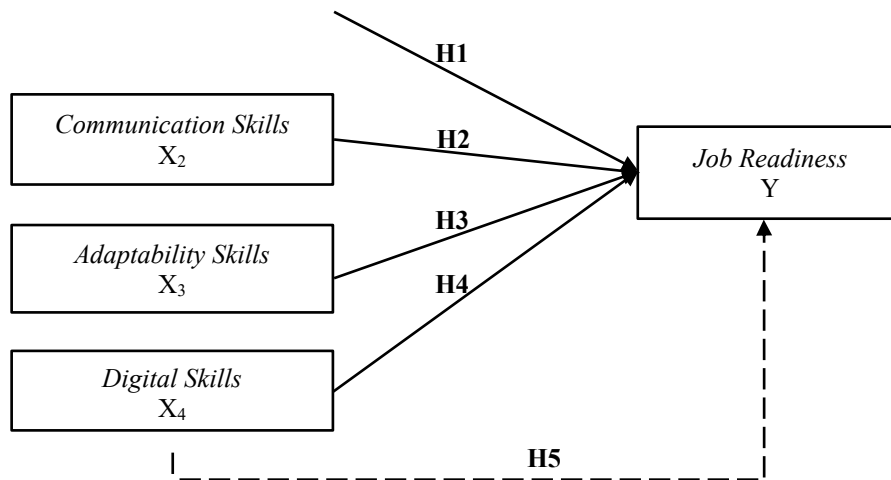
> *Leadership Skills*
> X_1

International Conference on Finance, Economics, Management, Accounting and Informatics

"Digital Transformation and Sustainable Business: Challenges and Opportunities for Higher Education Research and Development"

Figure 1
Conceptual Framework

Reference: Author (2025)

a. H1 : Leadership skills have a significant effect on job readiness.
b. H2 : Communication skills have a significant effect on job readiness.
c. H3 : Adaptability skills have a significant effect on job readiness.
d. H4 : Digital skills have a significant effect on job readiness.
e. H5 : Leadership skills, communication skills, adaptability skills, and digital skills simultaneously affect job readiness.

Methods

This study employs a quantitative approach aimed at measuring and analyzing the influence of leadership skills, communication skills, adaptability skills, and digital skills on job readiness among students of the Management Study Program, Faculty of Economics, Universitas Methodist Indonesia. This approach was selected due to its ability to provide objective empirical data and allow for the testing of relationships between variables through statistical techniques. The choice of location was based on the alignment of the university's curriculum with the 2025 labor market demands and its practice-oriented learning approach that emphasizes industry relevance (link and match).

The population in this study consists of all 2021 cohort students in the Management Study Program, totaling 322 individuals. The sample was selected using purposive sampling and determined by applying the Slovin formula with a 5% margin of error, resulting in a total sample size of 179 respondents. The sampling criteria included students who were not engaged in full-time employment, had completed and passed courses in leadership, business communication, corporate culture, and technology and information applications, preferably with a minimum grade of B, and had experience in internships or participation in the MBKM program (optional).

Data collection techniques included observation, interviews, documentation, and the distribution of a Likert-scale questionnaire. The questionnaire instrument was developed based on indicators for each variable and was tested for validity and reliability using SPSS version 26. The collected data were analyzed using multiple linear regression, preceded by classical assumption tests, including tests for normality, multicollinearity, and heteroscedasticity, to ensure the feasibility of the regression model. A t-test was conducted to determine the partial effect of each independent variable on the dependent variable, while an F-test was used to assess the simultaneous effect of all independent variables. Additionally, the coefficient of

International Conference on Finance, Economics, Management, Accounting and Informatics

"Digital Transformation and Sustainable Business: Challenges and Opportunities for Higher Education Research and Development"

determination (R^2) was calculated to determine the extent to which the independent variables collectively explained the variance in job readiness.

In conclusion, the research design was systematically and methodologically constructed. The selection of the quantitative method, relevant sampling, appropriate data collection processes, and the use of proper analytical techniques make this methodology reliable for addressing the research questions and testing the hypotheses in a scientific and accurate manner.

