

Digital Innovation in Arabic Language Learning Models for Islamic Higher Education

Imelda Wahyuni

Institut Agama Islam Negeri Kendari

imelda@iainkendari.ac.id

Zulaeha

Institut Agama Islam Negeri Kendari

zulaeha@yahoo.com

Budiarti

Universitas Islam Negeri Alauddin Makassar

budiartirahman@uin-alauddin.ac.id

LM Akramullah Nasiru

Institut Agama Islam Negeri Kendari

akramvakatobi@gmail.com

Abstract:

This study aims to examine the innovation of digital-based Arabic learning models, particularly regarding Human Resource (HR) innovations and the utilization of digital facilities at three Islamic Higher Education (Perguruan Tinggi Keagamaan Islam/PTKI) Institutions in Southeast Sulawesi. This qualitative research employs a phenomenological approach, with data collected from primary and secondary sources through observation, interviews, Focus Group Discussions (FGD), and document studies. The data was analyzed using categorization, description, and synthesis techniques, with data validity tested through triangulation. The findings of this article indicate that the State Islamic Institute (IAIN) Kendari, the Islamic College (STAI) YPIQ Baubau, and the Islamic Institute (LAI) Al-Manaddah Warahmah Kolaka have implemented innovations in digital-based Arabic learning models. The creativity of human resources (lecturers, students, and administrative staff) shows different adaptation styles in utilizing digital facilities. These innovations have facilitated Arabic language learning but have not been fully supported by the digital competence of human resources at these three institutions. In terms of digital facilities meeting standard requirements, the three Islamic Higher Education Institutions exhibit varying levels of innovation in digital-based Arabic learning models, especially in operational digital formats, HR competence readiness, and availability of facilities. The digital-based Arabic learning model innovations at these institutions offer advantages, compatibility, and religious complexity. These innovations are implemented with a commitment to enhancing HR creativity and providing representative digital facilities based on needs.

Keywords: *Innovation, learning model, digital-based Arabic learning, and Islamic higher education.*

INTRODUCTION

The implementation of education in Islamic higher education institutions has undergone drastic changes following the Covid-19 pandemic, with teaching having to be conducted online and revolutionary changes applied to all aspects (Putra et al., 2022: 16). This transformation affected all learning activities in higher education, which serves as a

representation of a platform for developing knowledge, insight, and skills for the community. Learning was conducted based on the characteristics of teachers and learners, method selection, media usage, and learning management abilities (Promadi et al., 2022: 44). These educational institutions are spread across various regions of Indonesia, including in Muslim minority areas (Wekke & Astuti, 2017: 34) (Wekke, 2014: 39). The existence of Islamic higher education institutions collaborates with secondary education institutions, such as pesantren (Islamic boarding schools), which serve as primary and popular institutions with distinct models of character-based education (Syafe'i, 2017: 63). A significant number of pesantren alumni continue their studies at Islamic higher education institutions.

Efforts to improve quality are carried out through curriculum implementation and innovation in learning models. Arabic language learning can optimally achieve its educational goals, even though supporting facilities remain inadequate, particularly in Muslim minority areas (Wekke, 2015: 49). This study focuses on digital-based Arabic language learning models in Islamic higher education institutions. These institutions have adapted to the challenges of dynamism and modernization. Modernization and innovation are reflected in the form of educational management, the selection of learning models, and the scope of learning materials. Specifically, Arabic language learning is linked to the existence of Islamic teachings, which are written using the Hijaiyyah script and are closely associated with the Arabic language (Wahyuni, 2017: 82). Digital-based learning has been implemented in almost all courses, including Arabic language courses (Putra et al., 2022: 18). Engaging learning has occurred due to the influence of the industrial revolution, which has impacted learning styles in the education management system (Khomsah & Imron, 2020). The transition period has passed, and the world is now moving from the fourth industrial revolution towards the fifth (Prasetyo & Sutopo, 2018). Disruptive innovation in education has reduced the role of lecturers in terms of quality and quantity due to the ease of access to technology and digital information, allowing students to learn more independently, effectively, and efficiently.

