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Perception of Generative AI Use for Japanese Speaking among Indonesian Workers in Japan

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Abstract

This study aims to determine the perception of Indonesian workers in Japan towards the use of generative Artificial Intelligence (AI) as a medium for practicing speaking Japanese. The background of this research is from the development of Society 5.0 technology in Japan which emphasizes the integration between the physical and digital worlds, including in the field of language learning. Generative AI, such as ChatGPT and similar applications, offers great potential in supporting interactive, adaptive, and contextual speaking exercises without time or place limitations. This study used a survey method with the distribution of online questionnaires to a number of Indonesian workers in various sectors in Japan. The data obtained were analyzed descriptively quantitatively to identify the level of acceptance, perceived benefits, and obstacles faced in the use of AI as a learning medium. The results of the study based on PLS-SEM showed that knowledge and use of generative AI had the most dominant effect on the use of generative AI ($\beta = 0.698$; $t = 10.234$), difficulty speaking Japanese ($\beta = 0.329$; $t = 3.652$), confidence, exposure to speech and demographics was not significant, and the predictive ability of the model was moderately strong ($R^2 = 0.635$). The use of generative AI as a medium for Japanese speaking practice in Indonesian workers in Japan is determined by AI literacy and the level of difficulty in speaking, not psychological or demographic factors. This research is useful for identifying the advantages and disadvantages of using AI so that it helps improve the Japanese language communication skills of Indonesian workers in the workplace.

Keywords: generative AI; speaking; Japanese language; Indonesian migrant workers in Japan

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1. Introduction

Japan introduced Society 5.0 as a future concept by combining the physical and digital worlds to improve the quality of life in the use of smart technology. One of the technologies

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that is the main concept in today's modern era is AI (Artificial Intelligence) which helps in various sectors, including education and language learning. In the context of language learning, AI provides a more interactive learning experience. The development of language learning upgrades from AI is the emergence of generative AI as a branch of AI, which is able to create new data or content such as text, images, videos, sounds by imitating what is learned. Generative AI advances the field of speech technology to generate and understand spoken language at a level of realism never achieved before. Research related to generative AI in language learning is increasing from 2020 to 2025. Much of the research focus is related to Generative Adversarial Networks (GANs) and Large Language Models (LLMs) which are the basis of various applications ranging from voice synthesis to multilingual voice assistants.

Japanese language learning in Indonesia has become a popular foreign language course with many Japanese language institutions in Indonesia (Karnawati et al., 2023). Japanese is a high-context language characterized by complex honorific systems (*keigo*), indirect communication patterns, and culturally embedded pragmatic norms. Mastery of spoken Japanese requires not only grammatical competence but also sociolinguistic awareness and contextual sensitivity. For migrant workers, especially those employed in service, manufacturing, and caregiving sectors, effective spoken communication is essential for workplace integration and professional performance. Wali (2022) provides a comprehensive review of the new and emerging GAN (Generative Adversarial Network) based frameworks and algorithms that have revolutionized speech processing (Wali, 2022). The survey is the first work that focuses on reviewing the recent progress in diffusion-based speech synthesis (Zhang et al., 2023). It conducted experiments on speech resynthesis from noisy speech using the GSLM model trained with speech without noise (Park et al., 2023). Based on some of these studies, generative AI's focus on speaking to audio and the limitations of realistically conditions, which suggests generative AI research still leaves a wide range of research space. In fact, the generative potential of AI in improving speaking skills is very much because it provides direct feedback, creates a simulation of natural conversations and reduces errors in speech. In the case of Automatic Speech Recognition (ASR), although much of the work on multimodal ASR has reported no significant improvement in Word Error Rate (WER). This phenomenon has attracted the attention of Japanese language learners, especially Indonesian workers in Japan, to the use of generative AI (Erdem et al., 2022). Speaking skills are one of the language skills and are the main means of communication between humans. Speaking is not just the process of pronouncing words, but involves phonological, choosing the right vocabulary and drafting sentence structures that are appropriate to the topic of speaking. Speaking skills are essentially skills in reproducing the flow of the articulation sound system to convey wishes, needs, feelings, and desires to others. Speaking skills are an indicator of communicative ability in learning Japanese (Aneros & Dewi Judiasri, 2021). Verbal communication through speaking activities has several purposes, including to convince or influence others through persuasive delivery, as well as to entertain and create a pleasant atmosphere through reactive interactions (Suseno et al., n.d.).

