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THE INFLUENCE OF TECHNOLOGY MASTERY AND SOCIAL NETWORKS ON CAREER OPPORTUNITIES FOR STUDENTS AT UNIVERSITY

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Abstract

This study aims to determine the effect of technological mastery and social networks on the career opportunities of Pamulang University students. This study uses a quantitative approach with an associative descriptive method. The research sample consisted of 105 students selected using purposive sampling, and data were collected through an online questionnaire with a five-point Likert scale. Data analysis was performed using multiple linear regression with the assistance of SPSS version 25. The results showed that technological mastery and social networks had a positive and significant effect on students' career opportunities, both partially and simultaneously. The coefficient of determination (Adjusted R^2 = 0.892) shows that 89.2% of the variation in student career opportunities can be explained by these two independent variables. These findings reinforce the Technology Acceptance Model (Davis, 1989) and Social Capital Theory (Bourdieu, 1986), which explain that students with high digital competence and extensive social networks have greater career prospects in the digital age. Academically, this study contributes to the development of literature on digital competence and work readiness, while practically providing input for universities to improve career preparation programs through digital literacy training and professional network development.

Keywords:
Technology Mastery, Social Networks, Career Opportunities, Digital Competence, Higher Education

Introduction

Rapid technological developments in today's digital age have brought about major changes in various aspects of life, including the world of work. The ability to master technology is one of the important competencies that students must have as future workers. Mastery of technology not only includes the ability to use digital devices, but also an understanding of the use of information technology in supporting productivity, communication, and career development.

In addition, social networks also play an important role in shaping and expanding career opportunities. Through social networks, students can obtain information related to job opportunities, internships, and professional collaborations. The skills

in building and maintaining social relationships can help students strengthen their position in the competitive world of work.

This study aims to determine the influence of technological mastery and social networks on the career opportunities of students at Pamulang University. The results of this study are expected to contribute to students' understanding of the importance of technological mastery and social network development as preparation for the world of work, as well as provide input for the university in improving student competency development programs.

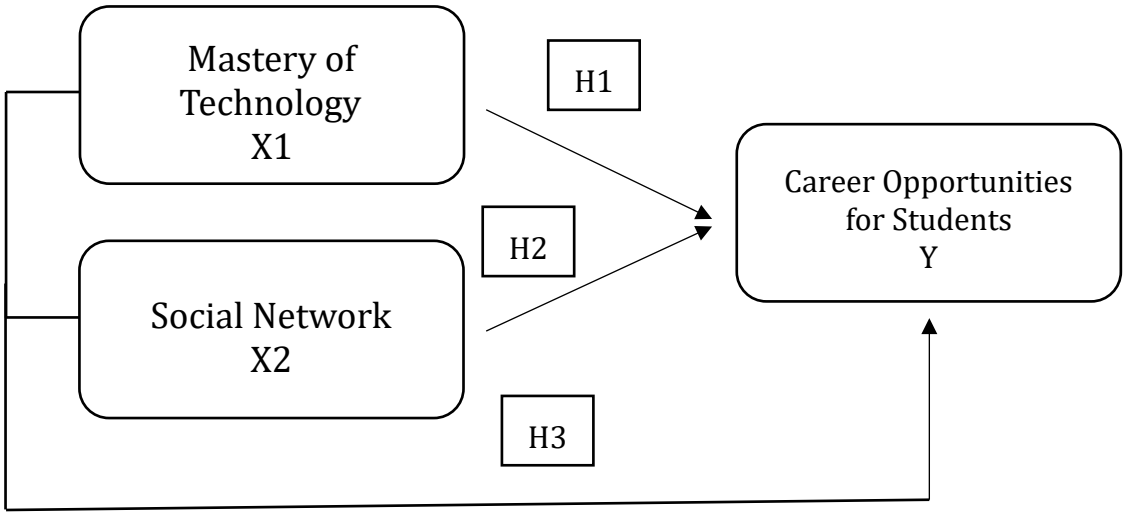
Theoretical Framework

The rapid development of digital technology has brought about major changes in the world of education and work. According to Davis (1989) in the Technology Acceptance Model (TAM), a person's level of acceptance of technology is influenced by their perception of the ease and benefits of that technology. Students who have good technological mastery will find it easier to adapt to the demands of the modern workplace, which requires the ability to use digital systems, collaborate online, and analyze data. Therefore, technological mastery (X1) is an important factor in preparing students to compete in the digital age.