Previous studies have discussed various language learning models (Makrifah, 2020) and the suitability of methods and media, including: cooperative and contextual learning models (Roundtable) (Gentala & Dasar, 2020), which are considered effective for developing writing skills; e-learning models, student-centered learning, and computer-based learning (Ritonga et al., 2016); the Directed Reading Thinking Activity (Murda & Purwanti, 2017) (Rayanto, 2018); distance learning models, stimulation models, and internet-based learning models (Hidayah & Kusumaningrum, 2021) (Putri & Billah, 2019). Language learning models specifically focus on selecting approaches that enhance communicative skills, both oral and written. Choosing an appropriate language learning model is part of innovation in teaching, with educators introducing new approaches as a form of creativity in preparing and delivering language instruction.

Data shows that Islamic higher education institutions in Southeast Sulawesi are located in several regions, including the Islamic Institute (IAI) Al-Mawaddah Warahmah in Kolaka Regency, the Islamic College (STAI) YPIQ in Baubau City, and the State Islamic Institute (IAIN) in Kendari City. These institutions meet the quality and quantity standards required for higher education. However, the quality they demonstrate still requires improvement in synergy with the development of the digital era, necessitating the ability to adapt to the acceleration of actions and responsive attitudes. Technological innovations in Arabic language learning are a positive and creative response that must be embraced by educators in Islamic higher education institutions in Southeast Sulawesi to ensure the continued advancement of education in the region. This article reveals various forms of

digital-based Arabic language learning models in different contexts at Islamic higher education institutions in Southeast Sulawesi.

This research is descriptive-qualitative with a phenomenological and exploratory approach. The qualitative research seeks to uncover facts and theoretical synergy relevant to this study, describing the innovation in Arabic language learning models at Islamic higher education institutions in Southeast Sulawesi. Qualitative research emphasizes holistic interpretation (Wiersma, 1976), so the selection of research data sources used purposive sampling techniques based on specific goals related to Arabic language innovation by human resources (lecturers, educational staff, and students) at three higher education institutions in Southeast Sulawesi. Data collection was conducted through interviews, observations, focus group discussions (FGD), and document studies using relevant guidelines. The data obtained was analyzed using categorization, description, and synthesis/conclusion techniques. The researcher ensured the validity of the data through triangulation techniques.

DISCUSSION

Digital-Based Innovation in Arabic Language Learning Models

Innovation can be understood as a form of new ideas, products, or practices that are disseminated and adapted by a particular community (Rogers et al., 2014). Innovation in language learning refers to the evolution of developmental ideas that can lead to new products in the form of learning tools with new formulas. Additionally, innovation in facilities and infrastructure is tailored to the usage methods, media, timing, and the community of users. These innovations align with the progression of the digital era, requiring modern technological competencies. Innovation may take the form of something perceived as new by a particular community, such as new technology, practices, or procedures used in a novel learning situation (Rogers et al., 2008).

According to Rogers' Diffusion of Innovations theory (Rogers et al., 2014), the decision to adopt an innovation can be taken through five stages: First, the knowledge stage. This involves a cognitive process where users become aware of the innovation's existence and seek ways to use it. Once they understand how to use it, they decide to adopt it independently through trial. Second, the persuasion stage. At this point, learners/teachers may weigh the pros and cons and experience doubt influenced by their environment and personality when considering adopting the innovation. Third, the decision stage. In this stage, individuals are faced with a choice and must decide whether to accept or reject the adoption of the innovation, often influenced by personal motives, external factors, and stakeholders. Fourth, the implementation stage. This involves using the innovation, evaluating the outcomes, and accommodating feedback on its usage. Fifth, the confirmation stage. At this point, the adopter reflects on the results of using the innovation and assesses the impact it has generated (Frei-Landau et al., 2022). Innovations must be adaptable and compatible with the social environment that can adopt them (Bandura, 1986) (Pokhrel & Chhetri, 2021).

Learning occurs in a social context through observation, imitation, and modeling (Bandura, 1977) (Bandura, 1986). Consistent with constructivism, every new knowledge is based on previous experience and knowledge (Piaget, 1972). Innovations in education often rely on learning activities. Arabic language learning models are not new issues in higher education. Every institution seeks, designs, and selects the most appropriate models based on its circumstances. Innovation is not limited to the conceptual framework of learning activities but also extends to the formulation of sustainable innovation products

that are easy for users to adapt. The users of innovative products must be matched so that the innovation adoption categories can be maximally classified (Hoi, 2020).