There are internal and external factors that affect speaking skills, internal factors such as age and gender, while external factors are experience, anxiety, and living conditions. That speaking skills, while influenced by some individual factors like age, living conditions, and experience, should be influenced by the motives to study a language. Affective barriers, such as anxiety and low self-esteem, further complicate the learning process (Tran et al, 2023). Motivation is the main thing that encourages active and confident use of the Japanese language,

because there is a strong desire to interact with native speakers, thus lowering the level of anxiety in Japanese (Tadaaki, 2022; (Lustiyantie et al., 2025). In Japanese language learning, internal and external factors continuously form an important role in successful speaking. On the assessment of eloquence, Speaking assessment made up of a picture description, a role play, and a past narration that was graded. The components of the assessment include fluency, accuracy, pronunciation and interactional competence (Peterson, 2021). This assessment aims to assess learners applying language knowledge in speaking skills. Speaking skills require a learning environment that supports the practice of speaking. Conventional learning, second language speaking exercises have limitations on time, the opportunity to meet native speakers and the number of participants in the class. However, with the use of generative AI based on Natural Language Processing (NLP), learners can practice speaking independently and get an assessment from the feedback. Learning and assessment of speaking skills is designed as a form of meaningful interaction, not as a reproduction of language structure.

Indonesian workers in Japan who have communication anxiety in communicating directly with Japanese people. Different cultures may press the communication problems while the business is about serving people requires good communication that fits the communication culture of working in Japan (Athallah & Dharma, 2024), (Ardani & Basalamah, 2021). Experience in teaching prospective Indonesian workers who go to Japan, many use standard learning media sources. Learning using AI applications is carried out at the training site. Indonesian workers in Japan were selected as the focus of this study due to their significant need to use Japanese in daily workplace communication while often facing limited access to formal language learning opportunities due to demanding work schedules. As a result, their speaking ability is often stagnant or declining, while there is an increase in communication needs in the workplace (Karnawati et al., 2025). Another problem is that Indonesian workers in Japan need independent learning media because while in Japan they are not trained to learn Japanese. Thus, there is a gap between previous research that focused more on communication barriers for Indonesian workers in Japan and the use of conventional learning media, and the reality on the ground that shows generative AI emerging as an alternative independent learning media in improving Japanese language skills, especially speaking. Based on this, the latest technology in the context of cross-cultural learning and intelligent technology-based, in this case, is generative AI. The phenomenon of the use of generative AI as a medium for speaking training for Indonesian workers in Japan illustrates the shift in Japanese language learning to be more independent and technology-based, and touches on the psychological dimension in reducing multicultural speaking anxiety. Therefore, this research is important to fill this gap and provide an empirical basis for the development of AI-based Japanese language learning that is more relevant to the needs of Indonesian migrant workers.

AI or artificial intelligence that includes computational algorithms that are able to perform tasks based on understanding patterns given by humans. Artificial intellegence is considered an umbrella term, spanning over different computational algorithms capable of performing tasks that typically require human intelligence, such as understanding natural language. AI aims to mimic human cognitive abilities in large-scale data processing that will later make decisions based on machine learning (Banh & Strobel, 2023). Every day, AI evolves from a system with simple rules to more complex as the data provided in its use becomes a database of AI development. The evolution of AI is Generative AI as a transformative development, a machine that creates text, images, audio from learning patterns of large data sets. Generative AI can produce something more realistic like a human creation. Generative AI finds its utility across various modalities, including the generation of text, image, video, code,

sound, and other produced content then create reproductive results and innovations help make human work easier, such as molecules or 3D renderings and generative AI systems learn data massively (Banh & Strobel, 2023). Generation lies at the core of human–machine interaction. Examples of generative AI applications that facilitate such interaction include dialogue systems, question answering, machine translation, text summarization, and image captioning. The development of generative AI has major implications in various sectors, such as healthcare, business and education (Erdem et al., 2022). The use of generative AI in education, can be leveraged as an automated speaking tool that has feedback, provides contextual conversation simulations and diverse language usage, provides examples of pronunciation without native speakers. This ability helps humans learn language from intonation, pronunciation to sentence structure without having to learn directly with native speakers. The flexibility of using generative AI that helps learners learn second languages independently and can be accessed anytime and anywhere, especially in improving language skills such as writing and speaking. Generative AI has a rapidly evolving type and form of implementation in technology, including language learning technology. in generative AI applications across various domains is Machine translation, game development, text generation, audio generation, video generation. Each type of generative AI has different functions and goals, but it creates something based on the data learned. In language learning, new experiences use machine translation, game development, create text, audio and video efficiently and quickly (Nuthalapati, 2024).