Meanwhile, social networks (X2) are a form of social capital that can provide access to information, opportunities, and professional support. Based on Bourdieu's (1986) Social Capital Theory, social networks help individuals obtain valuable resources such as recommendations, job vacancy information, and collaboration opportunities. For students, the ability to build and maintain an extensive social network can increase career opportunities, both during their studies and after graduation.

Previous studies have shown that mastery of technology and social networking has a positive influence on students' work readiness and career opportunities. Prasetyo and Nugroho (2021) found that technological competence enhances students' ability to adapt to the job market. Lestari (2022) showed that social networking plays an important role in expanding access to job information. Meanwhile, Sari and Utami (2023) emphasized that a combination of technological skills and social networking can increase graduates' competitiveness in the workplace.

Based on previous theories and research findings, this study assumes that Technology Mastery (X1) and Social Networking (X2) have a partial and simultaneous effect on Student Career Opportunities (Y).



Research Hypotheses
Hypothesis 1 (H1): Mastery of technology has a significant impact on students' career opportunities.
Hypothesis 2 (H2): Social networks have a significant impact on students' career opportunities.
Hypothesis 3 (H3): Simultaneous mastery of technology and social networking has a significant impact on students' career opportunities

Method
This study uses a quantitative approach with an associative descriptive method, which aims to determine the influence of technological mastery and social networking on the career opportunities of Pamulang University students. This approach was chosen because it can explain the cause-and-effect relationship between variables based on empirical data collected through surveys.

The population in this study was all active students at Pamulang University in the 2025 academic year. The research sample was taken using purposive sampling, with the criteria being students who had experience in organizations, internships, or activities related to career preparation. Based on the data collection results, the number of respondents who participated was 105 students from various study programs.

Data collection techniques were carried out through the distribution of online questionnaires using Google Forms, with a Likert scale of 1–5, ranging from

"strongly disagree" to "strongly agree." Each statement in the questionnaire was compiled based on indicators from each variable.

Technology Proficiency (X1): the ability to use digital devices, operate productivity applications, and utilize online learning platforms.
Social Networking (X2): the ability to build professional relationships, participate in organizations and communities, and use social media for career purposes.
Student Career Opportunities (Y): readiness for the world of work, access to career information, and involvement in self-development activities.

The data obtained were analyzed using multiple linear regression analysis with the help of SPSS version 25. This analysis was conducted to test the influence of technological mastery and social networking on students' career opportunities. The testing included a t-test to determine the influence of each independent variable on the dependent variable partially, as well as an F-test to determine the simultaneous influence of both independent variables on the dependent variable. In addition, multiple regression coefficient analysis was also used to determine the direction and magnitude of the influence of each variable, as well as the coefficient of determination to determine the extent to which technological mastery and social networking can explain the variation in changes in student career opportunities.

Results

Table 1. T-test

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95,0% Confidence Interval for B		Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	.372	.734		.507	.613	-1.084	1.829					
	The influence of technological mastery	.421	.079	.421	5.306	.000	.264	.579	.920	.465	.171	.164	6.084
	Social network	.557	.081	.545	6.872	.000	.396	.717	.930	.563	.221	.164	6.084

a. Dependent Variable: Career opportunities

Mastery of technology (X1) has a t-value of 5.036 with a significance value of 0.000 < 0.05. This means that mastery of technology has a positive and significant effect on students' career opportunities. The better the students' mastery of technology, the greater their chances of obtaining career opportunities.

Social networks (X2) have a t-value of 6.872 with a significance value of 0.000 < . This indicates that social networks also have a positive and significant effect on students' career opportunities. The more extensive the social networks that students build, the higher their chances of developing their careers in the future.

