Original Research Article

A STUDY ON AWARENESS AMONG HUMAN RESOURCE SPECIALISATION STUDENTS ABOUT THE USE OF ARTIFICIAL INTELLIGENCE AT THE WORKPLACE

* Dr. Jyoti Jangir & ** CA Aakanksha Mangesh Sant

* Assistant Professors, KSD's Model College

Abstract:

Artificial Intelligence (AI) is increasingly influencing workplace practices by automating tasks, improving efficiency, and reshaping skill requirements across industries. As future professionals in business and service sectors, human resource specialisation students are expected to engage with AI-based tools in their careers. This study examines the awareness among human resource specialisation students regarding the use of artificial intelligence at the workplace. The research assesses students' understanding of AI concepts, sources of awareness, extent of AI usage, perceptions of workplace relevance, willingness to adopt AI after graduation, and challenges faced in learning AI. Primary data were collected through a structured questionnaire administered to undergraduate human resource specialisation students and analyzed using percentage analysis and correlation statistical test. The findings indicate that although most students possess basic awareness and a positive attitude toward AI, gaps remain in practical exposure, formal guidance, and curriculum integration.

Keywords: *Artificial Intelligence, human resource specialisation Students, Workplace Awareness, Employability Skills, Future of Work, Digital Transformation*

Introduction:

Artificial Intelligence (AI) is rapidly transforming modern workplaces by automating routine processes, enhancing decision-making, and redefining skill requirements across industries. According to the International Monetary Fund (IMF, 2026), AI is not only replacing certain job functions but is also creating new roles that demand advanced digital and analytical skills. This transformation is reshaping labor markets globally, making AI literacy and technological adaptability critical for future employability. Similarly, McKinsey Global Institute estimates that while automation may displace millions of jobs, it could also generate new employment opportunities, provided workers acquire relevant digital skills (Chui et al., 2018).

Recent studies emphasize that the future of work will depend significantly on education systems' ability to prepare students with AI-related competencies (Arntz et al., 2016; Alfaouri & Abu Aqoula, 2024). Alam and Windiarti (2025) highlight that integrating AI into learning environments enhances interactive learning, skill development, and workforce readiness. However, inadequate exposure and lack of structured training may widen the skills gap, particularly among undergraduate students.

In higher education, student awareness and preparedness toward AI remain inconsistent. Tripathi (2024) found that although undergraduate students show high interest in AI, substantial gaps persist in practical knowledge and application. Similarly, Ma'ruf et al. (2025) reported that while students acknowledge AI's benefits for learning and career preparation, limited hands-on experience restricts their workplace readiness. Studies also suggest that AI awareness significantly influences career resilience and reduces

job insecurity, indicating the importance of early exposure and training (Chung et al., 2025).

Commerce students, who are expected to enter AI-enabled sectors such as finance, accounting, marketing, and business analytics, are particularly affected by this technological shift. Despite AI's growing integration into business operations, limited research has explored commerce students' awareness of AI workplace applications, especially in developing economies. Therefore, this study seeks to assess the awareness among commerce students with human resource specialisation regarding the use of artificial intelligence at the workplace, examining their knowledge levels, perceptions, usage patterns, and challenges. Understanding these dimensions is essential for designing curriculum reforms and training initiatives that align academic learning with evolving industry expectations (IMF, 2026; Tripathi, 2024).study highlights the need for structured training programs and curriculum enhancements to improve students' preparedness for an AI-driven workplace.

Literature review:

1) According to a study conducted by Araz Zirar, Syed Imran Ali, and Nazrul Islam (2023), Workplace Artificial Intelligence (AI) helps organisations increase operational efficiency, enable faster decisions, and innovate products and services. While there is a wealth of information on how AI can provide value to workplaces, research on how workers and AI can coexist in the workplace is also evolving. This study's overarching research question is how workers will coexist with AI in workplaces.