Conceptually, Generative AI is divided into two namely Task specific GAI and General GAI. Task Specific GAI used on specific tasks, such as Chatbot, google translate and automatic logo design. General AI, which is general, handles different types of tasks and contexts, has command capabilities that focus on complex commands such as ChatGPT, Gemini, and Multimodal AI (Liu et al., 2023). Task-specific GAI can be used to translate words, rewrite sentences or provide automatic language corrections. General GAI can be used in conducting virtual conversations in multilingual and the context of the chosen topic, for example learning formal and informal conversations on ChatGPT in various situations, so that the language learning experience becomes more immersive. The advantages of using generative AI in the adaptation of these machines in the user's learning style. The adaptability of chatbots, particularly in applications involving Natural Language Processing (NLP) and adversarial machine learning, supports innovative teaching methodologies such as the flipped classroom model. The incorporation of NLP and chatbots improves the quality of language skill feedback interactions (Al Naqbi et al., 2024). Each generative AI used can analyze an individual's learning style and adjust the difficulty level of language learning. In generative learning, AI based on audio generation can provide intonation learning, the use of text generation helps in composing more natural sentences, and the use of video generation makes contextual conversation simulations.

The generative benefits of AI in language learning help teachers and learners by assessing learning outcomes with direct feedback. Benefits for both the students and teachers by decreasing burden of teachers in the process of assessment, working like a teaching assistant, helping in personalized learning of the students, playing role as a research assistant, also creating content, helping in translating the language. For teachers, the workload of teachers can be reduced, especially in differences in learners' abilities, so that learners can practice independently (Das & J.V., 2024). AI systems are able to analyze individual learning needs in improving language skills and adjust the learning style of each learner, analyzing the materials and methods that are most appropriate individually. Help learners understand their language skills and improve their linguistic performance on an ongoing basis.Additionally, thse use of

generative AI in the writing of scientific reports can identify more complex linguistic or semantic patterns. Developments with generative AI types that can help scientific writing, can help relevant literature, summarize big data. The limitations of generative AI include several things, especially in the ethics of using AI, especially the authenticity of the work and academic integrity. categorized into ethical concerns, technical challenges, and regulatory and legal issues (Nuthalapati, 2024). The ethics of using AI are studied in the publication rules of scientific journals. Regulation in legal aspects related to the legality and copyright of texts, machine-generated images has become a long debate in policymakers. The protection of personal data is a problem, where AI has evolved from the data we provide and can be accessed in general, including the confidential information data of individuals. Limited accuracy in the bias of the data used, the results provided are not completely correct and only explore external data. The performance of AI depends on the availability of the data provided, if the data provided is limited, the results provided are biased. In addition, cognitive abilities can decline due to dependence on technology and without finding out the truth of the knowledge itself. Generative AI emerged as one of the alternative self-learning media in improving Japanese language skills, especially speaking. Based on that, the state of the art in the context of cross-cultural and intelligent technology-based learning in this case is generative AI. The phenomenon of using generative AI as a medium for speaking training for Indonesian workers in Japan illustrates the shift in Japanese language learning to be more independent and technology-based, as well as touching on the psychological dimension in reducing multicultural speaking anxiety. Based on this, the research seeks to dig deeper related to the benefits and limitations of using generative AI for Indonesian workers in Japan and the perception of Indonesian workers in Japan towards the use of Generative AI as a medium for practicing speaking Japanese.