Thus, partially, both independent variables have a positive and significant effect on the career opportunities of Pamulang University students.

Table 2. Multiple linear regression test

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients			95,0% Confidence Interval for B		Correlations			Collinearity Statistics	
		B	Std. Error	Beta	t	Sig.	Lower Bound	Upper Bound	Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	.372	.734		.507	.613	-1.084	1.829					
	The influence of technological mastery	.421	.079	.421	5.306	.000	.264	.579	.920	.465	.171	.164	6.084
	Social network	.557	.081	.545	6.872	.000	.396	.717	.930	.563	.221	.164	6.084

a. Dependent Variable: Career opportunities

A constant value of 0.372 indicates that if technological mastery (X1) and social networks (X2) have a value of zero, then students' career opportunities (Y) remain at a base value of 0.372 units.

The regression coefficient for technology mastery (X1) of 0.421 indicates that each oneunit increase in technology mastery will increase students' career opportunities by 0.421 units, assuming other variables remain constant.

The efficiency of the social network regression X2 of 0.557 indicates that every oneunit increase in social networks will increase career opportunities by 0.057 units.

Table 3. Coefficient of determination

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.946[a]	.894	.892	2.76877	.894	432.079	2	102	.000	2.404

a. Predictors: (Constant), Social network, The influence of technological mastery

b. Dependent Variable: Career opportunities

An adjusted R-square value of 0.892 indicates that 89.2% of the variation in students' career opportunities can be explained by two independent variables in this study, namely technological mastery and social networks. Meanwhile, the remaining 10.8% is explained by other factors not included in the research model, such as work experience, communication skills, learning motivation, and environmental support.

Thus, these results indicate that the regression model used in this study has excellent ability to explain the relationship between technological mastery, social networks, and career opportunities for students.

Table 4. f test

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	6624.689	2	3312.345	432.079	.000[b]
	Residual	781.939	102	7.666		
	Total	7406.629	104			

a. Dependent Variable: Career opportunities

b. Predictors: (Constant), Social network, The influence of technological mastery

Based on these results, it was found that the significance value was 0.000 < 0.05, so it can be concluded that mastery of technology (X1) and social networks (X2) simultaneously had a positive and significant effect on students' career opportunities (Y).

This means that the combination of students' technological skills and social networking abilities can increase their chances of obtaining better career opportunities. The regression model used in this study is also considered valid, as the independent variables collectively contribute significantly to the dependent variable.

Table 5. Simple Linear Regression Analysis between Technological Mastery (X_1) and Career Opportunities (Y)

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95,0% Confidence Interval for B		Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	.372	.734		.507	.613	-1.084	1.829					
	The influence of technological mastery	.421	.079	.421	5.306	.000	.264	.579	.920	.465	.171	.164	6.084
	Social network	.557	.081	.545	6.872	.000	.396	.717	.930	.563	.221	.164	6.084

a. Dependent Variable: Career opportunities

This equation shows that if technological proficiency increases by one unit, career opportunities will increase by 0.421 units, assuming other variables remain constant. The t-value of 5.306 with a significance of 0.000 < 0.05 indicates that technological proficiency has a positive and significant effect on career opportunities.

These findings indicate that the higher the level of students' technological proficiency, such as the use of digital devices, productivity software, and information systems, the greater their opportunities to obtain and retain employment. This is in line with Robles (2012), who states that technological skills are one of the determining factors of graduate competitiveness in the modern job market.

The social network regression coefficient (X_2) of 0.557 indicates that each one-unit increase in social networks will increase students' career opportunities by 0.557 units. This means that the more active students are in building and maintaining social networks, the broader their access to information and job opportunities will be.

From these results, it can be concluded that both independent variables, namely technological proficiency and social networking, have a positive effect on students' career opportunities, with social networking (X_2) having a more dominant influence than technological proficiency (X_1).