2) Uta Wilkens (2022) presented a qualitative evaluation of the augmentation potential of AI to assist individual and organizational learning in the workplace. The core outcome is that there is an augmentation potential of AI to enhance individual learning and development in the workplace, which,

however, should not be overestimated. AI has a complementarity to individual intelligence, which can lead to an advancement, especially in quality, accuracy, and precision.

3) Abhishek (2025), in the paper titled "Impact of Artificial Intelligence on the workplace," highlights AI-driven technologies, including machine learning, robotics, and natural language processing, are optimizing workflows, reducing operational costs, and improving decision-making across industries such as finance, healthcare, manufacturing, and customer service. While AI increases productivity, it also raises concerns about job displacement, as routine and repetitive tasks become automated. However, AI simultaneously creates new job opportunities in areas like AI development, data science, and human-AI collaboration, emphasizing the need for workforce reskilling and adaptation. Despite its benefits, AI introduces ethical and social challenges, including algorithmic bias, data privacy concerns, and the need for transparent governance.

4) Sinumon T G, Anagha M Nair and Nisha M (2025) This study underscores the importance of addressing the knowledge gap in AI literacy among commerce students. By highlighting the current awareness levels and the perceived benefits and challenges associated with AI, the research offers valuable insights for educators, policymakers, and industry stakeholders to design targeted initiatives that enhance AI integration in commerce education. Such efforts are crucial for preparing students to navigate an AI-driven business landscape effectively.

5) Sinumon (2025) The study aims to identify the current levels of understanding of AI concepts and tools among undergraduate (UG) and postgraduate (PG) students, particularly in areas like investment decision-making, education, and e-commerce.

6) Anne-Sophie Mayer, Reza M. Baygi, and Reinout Buwalda's (2025) paper titled "Generation AI: Job Crafting by Entry-Level Professionals in the Age of Generative AI" focuses on the use of AI by entry-level professionals and its consequences, both from managers' and ELPs' perspectives. It covers the recrafting and changes observed through adjustments in three aspects: 1) tasks, 2) relationship 3) signals to other stakeholders

7) Dr. Kumaraswamy Mora (2025) paper titled "Artificial Intelligence in Commerce Studies: Student Experiences, Perceived Advantages, and Gender-Based Adoption Trends" studies the use of AI based tools by commerce students, the perceived advantages and challenges faced. Further it discusses incorporation of AI in curriculum, gender specific AI training and for educating students for safe and ethical use of AI tools.

Objectives of the Study:

Primary Objective:

● To study the level of awareness among human resource specialisation students regarding the use of Artificial Intelligence at the workplace immediately after graduation.

Secondary Objectives:

1. To analyze students' awareness of AI tools and technologies used in modern workplaces.

2. To study the awareness of human resource specialisation students regarding the importance of AI skills for employment after graduation.

3. To identify gaps in awareness and challenges faced by human resource specialisation students in understanding AI applications at the workplace.

4. To examine whether current human resource specialisation education adequately prepares students for AI-based workplace requirements.

Hypotheses:

Ha1: There is a significant association between AI training being included as a compulsory part of Commerce education and the sufficiency of current AI awareness for use in the workplace.

Ha2: There is a significant association of awareness between Use of AI based tools by Commerce graduates immediately after graduation and their awareness on AI improves employability of commerce graduates.

Research Methodology:

Method of Sampling: Convenient sampling

Type of Research: Descriptive

Primary Data was collected by circulating a questionnaire through Google on WhatsApp. The data was analysed with the help of tables, diagrams, and the Spearman correlation test. An online calculator was used to run calculations for testing the hypotheses.

Both sources of data collection were used:

Primary data: It was collected by asking questions with the help of a questionnaire.

Sample size: 37 students from Human Resource Specialisation

Sample Area: A Prominent college located in Dombivli.

Secondary data: The secondary data has been collected from Online Journals and relevant websites.

Limitations of the study:

● Responses to the questions of the questionnaire are as per the respondents' understanding, which may differ.