Results and Discussion
Results

This study involved 179 final-year students from the Management Study Program, Faculty of Economics, Universitas Methodist Indonesia. The data collection was conducted using a structured questionnaire consisting of 42 items, categorized into five variables: leadership skills, communication skills, adaptability skills, digital skills, and job readiness.

Descriptive Findings

The demographic profile revealed that 63.13% of respondents were female, and 85.47% had completed their final semester. Most students had relevant academic backgrounds, and 81.01% possessed various types of experiential learning (internships, student organizations, or MBKM programs), with the majority having engaged in self-initiated internships (25.14%).

Instrument Validity and Reliability

The validity test results show that all items across variables exceeded the critical *r-table* value of 0.147, indicating that each item is statistically valid. Reliability tests using Cronbach's Alpha showed values above the acceptable threshold of 0.60, with leadership skills (0.840), communication skills (0.853), adaptability skills (0.811), digital skills (0,800), and job readiness (0.719), confirming all variables are reliable for further analysis.

Classical Assumption Testing

All classical assumptions were satisfied:
a. Normality: Data were normally distributed ($p = 0.200$).

Table 2
Normality Test Results

One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		179
Normal Parameters[a,b]	Mean	,0000000
	Std. Deviation	2,21992083
Most Extreme Differences	Absolute	,056
	Positive	,054
	Negative	-,056
Test Statistic		,056
Asymp. Sig. (2-tailed)		,200[c,d]

a. Test distribution is Normal.
b. Calculated from data.
c. Lilliefors Significance Correction.
d. This is a lower bound of the true significance.
Reference: Data processed using SPSS version 26 (2025)

b. Multicollinearity: All VIF values were <10, and Tolerance values >0.1, indicating no multicollinearity.

International Conference on Finance, Economics, Management, Accounting and Informatics

"Digital Transformation and Sustainable Business: Challenges and Opportunities for Higher Education Research and Development"

Table 3
Multicollinearity Test Results

Coefficients[a]

Model		Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta	t	Sig.	Collinearity Statistics Tolerance	VIF
1	(Constant)	5,652	1,397		4,045	,000		
	Leadership Skills	,198	,057	,344	3,476	,001	,266	3,753
	Communication Skills	,145	,061	,243	2,364	,019	,247	4,048
	Adaptability Skills	,149	,065	,202	2,297	,023	,337	2,966
	Digital Skills	,003	,054	,004	,059	,953	,535	1,869

a. Dependent Variable: *Job Readiness*
Reference: Data processed using SPSS version 26 (2025)

c. Heteroscedasticity: Glejser and Spearman's Rho tests indicated no heteroscedasticity issues ($p>0.05$ for all predictors).

Table 4
Heteroscedasticity Test Results (Glejser)

Coefficients[a]

Model		Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta	T	Sig.
1	(Constant)	1,508	,883		1,708	,089
	Leadership Skills	-,002	,036	-,006	-,042	,966
	Communication Skills	-,006	,039	-,025	-,162	,871
	Adaptability Skills	-,012	,041	-,038	-,295	,768
	Digital Skills	,028	,034	,086	,827	,409

a. Dependent Variable: RES2
Reference: Data processed using SPSS version 26 (2025)

Table 5
Heteroscedasticity Test Results (Spearman's Rho)

Correlations

			Leadership Skills	Communication Skills	Adaptability Skills	Digital Skills	Unstandardized Residual
Spearman's rho	Leadership Skills	Correlation Coefficient	1,000	,829**	,770**	,624**	-,007
		Sig. (2-tailed)	.	,000	,000	,000	,926
		N	179	179	179	179	179
	Communication Skills	Correlation Coefficient	,829**	1,000	,775**	,646**	-,008
		Sig. (2-tailed)	,000	.	,000	,000	,916
		N	179	179	179	179	179
	Adaptability Skills	Correlation Coefficient	,770**	,775**	1,000	,621**	-,014

International Conference on Finance, Economics, Management, Accounting and Informatics

"Digital Transformation and Sustainable Business: Challenges and Opportunities for Higher Education Research and Development"

	Sig. (2-tailed)	,000	,000	.	,000	,855
	N	179	179	179	179	179
Digital Skills	Correlation Coefficient	,624**	,646**	,621**	1,000	,004
	Sig. (2-tailed)	,000	,000	,000	.	,952
	N	179	179	179	179	179
Unstandardized Residual	Correlation Coefficient	-,007	-,008	-,014	,004	1,000
	Sig. (2-tailed)	,926	,916	,855	,952	.
	N	179	179	179	179	179

