

Role of Artificial Intelligence Literacy in Electronic-Entrepreneurial Intention: Mediating Role of Entrepreneurial Self Efficacy: A Study from District Haripur Pakistan

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Abstract

The use of AI has been increased in all areas of life. Among these areas, entrepreneurship is one major area. The study investigates the role of literacy of artificial intelligence in electronic-entrepreneurial intention. The study has measured the mediation role of entrepreneurial self-efficacy between artificial intelligence literacy and electronic-entrepreneurial intention. The study has used a probability sampling technique from the university of haripur students. A sample of 200 were chosen on simple random sampling to assess the data. The Study results indicates that AI Literacy positively contribute towards E-entrepreneurial Intention. Furthermore the result also shows that entrepreneurial self-efficacy positively mediates towards electronic-entrepreneurial Intention. The study results indicate that there is strong need for AI-Ethics development among Entrepreneurs E-entrepreneurial Intention.

Keywords: Artificial Intelligence (AI), Self Efficacy, AI-Use, AI-Ethics, Entrepreneurs, E-entrepreneurial Intention.

Introduction

Electronic-entrepreneurship is increasing and it's bringing both economical and societal development in the current digital world. With the emergence of advanced technology e-entrepreneurship has also been evolved and many e-businesses have been developed. E-entrepreneurship means to establish and develop a business online through website and using digital technologies (Al Halbusi et al., 2024). E-entrepreneurship offer not just

accessible market but also other reduce traveling and operational costs along with accessibility to international brands worldwide which not only make creativity but also health competitiveness (Li & Kang, 2022). In the current technological advanced world E-entrepreneurship is raising and all new business model have to use E-entrepreneurship along with traditional mode of operations. Hence in such scenarios entrepreneurial intention for E-entrepreneurship is also raising.

In the current technological and artificial intelligence (AI) world, the concept of E-entrepreneurial Intention is raising. In order to assess the real time need of AI usage for entrepreneurial intention, this study has been taken into consideration to find the role of various antecedents for AI literacy. The study of Hamrick, Murniek & Waddingham (2025) describe that AI literacy is contributed by various antecedents like artificial intelligence awareness, artificial intelligence awareness use, artificial intelligence awareness ethics and artificial intelligence awareness evaluation. Nevertheless, the e-entrepreneurship literature is still incomplete and only a few studies have covered the psychological and technological process and skills that cultivate e-entrepreneurial behaviours, and particularly electronic entrepreneurial intentions. In psychological context the intentions for entrepreneurship is considered one the most consistent predictor for action (Kautonen et al., 2015) as intentions reflect conscious intentions of a person to start a business (Tsou et al., 2023).

Although it is important, there is a gap in the literature regarding systematic studies on the role of emerging technological abilities, including artificial intelligence (AI) literacy, in intentions to become e-entrepreneurs. The importance of filling this gap is not only to contribute to the theoretical knowledge but also to find feasible measures to encourage the presence of entrepreneurs in the digital world. Artificial Intelligence and technologies have caused a fundamental change in the entrepreneurial world, which influence not just innovation, motivation, operations and on time decision makings (Duong, 2024). The skill of AI literacy, meaning being able to successfully interact with AI through identification, use, assessment and compliance with ethical standards (Wang et al., 2022), has become one of the essential skills used by up-to-date entrepreneurs (Huy et al., 2023). Artificial intelligence technologies allow businesspersons to analyze a great amount of data, optimize the use of resources, and find new ways of solving difficult tasks (Imjai et al., 2024).

In the case of electronic-entrepreneurs, literacy of artificial intelligence even more applicable because the attainment of digital businesses is reliant on digital gears and platforms, which are fuelled by AI systems. Despite the recognition of the significance of Artificial Intelligence technologies (Chalmers et al., 2021), there is limited research on how AI literacy can promote entrepreneurial behaviors. While very few psychological studies has been conducted on how AI and its literacy influence electronic entrepreneurial motivation as well as behavior which creates a huge gap in the knowledge of the impact of technological skills on entrepreneurship. This gap needs to be filled to come up with specific intercessions to prepare businesspersons with artificial intelligence related skills in the fast-changing online business world. The external technological factors, including literacy in AI, plays a central role in the formation of entrepreneurial behaviors that determine their mental and emotional state (Duong, 2024). Stimuli related to AI can be seen as the triggering factors that allow people to recognize the entrepreneurial chances, boost their self-confidence, and imagine the entrepreneurial selves in the online environment (Upadhyay et al., 2021). The literacy of AI has the potential to