● All responses from respondents are assumed to be true.

● Due to time constraint small sample was taken from students from the same college.

● A non- probability method of sampling was used.

Data analysis and interpretation:

1) Class

Sr. No.	Options	No of responses	Percentage (%)
1	SY	21	56.76
2	TY	16	43.24
		37	100.00

(Source: Sample Survey)

The table shows the distribution of respondents based on their academic year. Out of a total of 37 respondents, 21 (56.76%) are from the Second Year (SY) classes and 16 (43.24%) are from the Third Year (TY) classes.

2) Gender

Sr. No.	Options	No of responses	Percentage (%)
1	Female	28	75.68
2	Male	9	24.32
		37	100

(Source: Sample Survey)

The table shows the distribution of respondents based on their gender. Out of a total of 37 respondents, 28 (75.68%) are female and 9 (24.32%) are male, indicating a substantial majority of female respondents.

3) Level of awareness about AI

Sr. No.	Options	No of responses	Percentage (%)
1	1	0	0.00
2	2	2	5.41
3	3	13	35.14
4	4	19	51.35
5	5	3	8.11
		37	100

(Source: Sample Survey)

The table presents respondents' ratings on a five-point scale for level of awareness of AI. Out of 37 respondents, majority respondents (51.35%) selected moderately high level of awareness with a rank of 4. Also, the number of respondents having level 3 is also significant (35.14%). Few are having a low level of awareness (level 2) and 8.11% have the highest level of awareness.

OPEN ACCESS

Original Research Article

4) Awareness about AI-based tools

Sr. No.	Options	Male	%	Female	%	Total	Percentage (%)
1	Chatbots (e.g., ChatGPT)	9	100	26	92.86	35	94.59
2	Automated accounting software	3	33.33	7	25.00	10	27.03
3	Fraud detection systems	5	55.56	5	17.86	10	27.03
4	Data analytics tools	2	22.22	8	28.57	10	27.03
5	Robotic Process Automation (RPA)	1	11.11	1	3.57	2	5.41

(Source: Sample Survey)

The table is showing the awareness among respondents in respect of AI based tools. Out of 37 respondents, 35 (94.59%) are aware about Chatbots (e.g., ChatGPT), 10 (27.03%) about Automated accounting software, Fraud detection system and Data analytics tools each and 2 (5.41%) about Robotic Process Automation (RPA). It is indicating a significantly high majority of both male and female respondents are aware about Chatbots.

5) Opinion on Use of AI at workplaces

Sr. No.	Options	No of responses	Percentage (%)
1	Agree	18	48.65
2	Neutral	8	21.62
3	Strongly agree	10	27.03
4	Strongly disagree	1	2.70
5	Disagree	0	0
		37	100

(Source: Sample Survey)

The table shows respondents' opinion on how commonly AI is used at the workplace. Out of 37 respondents, the largest proportion 48.65% agreed and 27.03% strongly agreed. Only one respondent 2.70% strongly disagreed. A small percentage (21.62%) of respondents are neutral.

6) Opinion on Expectations for Use of AI based tools by Commerce graduates immediately after graduation.

Sr. No.	Options	No of responses	Percentage (%)
1	Agree	17	45.95
2	Neutral	13	35.14
3	Strongly agree	4	10.81
4	Disagree	3	8.11
5	Strongly disagree	0	0
		37	100

(Source: Sample Survey)

The table shows respondents' opinion on expectations for Use of AI based tools by Commerce graduates immediately after graduation. Out of 37 respondents, the largest proportion (45.95%) agreed and 10.81% strongly agreed. 35.14% of respondents remained neutral. Very few (8.11%) disagreed.