2. Methods

2.1 Types of research

This study adopts a quantitative research design. A survey method was employed as the primary approach to collect quantitative data. In a survey design, researchers collect data to examine current attitudes, beliefs, opinions, or practices of a population (Creswell, 2012). The survey was conducted to measure the perceptions of Indonesian workers in Japan toward the use of generative AI as a medium for practicing Japanese speaking skills. Through this approach, the researchers were able to obtain a systematic and measurable overview of respondents' perceptions regarding the use of new technologies because the researcher's role in the research was both as a researcher and a participant.(Nurfajriyati & Seruni, 2022)

2.2 Subject/Respondent

The subjects of this study were 100 Indonesian migrant workers currently employed in Japan. The respondents worked in various sectors, including manufacturing, caregiving (kaigo), hospitality, agriculture, and technical internship programs (TITP). These workers entered Japan under visa categories such as Technical Intern Training or Specified Skilled Worker (SSW). Most participants had resided in Japan between one to five years and were actively engaged in daily workplace communication using Japanese. Respondents were recruited using snowball sampling, a non-probability sampling technique particularly suitable for accessing migrant worker populations that may be difficult to reach through conventional

random sampling methods. Snowball sampling is commonly used in studies involving specific or hard-to-access communities (Al-Awadhi et al., 2025). This approach enabled the researchers to reach participants across different regions and employment sectors in Japan.

2.3 Data collection techniques

Data were collected using an online questionnaire distributed through Google Forms. Participation was voluntary, and only respondents who had experience using generative AI were included in the analysis. Data collection was conducted from October to November 2025. The instrument used in this study was a questionnaire employing a five-point Likert scale ranging from strongly disagree to strongly agree. The first section collected demographic information (gender, occupation type, age, length of stay in Japan, and JLPT level). The second section measured perceptions regarding the use of generative AI for Japanese speaking practice. The research instrument was a self-constructed questionnaire developed based on previous studies on technology acceptance and AI usage in education (Das & J.V., 2024; Banh & Strobel, 2023). The dimensions measured included: (1) Basic AI Knowledge and Use, (2) Japanese Speaking Difficulty, (3) Confidence and Speaking Exposure, and (4) Perception of Generative AI Usage. The items were conceptually adapted from technology acceptance and language anxiety literature and adjusted to the context of Indonesian migrant workers in Japan. Content validity was assessed through expert judgment from two Japanese language education specialists. Reliability and construct validity were evaluated using Cronbach's Alpha, Composite Reliability, and Average Variance Extracted (AVE) within the PLS-SEM framework. Threshold values above 0.70 for reliability and above 0.50 for AVE were considered acceptable for exploratory research.

2.4 Data Analysis Techniques

Data were analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM) with SmartPLS software, a widely used variance based approach for analyzing complex relationships among latent constructs and their indicators (Hair, 2019). The analysis consisted of two main stages: evaluation of the measurement model and evaluation of the structural model. The measurement model assessment included the examination of outer loadings, Cronbach's Alpha, Composite Reliability (CR), Average Variance Extracted (AVE), and discriminant validity using the Fornell Larcker criterion. These indicators were used to ensure the reliability and validity of the constructs before proceeding to the structural model evaluation. The structural model evaluation included the analysis of path coefficients, R-square values, and bootstrapping procedures to test the significance of relationships between constructs. Bootstrapping with 5,000 subsamples was conducted to obtain t-statistics and p-values, providing robust estimates of the significance levels. PLS-SEM was selected due to its suitability for exploratory research models, prediction-oriented analysis, and moderate sample sizes. In addition, this method is flexible in handling complex models with multiple constructs and does not require strict assumptions of data normality. Therefore, it is considered appropriate for this study, which aims to analyze relationships among latent variables in a relatively complex research model.