awaken individuals to adopt new technologies (Wang et al., 2022), feel the possibilities of innovations, and decrease the ambiguities of starting online business. Nevertheless, prior literature does not explicitly test the role of AI literacy as a driving source of key psychological processes and mechanisms (e-entrepreneurial skills and identity aspirations). Therefore, the research in question will bridge this gap by providing new understandings into the role of artificial intelligence literacy as an external source of entrepreneurial motivation. Indeed, the study will argue that AI literacy triggers key psychological determinants leading to the formation of e-entrepreneurial intentions. These lessons are crucial in not only developing the theoretical knowledge on e-entrepreneurial behaviours, but also in the development of practical interventions aimed at developing entrepreneurial motivation within the environment of emerging technologies.

By the model, external environmental stimuli is a trigger that can elicit internal cognitive and emotional changes (organism) which then leads to the development of behavioral intentions or actions (response). The SOR framework has been tested in various contexts, such as entrepreneurship where the conditions of technology and environment affect entrepreneurial behaviours through mediation psychological processes (Chahal et al., 2024). Additionally, this research will utilize the model of SOR to study how literacy of artificial intelligence can be construed as an outer stimulus that triggers motivation and route to electronic-entrepreneurial intent through sequential facilitation of electronic-entrepreneurial self-efficacy. The fact that this study will contribute to develop the theoretical implications of theoretical contribution between literacy of artificial intelligence and electronic-entrepreneurial intention by integrating such constructs in the framework of developing tools is presented here. First, this research addresses an important gap in the existing literature by highlighting artificial intelligence literacy as a key factor influencing entrepreneurial intention, an area that has received relatively little attention in previous studies. The findings will contribute to theory by emphasizing the role of technological literacy in entrepreneurship research. They also offer practical visions for legislators, educationalists, and general practitioner seeking to encourage greater participation in the electronic economy.

Literature review

Artificial Intelligence literacy, Self-efficacy and electronic-entrepreneurship

Some of the processes that AI has transformed to give competitive edge to those who can incorporate AI in business models contain complaint handling, customer relationship management, CSR, Sale records and much more (Satornino et al., 2023). In today competitive world computer and AI based learning is very important in order to be more competitive and effective in the market (Rajaram and Tinguely, 2024). Business people who adopt these technologies are in a position to become more innovative, minimize uncertainties in operations and make better decisions (Duong, 2024). Nevertheless, the personal competencies level is crucial to be able to take advantage of AI technologies, which makes AI literacy one of the most important skills to achieve long-term business success. Literacy of artificial intelligence provides persons with the ability to be able to interact with AI technologies in a competent manner to be able to assess their efficiency and apply them towards innovation in a dynamic business context. The role of AI literacy is especially relevant towards facilitating the creation and development of e-entrepreneurial endeavors. E-entrepreneurship focuses on the use of digital medium to carry out a business operation

which makes use of technology to access consumers and has a way of running the business efficiently (Kollmann, 2006).

The study of Duong (2025) describes that Artificial intelligence-literacy developed on the basis of artificial intelligence-Awareness, artificial intelligence-evaluation, artificial intelligence use and artificial intelligence-ethics. The combination of these four items make AI literacy. Now on the basis of AI-literacy an individual self-efficacy enriched which leads to greater chances of e-entrepreneurial behavior.

With AI literacy, entrepreneurs will be able to utilize the newest technologies, including niche marketing, automation, digitization and reaching globally online with innovations (Haleem et al., 2022). Actually, chatbots that use AI technology increase the quality of customer experience services, and the analysis of the data drives the product design and positioning in the market. Entrepreneurs who have the capacity to understand and utilize the power of AI technology can help their business grow and deal with changing market dynamics. Despite the obvious positive aspects of AI integration, not all future e-entrepreneurs find it easy to comprehend and use AI technologies, which is why research concerning the influences of AI literacy on inspiring and enabling e-entrepreneurial activities is required. AI literacy serves as a decisive catalyst to an entrepreneurial activity because it influences the perception of the opportunities, decreases doubts, and enables people to feel confident in their potential to act in digital business settings. Having gained AI-related skills, people will have a better chance of recognizing AI-driven origination chances and will have fewer obstacles to entering new businesses (Giuggioli and Pellegrini, 2022). Cognitive and emotional processes can be activated by technological stimulus, including the exposure to AI tools, and can affect entrepreneurial decision-making (Duong, 2024). Nevertheless, there is little research that has been conducted mechanically to analyze the psychological processes between AI literacy and entrepreneurial intentions Gregori et al., (2021).

