



Bridging the Gap: Commerce Students' Readiness for AI-Driven Careers in Banking and Financial Services

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Abstract: Artificial Intelligence (AI) is changing the banking and financial services sector by transforming job roles and the skills expected from future professionals. As AI adoption continues to grow, Commerce students need to be equipped with the knowledge and competencies required for technology-driven careers. This study examines the readiness of Commerce students for AI-driven careers in banking and financial services and identifies the factors that influence their preparedness. The study considers six key factors: AI knowledge, digital skills, attitude toward AI, self-efficacy, career awareness, and institutional support. A structured questionnaire using a five-point Likert scale was developed to collect data from Commerce students. The findings are expected to identify the factors that most strongly influence career readiness and provide insights into existing skill gaps. The study offers useful recommendations for higher education institutions to strengthen curriculum design and improve students' employability by aligning academic learning with the evolving needs of the banking and financial services industry.

Keywords: Artificial Intelligence, Banking, Financial Services, Commerce and Students

I. Introduction

Artificial Intelligence (AI) is transforming the banking and financial services sector, increasing the demand for graduates with digital skills and the ability to adapt to new technologies. As Commerce students are a major source of talent for this sector, it is important to assess their readiness for AI-driven careers. However, limited research has examined this area. Therefore, this study evaluates Commerce students' readiness and examines the influence of AI Knowledge, Digital Skills, Attitude toward AI, Self-Efficacy, Career Awareness, and Institutional Support. The findings are expected to help higher education institutions improve curriculum and skill development to enhance students' employability in the AI-driven banking and financial services industry.

II. Literature Review

Ridzuan et al. (2024) found that AI has improved fraud detection, credit assessment, customer service, and operational efficiency in the banking sector, while highlighting the need for higher education institutions to strengthen students' AI and digital skills.

Vukovic, Dekpo-Adza, and Matovic (2025) reported that AI has transformed financial services and increased the demand for graduates with strong digital and analytical skills, recommending closer collaboration between higher education institutions and the financial industry to prepare students for AI-driven careers. Vyas and Suganthiya (2025)

III. Objectives

- To assess the level of readiness of Commerce students for AI-driven careers in Banking and Financial Services.

- To identify the factors influencing the readiness of Commerce students for AI-driven careers in Banking and Financial Services.

IV. Research Questions

- Which factor has the greatest influence on readiness?
- How much of the variation in readiness is explained by these factors?
- Which factors are significant and which are not?

V. Research Design

The study adopted a quantitative, descriptive, and explanatory research design using a cross-sectional approach. Primary data were collected from 100 undergraduate and postgraduate Commerce students through a structured questionnaire using convenience sampling. The questionnaire included demographic information, career readiness items, and six influencing factors measured on a five-point Likert scale. Yadav and Satsangi (2025) Data were collected through online and direct surveys and analysed using descriptive statistics and multiple linear regression in IBM SPSS Statistics.

VI. Data Analysis

Table 1: Descriptive Analysis of Demographic Profile of the Respondents

Variable	Category	Frequency (n)	Percentage (%)
Gender	Male	45	45.0
	Female	55	55.0
Age (Years)	18–19	22	22.0
	20–21	41	41.0
	22–23	24	24.0
	24–25	13	13.0
Programme	B.Com	70	70.0
	M.Com	25	25.0
	Other	5	5.0
Year of Study	I Year	42	42.0
	II Year	37	37.0
	III Year	21	21.0
Area of Specialization	Accounting	18	18.0
	Finance	17	17.0
	Banking	15	15.0
	Marketing	18	18.0
	Human Resource	15	15.0
	General Commerce	17	17.0



Prior Training in AI	Yes	40	40.0
	No	60	60.0
Frequency of Using AI Tools	Daily	30	30.0
	Weekly	35	35.0
	Monthly	25	25.0
	Never	10	10.0

Source: Primary Data

Table 1 shows that most respondents were female (55%), aged 20–21 years (41%), and B.Com students (70%), with first-year students forming the largest group (42%). Although 60% had not received formal AI training, 65% used AI tools regularly, indicating familiarity with AI. Kumar and Sharma (2025) Overall, the respondent profile was suitable for assessing Commerce students' readiness for AI-driven careers in the banking and financial services sector.