3. Result and Discussion

3.1 Result

The evaluation of the measurement model begins with the assessment of indicator reliability using the PLS algorithm. The structure of the measurement model is illustrated in Figure 1, which presents the relationship between indicators and latent constructs related to the perception of Indonesian workers in Japan in using Generative AI as a medium for Japanese speaking training. The figure shows that most constructs are well represented by their indicators, except for the demographic construct, which exhibits instability. In the Japanese Language Speaking Difficulty (KES) construct, the outer loadings range from 0.786 to 0.929, indicating that all indicators consistently capture the level of difficulty experienced by workers. The highest values are observed in KES1 (0.929) and KES2 (0.917), suggesting that specific aspects of language difficulty are highly dominant in shaping this construct. Similarly, the Basic AI Knowledge & Use (AI) construct demonstrates strong and stable loadings ranging from 0.577 to 0.925, with AI2 (0.925) and AI3 (0.920) reflecting a high level of familiarity and experience with AI technologies among respondents. The Confidence & Speaking Exposure (KP) construct shows more variation, with loadings between 0.522 and 0.992. The KP1 indicator (0.992) is particularly dominant, while KP2 (0.522) remains acceptable for exploratory analysis despite its relatively lower contribution. The construct of Using Generative AI as a Japanese Speaking Training Media (GAI) presents a wider range of values, from 0.385 to 0.887. Indicators such as GAI2 (0.875), GAI5 (0.887), and GAI7 (0.825) indicate strong positive perceptions, whereas GAI14 (0.385) and GAI19 (0.489) suggest weaker or less developed perceptions among respondents. In contrast, the Demographic construct shows unstable and even negative loadings, including Gender (–0.351) and Working Length (–0.571), indicating that these variables do not form a valid reflective construct. Therefore, demographic variables are more appropriately treated as control variables rather than latent constructs. More details can be seen in Figure 1.

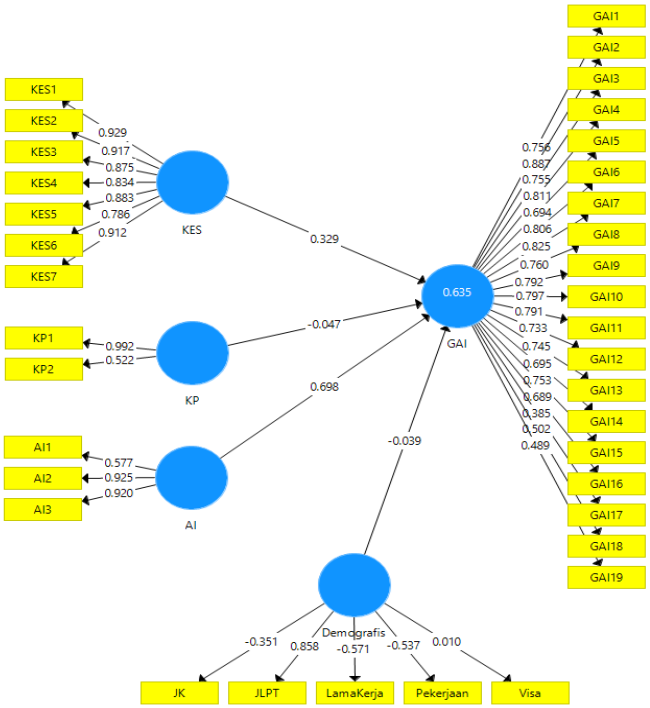

Figure 1. Measurement model pls algorithm estimation result

Further evaluation using outer loadings summarized in Table 1 confirms that the AI, GAI, KES, and KP constructs exhibit acceptable to strong indicator reliability, while the demographic construct does not meet the criteria for reflective measurement.

The reliability and convergent validity results presented in Table 2 indicate that all main constructs (AI, GAI, KES, and KP) meet the required thresholds for Cronbach's Alpha, Composite Reliability, and Average Variance Extracted. The KES construct shows the strongest reliability (CR = 0.959; AVE = 0.771), followed by the GAI construct (CR = 0.955; AVE = 0.533), indicating high internal consistency and adequate convergent validity. In contrast, the Demographic construct shows very low reliability (CR = 0.090; AVE = 0.295) and a negative Cronbach's Alpha, confirming that it is not suitable as a reflective construct.

Table 1. Outer loadings construct research

Construct	Indicator	Loading
Knowledge & Use of Basic AI (AI)	AI1	0.577
	FW2	0.925
	FW3	0.920
The Use of Generative AI as a Japanese Speaking Training Media (GAI)	GAI1	0.756
	GAI2	0.887
	GAI3	0.755
	GAI4	0.811
	GAI5	0.694
	GAI6	0.806
	GAI7	0.825
	GAI8	0.760
	GAI9	0.792
	GAI10	0.797
	GAI11	0.791
	GAI12	0.733
	GAI13	0.745
	GAI14	0.695
	GAI15	0.753
	GAI16	0.689
	GAI17	0.385
	GAI18	0.502
	GAI19	0.489
Difficulty Speaking Japanese (KES)	KES1	0.929
	KES2	0.917
	KES3	0.875
	KES4	0.834
	KES5	0.883
	KES6	0.786
	KES7	0.912
Confidence & Speaking Display (KP)	KP1	0.992
	KP2	0.522
Demographics	JK	–0.351
	JLPT	0.858
	Length of Work	–0.571
	Jobs	–0.537
	Visa	0.010