**. Correlation is significant at the 0.01 level (2-tailed).
Reference: Data processed using SPSS version 26 (2025)

Multiple Linear Regression Analysis
The multiple regression equation was:
$Y = 5.652 + 0.198X_1 + 0.145X_2 + 0.149X_3 + 0.003X_4$
Where:
a. X_1 = Leadership Skills
b. X_2 = Communication Skills
c. X_3 = Adaptability Skills
d. X_4 = Digital Skills
e. Y = Job Readiness

Table 6
Multiple Linear Regression Test Results

Coefficients[a]

Model		Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	5,652	1,397		4,045	,000
	Leadership Skills	,198	,057	,344	3,476	,001
	Communication Skills	,145	,061	,243	2,364	,019
	Adaptability Skills	,149	,065	,202	2,297	,023
	Digital Skills	,003	,054	,004	,059	,953

a. Dependent Variable: *Job Readiness*
Reference: Data processed using SPSS version 26 (2025)

The analysis showed:
a. Leadership Skills (p=0.001), Communication Skills (p=0.019), and Adaptability Skills (p=0.023) each had a positive and significant influence on job readiness.
b. Digital Skills (p=0.953) showed a positive but insignificant effect.

Simultaneous Testing and Determination Coefficient
a. The F-test confirmed that all independent variables jointly had a significant effect on job readiness ($F = 52.146$, $p < 0.001$).

Table 7
F-Test Results

International Conference on Finance, Economics, Management, Accounting and Informatics

"Digital Transformation and Sustainable Business: Challenges and Opportunities for Higher Education Research and Development"

ANOVA[a]

	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1051,534	4	262,883	52,146	,000[b]
	Residual	877,193	174	5,041		
	Total	1928,726	178			

a. Dependent Variable: Job Readiness
b. Predictors: (Constant), Digital Skills, Adaptability Skills, Leadership Skills, Communication Skills
Reference: Data processed using SPSS version 26 (2025)

b. The Adjusted R^2 value was 0.535, indicating that 53.5% of the variation in job readiness was explained by the four predictors.

Table 8
Coefficient of Determination Test Results

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,738[a]	,545	,535	2,245

a. Predictors: (Constant), *Digital Skills, Adaptability Skills, Leadership Skills, Communication Skills*
Reference: Data processed using SPSS version 26 (2025)

Discussion

Leadership Skills and Job Readiness

The findings demonstrated that leadership skills had the strongest impact on job readiness. This aligns with Human Capital Theory (Becker, 1964), which posits that non-technical skills, such as decision-making, motivation, and responsibility, are critical for transitioning into the workforce. Prior studies (Sari & Manunggal, 2023; Ardias & Rambe, 2020) support this finding, indicating that leadership competency significantly enhances a graduate's employability and preparedness.

Communication Skills and Job Readiness

Communication skills were found to significantly influence job readiness. According to the Resource-Based View (Barney, 1991), communication builds social and professional capital, making graduates more capable of navigating workplace expectations. Similar findings were reported by Reflina (2023) and Hapsari et al. (2024), who emphasized the importance of assertiveness, clarity, and interpersonal communication in bridging the gap between education and employment.

Adaptability Skills and Job Readiness

Adaptability, including emotional regulation, flexibility, and proactive problem-solving, also significantly affected job readiness. As industries evolve, graduates must be able to cope with dynamic roles and environments. The study reinforces previous research suggesting that reflective and adaptive behaviors are essential in the modern workplace.

Digital Skills and Job Readiness

Although digital skills are essential in the current digital economy, this study found their influence on job readiness to be statistically insignificant. This could be attributed to a high baseline digital proficiency among respondents, making it a non-differentiating factor in readiness. Alternatively, the types of digital skills measured may not have been aligned closely enough with job-specific demands.

Conclusion

International Conference on Finance, Economics, Management, Accounting and Informatics

"Digital Transformation and Sustainable Business: Challenges and Opportunities for Higher Education Research and Development"

This study found that leadership, communication, and adaptability skills significantly influence job readiness among final-year management students, with leadership skills showing the strongest effect. In contrast, digital skills showed a positive but statistically insignificant influence, suggesting a potential gap between digital competence and its perceived relevance to job preparedness.