Table 2: Descriptive Statistics of Readiness and Influencing Factors (N = 100)

Variables	No. of Items	Mean	Standard Deviation	Level
Readiness for AI-Driven Careers	8	3.86	0.58	High
AI Knowledge	3	3.72	0.67	High
Digital Skills	3	3.95	0.61	High
Attitude toward AI	3	4.08	0.54	High
Self-Efficacy	3	3.81	0.63	High
Career Awareness	3	3.69	0.71	Moderate
Institutional Support	3	3.42	0.76	Moderate
Mean Score Interpretation: 1.00 – 1.80 (Very Low); 1.81 – 2.60 (Low); 2.61 – 3.40 (Moderate); 3.41 – 4.20 (High); 4.21 – 5.00 (Very High)				

Source: Primary Data

Table 2 shows that Commerce students have a high level of readiness for AI-driven careers ($M = 3.86$, $SD = 0.58$). Among the influencing factors, Attitude toward AI recorded the highest mean score ($M = 4.08$), followed by Digital Skills ($M = 3.95$) and Self-Efficacy ($M = 3.81$). Career Awareness ($M = 3.69$) and Institutional Support ($M = 3.42$) received relatively lower scores, suggesting the need for improved career guidance and stronger institutional support to better prepare students for AI-enabled careers.

Table 3: Reliability Analysis

Construct	No. of Items	Cronbach's Alpha	Reliability
Readiness	8	0.884	Good
AI Knowledge	3	0.816	Good
Digital Skills	3	0.842	Good
Attitude toward AI	3	0.798	Acceptable
Self-Efficacy	3	0.865	Good
Career Awareness	3	0.801	Good
Institutional Support	3	0.774	Acceptable

Source: Primary Data

The reliability analysis showed that all constructs had Cronbach's Alpha values greater than 0.70, indicating satisfactory internal consistency. Therefore, the items within each construct reliably measured the same concept, and it was appropriate to compute composite (mean) scores for Readiness, AI Knowledge, Digital Skills, and Attitude toward AI, Self-Efficacy, Career Awareness, and Institutional Support for further analysis.

Table 4: Model Summary of Multiple Linear Regression Analysis on Students' Readiness for AI-Driven Careers in Banking and Financial Services

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.767 ^a	.589	.562	.3677

Source: Primary Data

Table 4 shows that the regression model has a strong relationship with students' readiness for AI-driven careers ($R = 0.767$). The model explains 58.9% of the variation in readiness ($R^2 = 0.589$), while the remaining 41.1% is influenced by other factors not included in the study. The Adjusted R^2 of 0.562 indicates that the model provides a good fit and effectively explains students' readiness for AI-driven careers.

Table 5: ANOVA Results of Multiple Linear Regressions for Students' Readiness for AI-Driven Careers in Banking and Financial Services

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	18.003	6	3.000	22.193	.000 ^b
	Residual	12.574	93	.135		
	Total	30.577	99			

Source: Primary Data

Table 5 presents the ANOVA results of the multiple linear regression model. The F-value of 22.193 with a significance value of 0.000 ($p < 0.001$) indicates that the regression model is statistically significant. This implies that the six independent variables—AI Knowledge, Digital Skills, Attitude toward AI, Self-Efficacy, Career Awareness, and Institutional Support—collectively have a significant influence on students' readiness for AI-driven careers in the banking and financial services sector.

Table 6: Multiple Linear Regression Coefficients for Factors Influencing Students' Readiness for AI-Driven Careers in Banking and Financial Services

Predictor Variables	Unstandardized Coefficient (B)	Standardized Coefficient (β)	t-value	Sig.	Decision
Constant	0.810	—	3.236	0.002	—
AI Knowledge	0.099	0.127	1.418	0.159	Not Significant
Digital Skills	0.051	0.059	0.660	0.511	Not Significant
Attitude toward AI	0.257	0.307	3.473	0.001	Significant
Self-Efficacy	0.230	0.277	2.818	0.006	Significant
Career Awareness	0.071	0.088	0.969	0.335	Not Significant
Institutional Support	0.083	0.102	1.201	0.233	Not Significant

Source: Primary Data

Table 6 shows that Attitude toward AI ($\beta = 0.307$, $p = 0.001$) and Self-Efficacy ($\beta = 0.277$, $p = 0.006$) significantly influenced students' readiness for AI-driven careers. In contrast, AI Knowledge, Digital Skills, Career Awareness, and Institutional Support did not have a statistically significant effect ($p > 0.05$).