Discriminant validity was assessed using the Fornell–Larcker criterion, as shown in Table 3. The square root of AVE for each main construct exceeds its correlation with other constructs, indicating satisfactory discriminant validity for AI, GAI, KES, and KP. However, the demographic construct does not fully meet this criterion, particularly in relation to KES, further confirming its weak construct validity.

The structural model assessment begins with the evaluation of the coefficient of determination. Table 4 shows that the endogenous construct, Use of Generative AI as a Japanese Speaking Training Media (GAI), has an R-Square value of 0.635 and an adjusted value of 0.622. This indicates that 63.5% of the variance in GAI can be explained by the exogenous constructs, namely Basic AI Knowledge & Use (AI), Japanese Language Speaking Difficulty (KES), and Confidence & Speaking Exposure (KP). This level of explanatory power can be categorized as moderate to strong, indicating that the model has good predictive capability.

The results of hypothesis testing using bootstrapping are presented in Table 5 and further illustrated in Figure 2. The findings show that the Basic AI Knowledge & Use (AI) construct has the strongest and most significant influence on GAI, with a path coefficient of 0.698, a t-statistic of 10.234, and a p-value below 0.001. This indicates that higher levels of AI literacy and experience significantly increase the likelihood of using Generative AI as a speaking training tool.

Table 2. Construct reliability and convergent validity

Construct	**Cronbach's Alpha**	**rho_A**	**Composite Reliability**	**AVE**
Knowledge & Use of Basic AI (AI)	0.754	0.854	0.859	0.678
Demographics	–0.571	0.366	0.090	0.295
The Use of Generative AI as a Japanese Speaking Training Media (GAI)	0.949	0.957	0.955	0.533
Difficulty Speaking Japanese (KES)	0.950	0.954	0.959	0.771
Confidence & Speaking Display (KP)	0.579	2.452	0.755	0.628

Table 3. Discriminant validity based on the fornell–larcker criteria

Construct	**AI**	**Demographics**	**GAI**	**WHO**	**KP**
AI	0.824				
Demographics	0.297	0.543			
GAI	0.735	0.389	0.730		
WHO	0.194	0.669	0.441	0.878	
KP	0.341	–0.018	0.171	–0.064	0.792

Japanese Language Speaking Difficulty (KES) also has a positive and significant effect on GAI, with a path coefficient of 0.329 and a t-statistic of 3.652. This suggests that workers who experience greater difficulty in speaking Japanese are more likely to adopt Generative AI as an alternative learning solution. In contrast, Confidence & Speaking Exposure (KP) does not show a significant effect, with a t-statistic of 0.874 and a p-value of 0.383, indicating that confidence alone does not directly influence the use of Generative AI. Similarly, the Demographic construct does not have a significant impact on GAI, as reflected by a t-statistic of 0.420 and a p-value of 0.675. This indicates that factors such as gender, job type, and length of employment are not key determinants of Generative AI usage in this context.

Table 4. R-square value of endogenous construct

Construct	R Square	R Square Adjusted
The Use of Generative AI as a Japanese Speaking Training Media (GAI)	0.635	0.622

Table 5. Bootstrapping results for inter-construct relationships

Relation	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics	P Values
TO JHA →	0.698	0.680	0.068	10.234	0.000
GAI → Demographics	-0.039	-0.006	0.092	0.420	0.675
WHO → GAI	0.329	0.302	0.090	3.652	0.000
KP → GAI	-0.047	-0.019	0.053	0.874	0.383