Collectively, the four variables explained 53.5% of the variance in job readiness, indicating that nearly half is influenced by other factors not included in this study. These results highlight the critical role of soft skills in workforce preparedness, particularly in academic programs aiming to enhance graduate employability. Limitations of this study include its single-institution scope. Future research is recommended to explore additional variables—such as organizational experience, internships, or personality traits—and to expand the sample across institutions for broader applicability

References

Ardias, W. S., & Rambe, D. R. (2020). Ingin Lebih Siap Memasuki Dunia Kerja? Asah Kemampuan Leadership
Anda Dari Sekarang. *Biopsikososial, 4*(2), 320-342.

Badan Pusat Statistik. (2025, Februari 6). *Tingkat Pengangguran Terbuka Berdasarkan Tingkat Pendidikan*. Retrieved Maret 1, 2025, from bps.go.id: https://www.bps.go.id/id/statistics-table/2/MTE3OSMy/unemployment-rate-by-education-level.html

Brodnitz, D. (2024, Februari 8). *The Most In-Demand Skills for 2024*. Dipetik April 2, 2025, dari linkedin.com: https://www.linkedin.com/business/talent/blog/talent-strategy/linkedin-most-in-demand-hard-and-soft-skills

Gultom, R. M. (2023). *Pengaruh Perilaku Asertif dan Kemampuan Komunikasi terhadap Kesiapan Kerja Mahasiswa Program Studi Pendidikan Ekonomi Angkatan 2020 Universitas Jambi.* Skripsi, Universitas Jambi, Jambi.

Hapsari, R. N., Agustina, S. M., Wijaya, R., & Romadona, M. R. (2024). Kurangnya Keterampilan Komunikasi Generasi Z Memasuki Pasar. *Jurnal Pekommas, 9*(1), 55-66.

Intelligent Choices Made Simple. (2023, Agustus 30). *4 in 10 Business Leaders Say Recent College Grads Are Unprepared to Enter Workforce*. Dipetik April 1, 2025, dari Intelligent.com: https://www.intelligent.com/4-in-10-business-leaders-say-recent-college-grads-are-unprepared-to-enter-workforce/

Priansa, D. J. (2016). *Perencanaan dan Pengembangan Sumber Daya Manusia.* Bandung: Alfabeta.

QS World Future Skills Index. (2024, Januari 30). *Skills Gap Analysis: What Soft Skills do Employers Want From Business School Graduates?*. Dipetik April 1, 2025, dari qs.com: https://www.qs.com/insights/articles/soft-skills-gap-2024/

Sari, C. N., & Manunggal, S. A. (2023). Pengaruh Soft Skill dan Hard Skill Terhadap Kesiapan Kerja Mahasiswa Di Bank Syariah. *Jurnal Pendidikan Ekonomi (Jurkami), 8*(2), 347-356.

Sedarmayanti. (2016). *Manajemen Sumber Daya Manusia: Reformasi Birokrasi dan Manajemen Pegawai Negeri Sipil.* Bandung : PT. Refika Aditama.

International Conference on Finance, Economics, Management, Accounting and Informatics

"Digital Transformation and Sustainable Business: Challenges and Opportunities for Higher Education Research and Development"

Sinambela, L. P. (2016). *Manajemen Sumber Daya Manusia: Membangun Tim Kerja yang Solid untuk Meningkatkan Kinerja.* Jakarta: Bumi Aksara.

Telaumbanua, A., & Telaumbanua, A. (2024). Pengaruh Soft Skill dan Hard Skill Mahasiswa Terhadap Kesiapan Kerja Di Era Revolusi Industri 4.0. *Jurnal Suluh Pendidikan, 12*(2), 126-136. Diambil kembali dari https://jurnal.uhn.ac.id/index.php/jsp/article/view/1617/628

World Economic Forum. (2023, April 30). *The future of jobs report 2023: Top industries for increasing skill requirements, 2023–2027.* Dipetik April 2, 2025, dari weforum.org.com: https://www3.weforum.org/docs/WEF_Future_of_Jobs_2023.pdf