It is important to investigate such mechanisms as electronic-entrepreneurial self-efficacy and electronic-entrepreneurial identity ambition in order to comprehend how the technological skills can be converted into business actions Farmer et al., (2011). These lessons might offer practical measures to enhance entrepreneurial participation in technology-based situations Nguyen et al., (2024). The increased use of AI in the entrepreneurial domain suggests a gap in research regarding its impacts on e-entrepreneurial activities. Although digital literacy has been previously explored as an outcome predictor of entrepreneurship (Ip, 2024) the importance of artificial intelligence literacy as an outcome predictor of e-entrepreneurship has been little empirically investigated. The current body of literature is more oriented towards operational benefits of AI technologies, which is why it fails to address the motivational effect of AI technologies on future entrepreneurs completely. By closing this gap, research will be able to offer more deep about the role of artificial intelligence literacy in promoting entrepreneurial sureness and ambitions especially in the electronic world. Exploring these associations is crucial to furthering the knowledge base about the technological factors behind e-entrepreneurial activities and guide educational and policy efforts to enhance AI skills amongst upcoming businesspersons.

The SOR model has been widely used in other disciplines, to learn the routes by which the outside influences the behavioral outcomes. The model has proved useful in the

entrepreneurial field to explore the impact of environmental stimuli, including technological change or market opportunity, on cognitive and motivational mechanisms, which determine entrepreneurial intents (Bachmann et al., 2024). Its use in technological-based settings allows researchers to study the complicated interactions among external stimuli, mental conditions, and entrepreneurial behaviors. This study has taken into consideration the model of SOR to check the degree of artificial intelligence literacy affect electronic-entrepreneurial intentions based on internal psychological processes.

The study of Wang et al., (2022) shows that tools are important to learn artificial intelligence literacy and it's further strengthening. One of the main concepts of the social cognitive theory is self-efficacy, which indicates the beliefs of an individual in the power to carry out certain activities and attain the intended results (Bandura, 2011). Self-efficacy can be applied in entrepreneurial activities in the form of the belief to engage and maneuver entrepreneurial activities successfully (Mishra and Singh, 2022). Hence on the basis of above discussion we can conclude following four hypothesis of the study.

- H1: Artificial intelligence literacy mediates between artificial intelligence awareness and Entrepreneurial Self Efficacy.
- H2: Artificial intelligence literacy mediates between artificial intelligence use and Entrepreneurial Self Efficacy.
- H3: Artificial intelligence literacy mediates between artificial intelligence evaluation and Entrepreneurial Self Efficacy.
- H4: Artificial intelligence literacy mediates between artificial intelligence ethics and Entrepreneurial Self Efficacy.

The study of Imjai et al., (2024) describes that the literacy of artificial intelligence can help to build electronic-entrepreneurial self-efficacy by alleviating the doubts related to AI knowledge and allowing persons to distinguish it as a tool that allows addressing a problem, making decisions, and innovating in digital business frameworks. Research's show's that literacy of artificial intelligence in electronic business make them more confident and hence they have more strong and powerful business chains and commands, and can run their business more successfully. Study of Duong (2024) shows that literacy of artificial intelligence positively influence self-efficacy of entrepreneurs. The results of Bachmann et al., (2024) also describes same. Therefore, AI literacy is an essential exogenous stimulus that enhances the feeling of capacity among people to accomplish e-entrepreneurial activities effectively.

Farmer et al., (2011), describes in their study that literacy in artificial intelligence increased motivation of individuals, as they have more information about electronics process hence their chances of starting a venture is more as compared to a non-literate person to artificial intelligence. The study of Gregori et al., (2021) shows that motivation and self-identification is one the most important element for entrepreneurial involvement, and literacy of artificial intelligence along with it make the rest of the process more simple. Jaiswal et al., (2022) also shows in their study that in electronic entrepreneurship the literacy of artificial intelligence works as driver force for entrepreneurs (Bachmann et al., 2024). The knowledge and assessment of AI systems improves the perceptions of people regarding the possibility of technology adoption in the context of entrepreneurial activities, and thus, align the aspirations of people in the future with the e-entrepreneurial position. Previous research

indicated that high-tech skills and exposure to new technologies provide a significant role in determining the identity aspirations of individuals related to their careers (Duong, 2024). As a result, developing a futuristic mindset and strengthening a positive self-image, AI literacy encourages people to become electronic-entrepreneurs, who use AI tools to be innovative and create businesses.