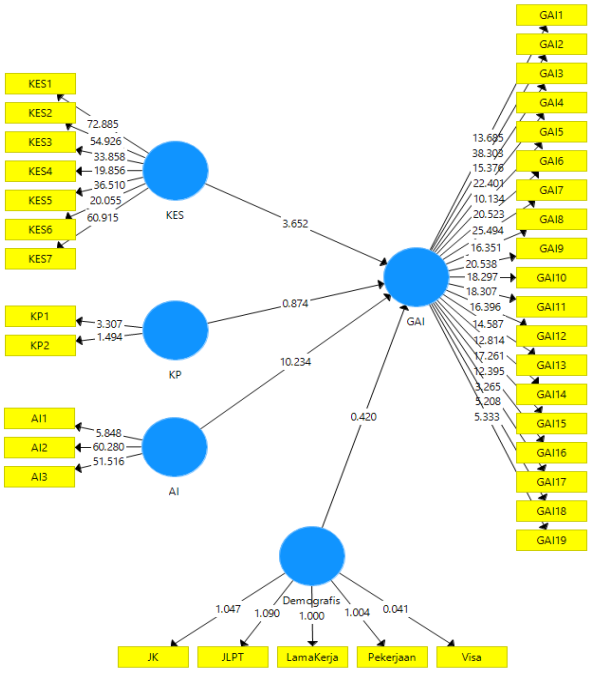

Figure 2. Structural model of bootstrapping results in pls-sem

3.2 Discussion

The findings of this study provide important insights into the determinants of Generative AI adoption among Indonesian workers in Japan. The significant effect of Basic AI Knowledge & Use highlights the crucial role of technological literacy in shaping the adoption of AI-based learning tools. Workers who possess higher levels of understanding and experience with AI are more capable of utilizing Generative AI effectively, indicating that digital competence is a key enabling factor. In addition, Japanese Language Speaking Difficulty emerges as a significant driver of AI adoption. This suggests that perceived difficulty acts as a motivating factor, encouraging workers to seek alternative learning solutions. Generative AI functions as a practical tool to address communication barriers and enhance speaking ability, particularly in challenging linguistic environments. On the other hand, Confidence & Speaking Exposure does not significantly influence AI usage, indicating that psychological readiness alone is insufficient to drive adoption without adequate technological capability. This finding implies that practical skills and technological familiarity are more important than internal confidence in determining AI usage behavior. Furthermore, demographic factors do not show a significant effect, suggesting that the adoption of Generative AI is not determined by personal characteristics but rather by functional needs and technological readiness. Overall, the results emphasize that the adoption of Generative AI is primarily driven by a combination of necessity, represented by language difficulty, and capability, represented by AI literacy.

4. Conclusions

Research on the perception of Indonesian workers in Japan on the use of generative AI as a Japanese speaking training media indicates that the PLS-SEM model exhibits strong measurement quality and predictive power. The constructs of Basic AI Knowledge & Use (AI), Japanese Language Speaking Difficulty (KES), Speaking Confidence & Exposure (KP), and Generative AI Use (GAI) meet the required reliability and convergent validity criteria, while the demographic construct is not suitable as a reflective construct and is better treated as a control variable. The results of the structural model show that Knowledge & Use of Basic AI (AI) is the most dominant factor influencing the use of Generative AI as a medium of speaking exercise. The path coefficient of 0.698 with a t-statistic value of 10.234 confirms that the higher the technological literacy of workers, the greater their tendency to utilize Generative AI. The Japanese Language Speaking Difficulty (KES) construct also had a significant influence with a coefficient of 0.329 ($t = 3.652$), indicating that workers who have higher difficulty in speaking Japanese are more motivated to use AI as a solution to improve communication skills.

In contrast, Confidence & Speaking Exposure (KP) and Demographics did not show a significant influence on the use of Generative AI. This shows that psychological factors such as self-confidence, as well as individual factors such as gender, JLPT, length of employment, or type of work, are not the main determinants of the adoption of this technology. Thus, the motivation for using Generative AI is more triggered by practical needs (speech difficulties) and technical abilities (AI literacy), rather than by personal characteristics. An R-square value of 0.635 indicates that the model has moderate-strong predictive capabilities, where more than half of the variation in the use of Generative AI can be explained by AI, KES, and KP

constructs. The consistency of discriminant validity in most constructs also strengthens the integrity of the research model. Overall, this study concludes that the acceptance and use of Generative AI as a medium for Japanese speaking practice among Indonesian workers is mainly determined by two main factors: technological literacy and the level of communication difficulty. These findings underscore the importance of improving basic technological capabilities as well as AI-based learning support to help migrant workers develop language competencies more effectively and sustainably.

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