VII. Major Findings Of The Study

- The study found that Commerce students exhibited a high level of readiness for AI-driven careers in the banking and financial services sector, indicating a positive inclination towards technology-enabled career opportunities.
- The regression model was found to be statistically significant ($F = 22.193$, $p < 0.001$), confirming that the selected factors collectively influence students' readiness for AI-driven careers.
- The six predictor variables—AI Knowledge, Digital Skills, Attitude toward AI, Self-Efficacy, Career Awareness, and Institutional Support—together explained 58.9% of the variation in students' readiness for AI-driven careers, while the remaining 41.1% may be influenced by other factors not included in the study.
- Among the factors examined, Attitude toward AI emerged as the strongest predictor of readiness ($\beta = 0.307$, $p = 0.001$). This indicates that students with a more positive perception of AI are more likely to be prepared for careers in AI-enabled banking and financial services.
- Self-Efficacy was identified as the second most influential factor ($\beta = 0.277$, $p = 0.006$), suggesting that confidence in learning and adapting to AI-related technologies plays a crucial role in enhancing career readiness.
- AI Knowledge, Digital Skills, Career Awareness, and Institutional Support did not show a statistically significant influence on readiness in the regression model, indicating that these factors alone were not strong predictors when considered alongside the other variables.



- The regression model showed no evidence of multi-collinearity, as all tolerance values were above the recommended threshold and the Variance Inflation Factor values were well within acceptable limits. This confirms the reliability of the regression estimates.
- Overall, the findings suggest that students' personal beliefs and confidence in adopting AI technologies have a greater impact on career readiness than their current level of AI knowledge, digital skills, or institutional support. This highlights the importance of developing positive attitudes and self-confidence alongside technical competencies to prepare Commerce students for AI-driven careers in the banking and financial services sector.

VIII. Suggestions

Higher education institutions should create more opportunities for students to develop a positive attitude towards Artificial Intelligence through workshops, seminars, expert lectures, and industry interactions. Familiarity with AI applications can help students view AI as an opportunity rather than a challenge.

Colleges should focus on strengthening students' self-efficacy by providing hands-on training, practical projects, case studies, and simulation-based learning related to AI applications in banking and financial services. Practical exposure can improve students' confidence in using emerging technologies.

Although AI Knowledge and Digital Skills were not statistically significant predictors in this study, institutions should continue integrating AI-related concepts, digital banking tools, data analytics, and financial technologies into the Commerce curriculum to ensure students remain aligned with industry developments. Career guidance programmes should be organized regularly to increase students' awareness of emerging job roles, skill requirements, and career opportunities in AI-enabled banking and financial services.

Educational institutions should strengthen collaborations with banks, financial institutions, fintech companies, and industry experts to provide internships, certification programmes, industrial visits, and guest lectures that expose students to real-world AI applications.

Policymakers and curriculum developers should periodically revise Commerce curricula to incorporate AI, digital transformation, financial technology (FinTech), and data-driven decision-making as integral components of business education.

IX. Conclusion

Artificial Intelligence (AI) is changing the banking and financial services industry and creating new career opportunities. This study examined how ready Commerce students are for AI-related careers and the factors that influence their readiness. The results show that most students are generally well prepared for AI-driven careers. Among the factors studied, Attitude toward AI and Self-Efficacy had the greatest influence on students' readiness. However, AI Knowledge, Digital Skills, Career Awareness, and Institutional Support did not have a significant impact in this study. The findings also show that the selected factors explain 58.9% of the students' readiness for AI-driven careers. This suggests that technical knowledge alone is not enough. Students also need confidence in their abilities and a positive attitude toward learning and using AI technologies.

In conclusion, higher education institutions should focus not only on teaching AI-related skills but also on building students' confidence and encouraging a positive attitude toward AI. This will help Commerce graduates become better prepared for careers in the banking and financial services sector. Future studies can include a larger group of students and examine other factors that may influence career readiness.

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