OPEN ACCESS   **Original Research Article**

7) **Opinion on Awareness of AI for improvement of employability of commerce graduates.**

Sr. No.	Options	No of responses	Percentage (%)
1	Agree	20	54.05
2	Neutral	11	29.73
3	Strongly agree	3	8.11
4	Disagree	3	8.11
5	Strongly disagree	0	0
		37	100

(Source: Sample Survey)

The table shows respondents' opinion on whether AI awareness improves the employability of commerce graduates. Out of 37 respondents, the largest proportion (54.05%) agreed and 8.11% strongly agreed. Very few (8.11%) disagreed. 29.73% remained neutral.

8) **Opinion about sufficiency of current level of AI awareness for workplace requirements after graduation**

Sr. No.	Options	No of responses	Percentage (%)
1	Yes	20	54.05
2	No	17	45.95
		37	100

(Source: Sample Survey)

The table indicates that out of 37 respondents, 20 (54.05%) feel they have sufficient level of AI awareness" while 17 (45.95%) answered "No."

9) **Opinion about AI awareness and training to be included as a compulsory part of commerce education**

Sr. No.	Options	No of responses	Percentage (%)
1	Yes	32	86.49
2	No	5	13.51
		37	100

(Source: Sample Survey)

The table indicates that out of 37 respondents, a strong majority (86.49%) feel AI awareness and training should be included compulsorily in commerce education while very few (13.51%) responded "No."

Testing of hypotheses:

Ha1: There is a significant association between AI training being included as a compulsory part of Commerce education and the sufficiency of current AI awareness for use in the workplace.

Spearman's Rho Calculator : The value of r_s is: 0.04003.

$r_s = 0.04003$, p (2-tailed) = 0.83972.

By normal standards, the association between the two variables would not be considered statistically significant.

Ha2: There is a significant association of awareness between Use of AI based tools by Commerce graduates immediately after graduation and their awareness on AI improves employability of commerce graduates.

Spearman's Rho Calculator : The value of r_s is: 0.31065.

$r_s = 0.31065$, p (2-tailed) = 0.10763.

By normal standards, the association between the two variables would not be considered statistically significant.

Findings:

OPEN ACCESS   **Original Research Article**

1) Majority of the respondents 56.76% are from SY classes but also substantial respondents 43.24% are from TY classes showing fair distribution.

2) The gender-wise analysis reveals that female respondents constitute a higher proportion 75.68% compared to male respondents 24.32%.

3) A significant proportion of students responded that they have comparatively high 51.35% (level 4) and 35.14% respondents have moderate (level 3) level of awareness about AI. Very few responded having a low level of awareness. It is indicating a positive attitude of respondents.

4) Substantial majority respondents have the opinion that AI is used commonly at workplaces.

5) Almost half the respondents agree that commerce graduates are expected to use AI at the workplace immediately after graduation. However significant (35.14%) respondents are neutral about it.

6) 54.05% agreed and 8.11% strongly agreed that AI awareness improves the employability of commerce graduates.

7) Only 54.05% of the respondents feel they have sufficient AI awareness indicating significant respondents not satisfied with their level of awareness.

8) A strong majority (86.49%) of the respondents have the opinion that AI awareness and training should be a mandatory part of the commerce curriculum.

9) 70.27% respondents face lack of guidance as a challenge in improving AI awareness. Also, limited curriculum coverage (43.24%), lack of interest (37.84%), Affordability issues (29.73%) are also notable challenges. Few agreed for their own lack of knowledge.

10) Most respondents mainly think AI is useful for automation of repetitive tasks which saves time and reduces errors and also provides innovation and accuracy. Respondents feel AI helps in data analysis and decision-making by quickly processing large amounts of information and providing insights or predictions. For support functions like customer support, resume screening, employee performance analysis, quality control, demand forecasting, and process optimization it can be used.