Specifically in Arabic language learning, digital-based learning in higher education is carried out based on several language learning principles: gradation, systematic, continuity, communicative (Chapelle & Jamieson, 1986), contextual (Suhartoyo et al., 2020), practice, and repetition (Silahuddin & Azhari, 2019). Digital-based innovations in Arabic language learning can be identified through digital tools used to achieve the four language skills: listening, speaking, reading, and writing. The forms of digital innovation vary according to the approach used. In the early stages of the digital era, the use of digital media as a delivery tool in learning was considered effective in achieving learning goals (Abdelkader et al., 2015; Aloraini, 2018).

Digital-Based Arabic Language Learning Innovation at Three Islamic Higher Education Institutions (PTKI) in Southeast Sulawesi

One form of innovation at three Islamic Higher Education Institutions (PTKI) in Southeast Sulawesi is the recruitment model for lecturers and student admissions. The selection of Arabic language lecturers must refer to the educational qualifications required for teaching Arabic courses (Hikmawati, 2020). The educational qualifications of Arabic language lecturers at these three PTKIs are master's and doctoral degrees in their respective fields. There are 23 lecturers in total, consisting of 11 female lecturers and 12 male lecturers. IAIN Kendari has 20 lecturers, IAI Al-Mawaddah has two, and STAI-YPIQ Bau-Bau has one lecturer. Ideally, all lecturers contribute to digital-based innovation in Arabic language learning at their respective institutions. However, in reality, there are still limitations among lecturers in demonstrating digital-based innovations in Arabic language learning. This is consistent with the categories of compatibility, trialability, and limitations in adapting innovations by the lecturers.

The reality found at these three PTKIs in Southeast Sulawesi is that millennial or Gen Z students dominate the adaptation process due to their technological capabilities, which creates a gap between younger lecturers and more senior ones in terms of utilizing information technology. Learning can utilize technology to tailor the learning experience to individual needs (Bloom, 1984). The process emphasizes how information is processed by the human brain (Bruner, 1966). Arabic language learning at these three PTKIs has already integrated digital platforms for information dissemination, learning, publication, and administrative staff management. This facilitates access to needed information and allows the use of instructional materials from digital platforms. Ideally, all institutional information should be accessible digitally to more easily showcase the institution's profile and performance to the public. However, in reality, this still varies depending on the availability of digital platforms at each PTKI.

Moreover, learning activities should ideally adapt to the developments of the times. The presence of digital systems can simplify processes, reduce costs, and increase time and energy efficiency through digital-based Arabic language learning innovations. Each institution has an academic journal as a publication platform, but not all of them are accessible digitally via institutional websites. Staff data should be accessible digitally to facilitate data management and access for those who need it. However, in reality, some staff data can only be accessed manually. Below is an overview of digital access innovation at the three PTKIs in Southeast Sulawesi:

Table 1. Digital Innovation Access Links for PTKI Institutions in Southeast Sulawesi

Institution/I nnovation	Information Portal	Learning Platform	Publication Platform	Staff Management
IAI Al-Mawaddah Warahmah	https://www.iaialmawar.ac.id/home/	-	-	-
STAI YPIQ Baubau	https://staiyp iq.ac.id/	-	-	-
IAIN Kendari	https://iaink endari.ac.id/	https://sia.iaink endari.ac.id/dashboa rd https://elearning.iaink endari.ac.id/	https://ejournal iaink endari.ac.id/	https://simpeg.iai nk endari.ac.id/log in

Innovation of Islamic Higher Education Institutions (PTKI) in Southeast Sulawesi: A Case Study of Three Institutions

The innovation of PTKI institutions in Southeast Sulawesi can be illustrated through the profiles of three institutions. *First*, the Institut Agama Islam (IAI) Al-Mawaddah Warahmah Kolaka was founded in 2005 and is currently led by Rector Dr. KH. M. Zakariah, M.A, who is assisted by three vice rectors (Vice Rector I, Vice Rector II, and Vice Rector III). Initially established as Sekolah Tinggi Agama Islam (Higher Education School of Islamic Studies) with institutional decree number: 6012 of 2012 (PD Dikti, 2021), it later transitioned into Institut Agama Islam (IAI) Al-Mawaddah Warahmah (Institutional Decree, October 31, 2017). This institution is located at Jalan Pondok Pesantren No. 10, Kolaka Regency, Southeast Sulawesi Province. The institution offers six undergraduate programs (S1), including Islamic Education, Islamic Education Management, Islamic Family Law, Islamic Banking, Islamic Economics, and Qur'anic Studies and Interpretation. At the postgraduate level, there is one program: Islamic Education.