Entrepreneurial intention is the willingness to be involved in entrepreneurial activities, which is conscious and intentional (Duong, 2025) and depends on how people perceive the opportunity and ability. AI literacy will improve the awareness of AI tools, and individuals will be able to discover new chances in electronic business settings. The ability to take advantage of AI-driven knowledge, including all machines skills minimizes the perceived obstacles to entering the online business and maximizes the perceived advantages (Duong, 2025). Put differently, a certain type of technological competence, literacy of artificial intelligence, prepares persons with the information and self-reliance that they need to take up e-entrepreneurial opportunities. Also, AI literacy will increase the skills of people to evaluate the possibility of using AI-based business models, which will contribute to motivation to take part in e-entrepreneurship. The study of Duong (2025) shows that literacy of digital skills plays important role in starting a new venture, particularly if the business or venture is intended to started online or electronic. Hence more chances for the persons having who are more AI-literate. E-entrepreneurial self-efficacy, when people have a higher e-entrepreneurial self-efficacy, it will make them believe that they can succeed in online entrepreneurial activities and this will enhance the desire to identify with the identity. Those who have higher self-efficacy would find it easier to become future e-entrepreneurs since they see themselves as capable of handling the requirements of digit entrepreneurship (Duong, 2025). Self-efficacy gives the feeling of mastery and success that makes people have ambitions that are based on their proficiency and attainment. According to previous studies, self-efficacy has a direct impact on professional identity development by encouraging persons to take up parts that they think they can effectively perform (Duong, 2025). In e-entrepreneurship, therefore, high self-efficacy people tend to internalize the aspects of entrepreneurship and perceive themselves as being able to succeed in the online business undertaking.

E-entrepreneurial self-efficacy is a major issue in determining the intentions of people to venture in online entrepreneurship activities. With increased self-efficacy, people tend to see entrepreneurial activities as feasible, leading to less perceived risks and an increased desire to seek entrepreneurial opportunities (Duong, 2025). Theory of the planned behavior focuses more on the importance of perceived ability to influence intentions because when one has confidence in his ability, the chances of making planned actions are high (Ajzen, 1991). From the study of Taneja et al., (2023) also proved that entrepreneurs with strong self-efficacy leads towards entrepreneurial intention and in the similar way the motivated AI-literate entrepreneurs will be more open for electronic venture.

According to the study of Davidsson & Sufyan (2023) there are various levels of literacy of artificial intelligence. More a person at higher level with more information of literacy of artificial intelligence, the more are chances for they will manage their business online successfully. This increased self-efficacy enhances their intrinsic drive to become e-entrepreneurial and match their ambitions to their future entrepreneurial position. Moreover, e-entrepreneurial self-efficacy creates a feeling of viability and control, which

encourages people to form intentions to participate in e-entrepreneurial endeavors. It was proven through prior research that self-efficacy acts as a mediator between technological skill and entrepreneurship as self-belief in one's ability acts as a psychological intermediary between external factors and one's identity and intention to act (Westhuizen and Goyayi, 2019). In this regard, e-entrepreneurship self-efficacy can prove to be a crucial mediator between artificial intelligence literacy and e-entrepreneurship success as it enables an individual to align his/her technological skills into a psychological readiness.

AI literacy helps individuals visualize themselves as competent e-entrepreneurs, making them develop aspirations for being entrepreneurial identities. As a result, such aspirations motivate them to formulate concrete plans towards undertaking e-entrepreneurship activities. In the same way, where individuals have high e-entrepreneurial self-efficacy, they feel capable of implementing their entrepreneurial goals and where identity aspirations motivate them to pursue entrepreneurship through deliberate actions. It can be argued from hypothetical viewpoints that identity ambitions are vital in the link between mental processes and behavioral intentions because they provide individuals with a definite self-concept and motivation (Urhahne and Wijnia, 2023). Thus, e-entrepreneurial identity ambitions can also act as mediating constructs through which the influence of literacy artificial intelligence and electronic-entrepreneurial self-efficacy has been channeled to form e-entrepreneurial intentions.