Table 6. Simple Linear Regression Analysis between Social Network (X_2) and Career Opportunities (Y)

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients			95,0% Confidence Interval for B		Correlations			Collinearity Statistics	
		B	Std. Error	Beta	t	Sig.	Lower Bound	Upper Bound	Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	.372	.734		.507	.613	-1.084	1.829					
	The influence of technological mastery	.421	.079	.421	5.306	.000	.264	.579	.920	.465	.171	.164	6.084
	Social network	.557	.081	.545	6.872	.000	.396	.717	.930	.563	.221	.164	6.084

a. Dependent Variable: Career opportunities

The regression coefficient value of 0.557 indicates that every one-unit increase in social networks will increase career opportunities by 0.557 units. The t-value of 6.872 with a significance of 0.000 < 0.05 indicates that social networks have a positive and significant effect on career opportunities.

These results indicate that students who have extensive social networks whether in academic, organizational, or professional settings tend to have greater access to information and career opportunities. This is in line with Granovetter's (1995) view in Social Network theory, which states that social relationships play an important role in opening up access to economic and employment opportunities.

Based on the results of these two simple regressions, it can be concluded that both technological mastery and social networks have a positive and significant influence on students' career opportunities. This means that students who are able to master technology and establish extensive social networks will have a competitive advantage in the world of work.

This finding emphasizes the importance of combining technological competence and networking skills as two main pillars of career readiness in the digital age.

Interpretation of Results

Overall, the results of the study indicate that mastery of technology and social networking has a positive and significant influence on the career opportunities of Pamulang University students, both partially and simultaneously. This shows that

the higher the students' ability to master technology and the broader their social networks, the greater the career opportunities they can achieve in the future.

Discussion

The results of this study indicate that mastery of technology and social networks has a positive and significant influence on students' career opportunities. These findings are in line with the research objective of determining how digital competence and social interaction play a role in improving students' career readiness in the era of digital transformation. These results reinforce Davis' (1989) Technology Acceptance Model (TAM) theory, which explains that individuals who have a positive perception of the ease and benefits of technology will find it easier to adopt it in academic and professional activities. In the context of this study, students with good technological skills are proven to be better prepared to face a dynamic and digital-based world of work.

Furthermore, the results of this study are also in line with Bourdieu's (1986) Social Capital Theory, which states that social networks are a form of social capital that plays an important role in providing access to information, support, and opportunities. The positive and significant influence of social networks on students' career opportunities shows that involvement in organizations, professional communities, and digital networks can expand students' access to job information and professional collaboration opportunities.

These findings also support the results of previous studies conducted by Prasetyo and Nugroho (2021), Lestari (2022), and Sari and Utami (2023), which confirm that a combination of technological capabilities and networking skills can increase the competitiveness of graduates in the world of work. Scientifically, this research contributes to the development of literature on digital competence and work readiness by emphasizing the importance of integrating soft skills and digital skills into higher education curricula. Practically, the results of this study suggest that universities strengthen student career preparation programs through digital literacy training and professional network development.

However, this study has limitations in terms of sample size and scope, as it focuses on only one university, so the results cannot be generalized widely. Further research is expected to expand the object of study to several universities and add other variables such as communication skills or internship experience to gain a more comprehensive understanding of the factors that influence students' career opportunities.

Conslusion

Based on the results of the research that has been conducted, it can be concluded that mastery of technology and social networks has a positive and significant effect on students' career opportunities. Students who have the ability to master technology are proven to be more adaptive and ready to face the demands of the digital-based world of work. Meanwhile, students who have extensive social networks gain greater access to job information, internship opportunities, and professional collaborations.

Academically, this study contributes to the development of theories regarding the role of the Technology Acceptance Model (Davis, 1989) and Social Capital Theory (Bourdieu, 1986) in the context of student career readiness in the digital age. Practically, the results of this study can serve as a basis for universities in designing career development programs that focus on improving digital literacy, technological skills, and the ability to build professional networks.

The limitations of this study lie in the scope of the sample, which only includes students from one university, so the results cannot be generalized widely. Therefore, further research is recommended to involve more universities and consider other variables such as work experience, communication skills, and learning motivation in order to gain a more comprehensive understanding of the factors that influence students' career opportunities.

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