IAI Al-Mawaddah Warahmah Kolaka has a website, which indicates that the institution has made information about itself accessible to the public via the web platform (<https://www.iaialmawar.ac.id/home/>). Some of the academic information available on the website includes institutional socialization activities, the implementation of community service programs (KKN), and graduation programs. Specifically for Arabic language learning, IAI Al-Mawaddah Warahmah Kolaka has made strides in innovating the available facilities and infrastructure. The number of buildings for Arabic language instruction is proportional to the number of students. There is a multi-story office building (due to limited land for expansion), a library, and a laboratory (which can be utilized for Arabic language learning with limited media, though not digital-based), as well as a canteen.

Classroom learning activities still primarily rely on in-person interaction. However, during the COVID-19 pandemic, the teaching process was conducted online. Despite this, the institution did not provide e-learning services; instead, online learning was conducted using relevant media based on the conditions at the time. The limitations on interaction during the pandemic affected the mechanism of Arabic language instruction, which was largely conducted online using various digital platforms such as Zoom, Google Meet, and WhatsApp. Post-pandemic, learning has returned to in-person (offline) settings, but the institution's e-learning platform remains underutilized. This situation highlights the need for greater digital tool utilization in providing services and instruction, supporting the idea of development through digital-based innovation (Vygotsky, 1978). Although IAI Al-

Mawaddah Warahmah Kolaka has a journal, it has not yet established an Open Journal System (OJS). As for staff data, it is displayed on the organizational structure board in the administrative office, but there is no digital platform available for staff information.

As a PTKI institution in Southeast Sulawesi, IAI Al-Mawaddah Warahmah Kolaka has made some progress in digital-based Arabic language learning innovation, but it has yet to fully implement innovations across all aspects of higher education management, particularly in teaching, publications, and staff data accessibility. In light of Rogers' diffusion of innovations theory, the institution has disseminated some innovations, particularly in institutional information, which can be adopted by the public. However, innovations in learning, publication platforms (journals), and staff management systems have not been widely disseminated or adopted, and have not fully engaged the organization's digital infrastructure. Therefore, it can be concluded that digital-based innovation in Arabic language learning has not yet permeated all areas of educational management.

Second, the Sekolah Tinggi Agama Islam Yayasan Pendidikan Islam Qaimuddin (STAI YPIQ). The Sekolah Tinggi Agama Islam Yayasan Pendidikan Islam Qaimuddin (STAI YPIQ) is one of the higher education institutions located in Bau-bau city, operating since 1993 under the management of the Qaimuddin Islamic Education Foundation, and currently led by Mr. Sahiruddin Udu. Initially, STAI YPIQ managed the Tarbiyah department with the Islamic Religious Education (PAI) program, followed by the establishment of the Dakwah department with the Islamic Guidance and Counseling (BPI) program. STAI YPIQ originated from the Faculty of Tarbiyah at IAIN Alauddin in 1987. This historical background led to the founding and development of STAI YPIQ by IAIN Alauddin alumni and community leaders in Buton. The institution coordinates its higher education operations through the Foundation, and the chairman of STAI is responsible for implementing education based on regulations from the Indonesian Ministry of Religious Affairs.

Digital innovation at the institution is represented by its website, which can be accessed at <https://staiypiq.ac.id/>, providing updated information on STAI YPIQ's progress. The institution benefits from a strategic location in the center of Bau-bau city, making it easily accessible. Although the campus has ample land, the infrastructure is not yet fully optimized. Religious facilities are used for student learning activities during free time. The library remains inadequate in terms of space and resources, lacking the necessary digital tools and media to meet students' reference needs. A laboratory is also unavailable for both Arabic language learning and other academic needs. This lack of learning support infrastructure, including for Arabic instruction, is attributed to limitations in planning and budgeting.