AI literacy is an opportunity that makes people feel more confident in their skills to cope with tasks related to AI, creating e-entrepreneurial self-efficacy. This enhanced self-efficacy encourages people to desire to become an e-entrepreneur because they feel that they are in a position that matches their skills to their preferred self-concept. Identity aspirations, on the other hand, reinforce their desire to become an e-entrepreneur by giving focus and goals and solidifying their desire to do something. Serial mediation process is in line with the SOR model, a concept that the external stimuli will affect the behavioral effects by means of internal psychological changes (Mehrabian and Russell, 1974). Previous literature has emphasized the role of consecutive intermediaries in the association between technical stimuli and business intentions as they reflect a dynamic process of confidence-building to identity formation and commitment to behavior (Duong, 2025). Thus, AI literacy may be sequentially mediated by e-entrepreneurial self-efficacy and e-entrepreneurial identity aspiration in the development of e-entrepreneurial intention.

H5: Entrepreneurial self-efficacy mediates between artificial intelligence literacy and electronic-entrepreneurial intention.

Theoretical Frame work of Study

The following figure no 1 shows that AI Literacy is an independent variable. While entrepreneurial self-efficacy and Locus of control are two mediating factors towards the dependent variable which is E-entrepreneurial Intention. The artificial intelligence literacy is developed on the basis of awareness of artificial intelligence, Use of artificial intelligence, evaluation of artificial intelligence and artificial intelligence ethics.

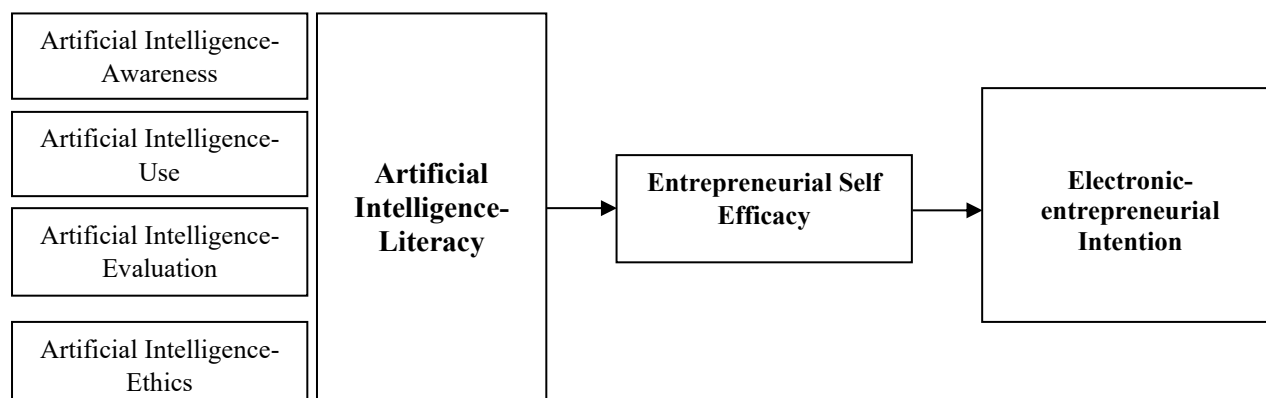


Figure No 1: Theoretical Framework

Study Methodology

This research is quantitative as the data has been collected with a structured questionnaire on a 5 point likert scale. The study has used cross section technique to measure the responses in same time. The population of the study was the student of business administration Department University of haripur. For the study a simple random sampling technique has been used to take sample size of the study. A total 210 business students were selected for data collection. The study of Zikmund, Babin & Griffin (2013) shows that a sample of 10 to 20 % is an appropriate sample size. The same has been suggested by Bougie and Sekaran (2004), that a sample of 10% is appropriate for data analysis part. Krejcie & Morgan (1970) suggest a sample of 300 to 400 is more appropriate in case of having large population. The unit of analysis of the study is univariate. Individual students who were enrolled in business department were targeted. The final Analysis has been made on 201 responses. 9 responses were not considered due to incomplete information.

Analysis of Study

Below table no 1 indicates the demographic results of the research respondents. The table below describes that half of the respondents were undergraduate and remaining were from graduate level. Table no 1 indicates that in the age group of 16-20, there are 53 respondents. While 124 respondents re in the age group of 21-24. While in age of 25-28 there were only 16 respondents. 6 respondents are in age of 29-32 and only 3 respondents are in age of 33-36. The response of the study shows that 78 respondents are female. While 178 are respondents are male.