11) Many respondents think lack of guidance, limited practical exposure and lack of regular awareness sessions are reasons for their insufficient level of AI awareness and for improvements respondents suggest –

a) Inclusion of AI concepts in syllabus, trainings and internship

b) Workshop, seminars and guest lectures by industry experts

c) Online courses, webinars and certification related to AI in business.

d) Case studies, projects and group discussions, assignments on AI applications in commerce

Conclusions: The study concludes that commerce students possess a basic to moderate level of awareness regarding the use of Artificial Intelligence at the workplace and generally hold a positive attitude toward its future application. Consistent with global evidence, AI is increasingly shaping job roles and skill requirements, making early awareness and preparedness essential for future employability (International Monetary Fund [IMF], 2026). While most students recognize the importance of AI in business-related fields such as finance, accounting, and marketing, gaps remain in practical exposure, formal guidance, and curriculum integration. Similar findings have been reported in previous studies, which emphasize that lack of structured training limits students' readiness for an AI-driven work environment (Tripathi, 2024; Chung et al., 2025). Therefore, the study highlights the need for curriculum reforms, skill-

OPEN ACCESS　　　　Original Research Article

based training programs, and institutional support to enhance AI awareness and workplace readiness among commerce students, enabling them to adapt effectively to the evolving digital economy.

References:

1) Zirar, A., Ali, S. I., & Islam, N. (2023). Worker and workplace Artificial Intelligence (AI) coexistence: Emerging themes and research agenda. Technovation, 124, 102747. https://doi.org/10.1016/j.technovation.2023.102747

2) Wilkens U (2020), "Artificial intelligence in the workplace – A double-edged sword". International Journal of Information and Learning Technology, Vol. 37 No. 5 pp. 253–265 https://doi.org/10.1108/IJILT-02-2020-0022

3) Petropoulos, G. (2018, July 31). The impact of artificial intelligence on employment (Bruegel Working Paper). Bruegel. https://www.bruegel.org/external-publication/impact-artificial-intelligence-employment

4) Sinumon, T. G., Anagha, M. N., & Nisha, M. (2025). A study on the awareness of commerce students towards artificial intelligence (AI). In Recent Trends in Multidisciplinary Research (RTMR-2025) (pp. 176–189). Association of Global Academician and Researchers (AGAR) Publications. https://www.researchgate.net/publication/389860261_A_Study_on_The_Awareness_of_Commerce_Students_towards_Artificial_Intelligence_AI

5) Mayer, H., Yee, L., Chui, M., & Roberts, R. (2025, January 28). Superagency in the workplace: Empowering people to unlock AI's full potential at work. McKinsey & Company. https://www.mckinsey.com/capabilities/tech-and-ai/our-insights/superagency-in-the-workplace-empowering-people-to-unlock-ais-full-potential-at-work McKinsey & Company

6) International Monetary Fund. (2026, January 14). New skills and AI are reshaping the future of work. https://www.imf.org/en/blogs/articles/2026/01/14/new-skills-and-ai-are-reshaping-the-future-of-work-IMF

7) Chui, M., Manyika, J., & Miremadi, M. (2018). What the future of work will mean for jobs, skills, and wages. McKinsey Global Institute.

8) Arntz, M., Gregory, T., & Zierahn, U. (2016). The risk of automation for jobs in OECD countries. OECD Publishing.

9) Tripathi, C. R. (2024). Awareness of artificial intelligence (AI) among undergraduate students. NPRC Journal of Multidisciplinary Research, 1(7), 126–142. https://doi.org/10.3126/nprcjmr.v1i7.72478

10) Ma'ruf, M., Saputra, R., Suwahyu, I., & Maharani, G. P. (2025). Students' perspectives on the role of artificial intelligence in learning and readiness for the workforce. Journal MediaTIK.

11) Chung, Y. W., Im, S., Kim, J. E., & Yun, J. K. (2025). Artificial intelligence awareness, career resilience, job insecurity and behavioural outcomes. Australian Journal of Psychology, 77(1). https://doi.org/10.1080/00049530.2025.2559910

Websites referred:

https://www.imf.org/en/blogs/articles/2026/01/14/new-skills-and-ai-are-reshaping-the-future-of-work-IMF

https://www.sciencedirect.com/science/article/pii/S0166497223000585