Table 1

Demographical Result of the study

Measures	Items	Frequency
Age	16-20	52
	21-24	124
	25-28	16
	29-32	6
	33-36	3
	37 above	0
Level	Graduate	100
	Under Graduate	101
Gender	Male	123
	Female	78
Total		201

Reliability Analysis

This study has used a 5 point lickert scale a structured questionnaire adopted from the study of Duong (2025). The research instrument was consist of two parts. Part first was related to demographic questions related to respondents and part second was about structured questions about the variables mentioned in figure no 1, on 5 point lickert scale starting from 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree and 5= Strongly Agree.

Table 2

Cronbach Alpha

S.No	Variable	No of Items	Cronbach alpha
1	AI-Awarness	03	.83
2	AI-Use	03	.91
3	AI-Evaluation	03	.86
4	AI-Ethics	03	.84
5	AI Literacy	04	.96
6	Entrepreneurial Self Efficacy	05	.80
7	E-entrepreneurial Intention	05	.92

The table 2 above shows that the reliability statistics of the items are reliable as they are above the threshold of 0.7. Hence the items of the study were reliable.

Table 3

Average Variance Extracted (AVE)

Constructs	Average Variance Extracted (AVE)
AI-Awarness	0.619
AI-Use	0.669
AI-Evaluation	0.541
AI-Ethics	0.547
AI Literacy	0.531
Entrepreneurial Self Efficacy	0.556
E-entrepreneurial Intention	0.611
AI-Awarness	0.783

The AVE values of all constructs are more than threshold value i.e., 0.5. The AVE value for second order variable is calculated by calculating the means of all its dimensions.

Table 4

Hetero-Trait Mono-Trait Ratio

	AIA	AIU	AIE	AIETH	AIL	ESE	EI
AIA							
AIU	0.161						
AIE	0.191	0.703					
AIETH	0.187	0.616	0.142				
AIL	0.063	0.027	0.032	0.041			
ESE	0.168	0.811	0.221	0.156	0.031		
EI	0.512	0.095	0.103	0.122	0.070	0.216	

Table 5

R- Square Values

Construct	R-square	R-square adjusted
AI-Awareness	0.947	0.947
AI-Use	0.607	0.604
AI-Evaluation	0.909	0.909
AI-Ethics	0.005	0
AI Literacy	0.914	0.913
Entrepreneurial Self Efficacy	0.781	0.78
E-entrepreneurial Intention	0.02	0.016

Collinearity Statistics

In order to get unbiased regression results, its important to check the collinearity statistics which can be checked with help of Variance Inflation Factor (VIF). For a reflective model, latent variable scores of predictor constructs are used to check the VIF. Hair et al. (2019) Suggest the ideal VIF values to be around 3 or lower. Although the problematic range starts from 5 and above but issues may also occur from 3 to 5. The VIF result of the current study are below threshold of 3, so hence it can be concluded that there is no Multicollinearity issues in the construct of the study. VIF values for predictor constructs are presented in Table 6 below.

Table No 6

VIF Results

Construct	VIF
AIA1	1.839
AIA2	1.775
AIA3	1.538
AIU1	5.752
AIU2	2.713
AIU3	2.290
AIE1	2.349
AIE2	5.121

AIE3	1.590
AIETI1	3.388
AIETI2	2.594
AIETI3	1.227
AILIT1	2.002
AILIT2	2.732
AILIT3	2.842
AILIT4	1.482
ESE1	1.707
ESE2	2.045
ESE3	3.705
ESE4	2.897
ESE5	2.696
EI1	2.265
EI2	2.080
EI3	1.929
EI4	2.669
EI5	1.520

Hypothesis Testing

First hypothesis H_1 demonstrated that AI literacy mediates between AI awareness and Entrepreneurial Self Efficacy. The structural model assessment (indirect effect) shown in table no: 7. Smart PLS analysis was conducted, mediation hypothesis determined significant relationship with ($\beta = 0.947$, $T = 41.705$) and $p = 0.000$. Bootstrapping procedure had been conducted for the mediation model and supported H_1 .

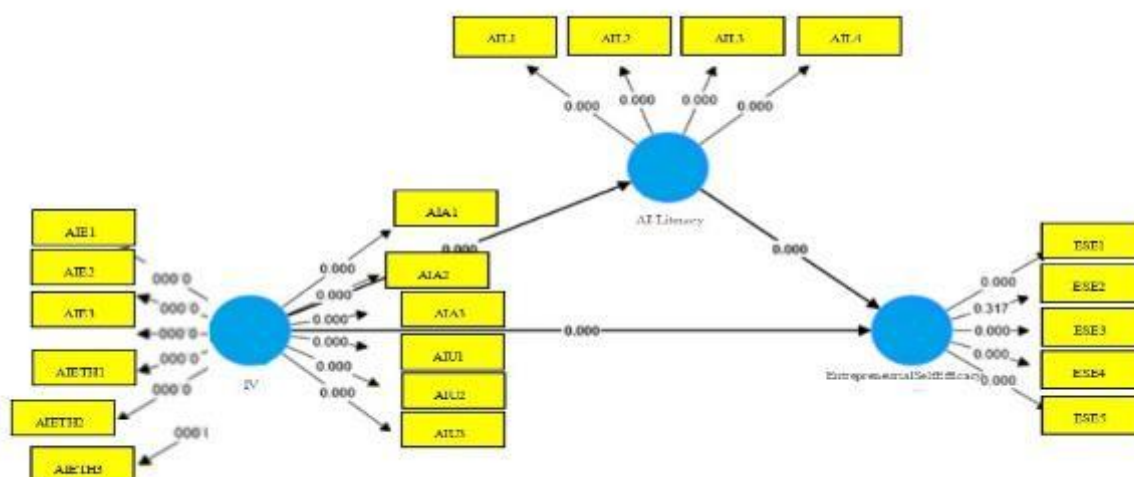


Figure No 2: Artificial Intelligence Literacy Mediates between Entrepreneurial Self Efficacy and Artificial Intelligence -Awareness, Artificial Intelligence -Use, Artificial Intelligence -Evaluation and Artificial Intelligence -Ethics

Second hypothesis H_2 demonstrated that AI literacy mediates between Artificial Intelligence use and Entrepreneurial Self Efficacy. The structural model assessment (indirect effect) shown in table no: 7. Smart PLS analysis was conducted, mediation hypothesis determined significant relationship with ($\beta = 0.607$, $T = 14.799$) and $p = 0.000$. Bootstrapping procedure had been conducted for the mediation model and supported H_2 .

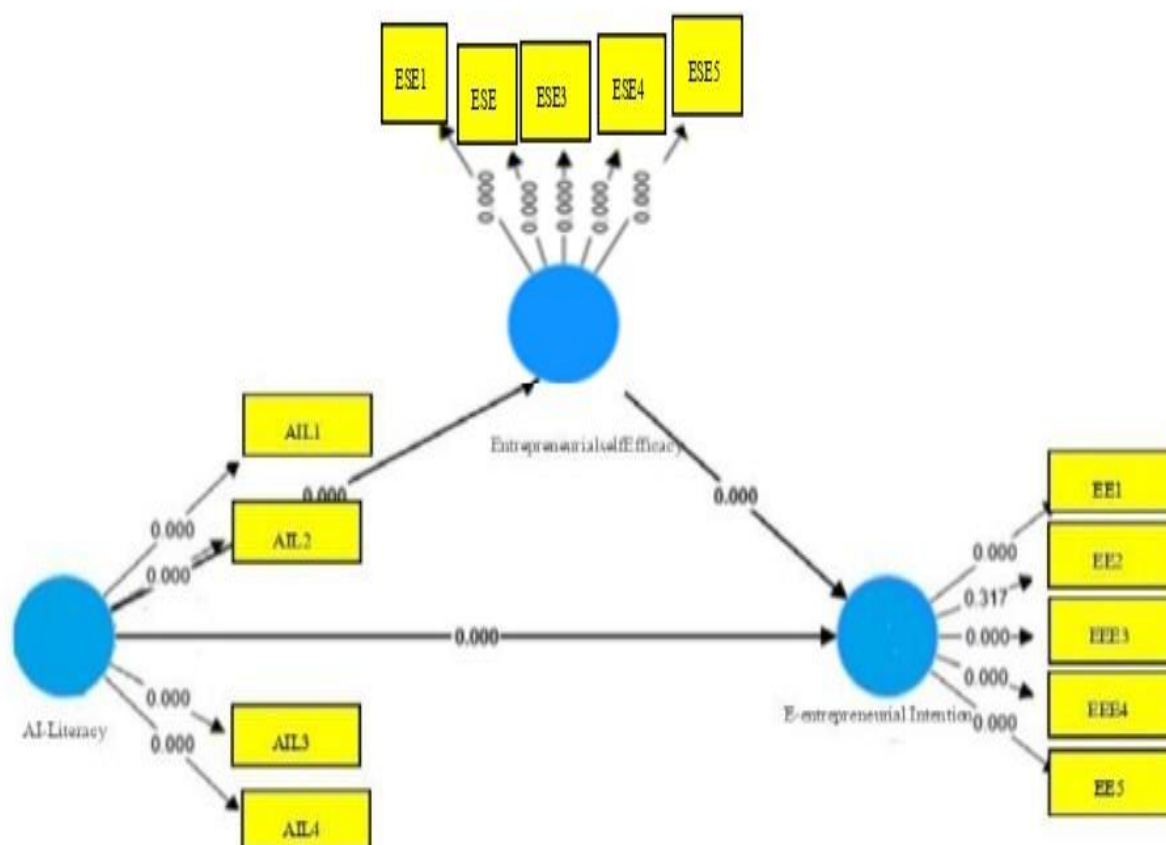


Figure No 3: Entrepreneurial Self Efficacy Mediates between Artificial Intelligence -Literacy and Electronic-entrepreneurial Intention

Third hypothesis H_3 demonstrated that AI literacy mediates between AI evaluation and Entrepreneurial Self Efficacy. The structural model assessment (indirect effect) shown in table no: 7. Smart PLS analysis was conducted, mediation hypothesis determined significant relationship with ($\beta = 0.541$, $T = 2.499$) and $p = 0.012$. Bootstrapping procedure had been conducted for the mediation model and supported H_3 .

Fourth hypothesis H_4 demonstrated that AI literacy mediates between AI ethics and Entrepreneurial Self Efficacy. The structural model assessment (indirect effect) shown in table no: 7. Smart PLS analysis was conducted, mediation hypothesis determined significant relationship with ($\beta = 0.005$, $T = 13.551$) and $p = 0.000$. Bootstrapping procedure had been conducted for the mediation model and supported H_4 .

Table No 7

Hypothesis Summarized Results

S. No	Hypothesis	Path Assessment	Standard Deviation	T value	P values	Results
H.1	AI literacy mediates between AI awareness and Entrepreneurial Self Efficacy	AIA-> AI -> ESE	0.017	41.705	0.000	Accepted
H.2	AI literacy mediates between AI use and Entrepreneurial Self Efficacy.	AIU-> AI -> ESE	0.039	14.799	0.000	Accepted
H.3	AI literacy mediates between AI evaluation and Entrepreneurial Self Efficacy.	AIE-> AI -> ESE	0.049	2.499	0.012	Accepted
H.4	AI literacy mediates between AI ethics and Entrepreneurial Self Efficacy	AIE-> AI -> ESE	0.044	13.551	0.000	Accepted
H.5	Entrepreneurial Self Efficacy mediates between AI Literacy and E-entrepreneurial Intention	AI -> ESE -> E_EI	0.064	6.333	0.000	Accepted

Fifth hypothesis H₅ demonstrated that Entrepreneurial Self Efficacy mediates between Artificial Intelligence Literacy and Electronic-entrepreneurial Intention. The structural model assessment (direct effect) shown in table no: 7. Smart PLS analysis was conducted, mediation hypothesis determined significant relationship with ($\beta = 0.914$, $T = 6.333$) and $p = 0.000$. Bootstrapping procedure had been conducted for the mediation model and supported H₅.

Conclusion

Results of the study indicate that four independent variables AI-Awareness, AI-Use, AI-Evaluation and AI-Ethics make significant contribution towards AI Literacy. The recent study shows that AI Literacy is important element for the usage of Artificial intelligence. The study results also indicate that Entrepreneurial Self Efficacy positively mediates between Artificial Intelligence Literacy and Electronic-entrepreneurial Intention. For Electronic entrepreneurial Intention the Artificial Intelligence Literacy is very useful. Once need to have good AI Literacy for stating a new electronic entrepreneurial setup. Hence this has been concluded that AI literacy is essential element for stating a new electronic venture in now a days world.

Future Direction

Study has used a small sample of 200, while further studies can be done over large sample to shows more wide results. Also future study can take a comparative sample to measure the AI Literacy role in developed and developing economy. Longitudinal effect can also be measured in future studies. Study can also check the role of other variables effect like, locus of control as moderator in future researches.

Limitations of the Study

One of the main limitation for this research was time, as to complete the degree it was supposed to be done at earliest. Data collection and overcoming respondent errors was another limitation of the study. It was intended in start to collect data from developed economy as well, but due to no accessibility to developed economy respondents, they were dropped from the study and the analysis was made on developing economy data only.

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