An e-learning application for online learning is still in the preparation phase. However, due to a shortage of expertise and administrative resources, the e-learning program has not been completed and is currently unavailable for online learning. Arabic language instruction is conducted by lecturers using digital tools such as LCD projectors, but the teaching process itself is not yet digitally based. Lecturers still handle attendance, monitoring sheets, and assessments manually, and teaching materials are shared through hard-copy documents, which are distributed manually as well. Arabic language learning has not yet demonstrated innovation in utilizing digital media, particularly in practical or conversational activities. Instead, the focus remains on explaining Arabic grammar, emphasizing students' grammar skills, and using basic classroom media like the whiteboard and marker.

STAI YPIQ does not yet have a publication journal as a platform for academic staff to publish their work, either within or outside the institution. This gap is due to a lack of human resources to manage the journal and unrealized innovations. Academic publications by STAI YPIQ faculty are currently done through external journals, depending on individual lecturers' initiatives and creativity, either to broaden their knowledge or for career development purposes. Employee data is managed through manual records housed in the administration office, with plans for digital data management in the near future. Staff data is confirmed through information stored on computers in the administrative office.

The digital innovation at STAI YPIQ is limited primarily to the information available on its website, which itself remains very basic. In terms of Arabic language learning, no significant digital innovations have been implemented, aside from the use of LCD projectors in classrooms. Similarly, employee data is not yet digitized and cannot be easily accessed, being dependent on manual records and only available during office hours. This condition contrasts with adaptive learning theory, which suggests that technology should be used to align the learning experience with students' needs (Bloom, 1984). Digital-based learning innovation at STAI YPIQ is still underdeveloped. The same applies to publication and staff data management, where no supporting innovations for digital-based Arabic language learning have been evident.

Third, the State Islamic Institute of Kendari (IAIN Kendari), The State Islamic Institute of Kendari (IAIN Kendari) is the only public Islamic university in Southeast Sulawesi. It started as a branch (faculty) of IAIN Alauddin Kendari in 1987, then became the Sultan Qaimuddin State Islamic College (STAIN) in 1997, and finally transitioned into IAIN Kendari in 2014. The facilities and infrastructure at IAIN Kendari are adequate to support the learning process and the operation of higher education programs. IAIN Kendari has made significant digitalization innovations in institutional management through various applications accessible online, with daily updates available on the website: <https://iainkendari.ac.id/>. IAIN Kendari offers 25 study programs across four faculties and a postgraduate program. All institutional management is conducted entirely online.

The Integrated Management Information System (SIMADU), which has evolved into the Employee Information System (SIMPEG), can be accessed by staff at <https://simpeg.iainkendari.ac.id/login>. Another application is the Academic Information System, accessible at <https://sia.iainkendari.ac.id/dashboard> using faculty and student accounts created under the institution's domain. This application includes features for course systems, academic advising (academic supervision, thesis/dissertation advising, teaching practice supervision, and community service supervision), seminar and thesis defense scheduling, and class schedules. Simakar is another system that manages faculty credit scores.

The primary application for learning is the E-learning platform, accessible at <https://elearning.iainkendari.ac.id/> using faculty and student accounts. This platform was developed to facilitate the learning process at IAIN Kendari, particularly for digital Arabic language learning. Its features and menus are tailored to the digital learning needs of IAIN Kendari. The characteristics of E-learning include access to information through electronic media, the use of electronic services, online storage of instructional activities, and the design of learning materials with online information media (Foristek & 2012, n.d.). Instruction is delivered through discussion

features on the E-learning platform. All classroom activities are carried out digitally, including attendance, which is also done through the digital system.

In terms of publication, IAIN Kendari has established 25 academic journals, accessible through the following link: [\[https://ejournal.iainkendari.ac.id/index\]](https://ejournal.iainkendari.ac.id/index)(<https://ejournal.iainkendari.ac.id/index>). All publication platforms are digital, and one of these journals accommodates academic works related to Arabic language teaching.

The management and utilization of technology in digital Arabic language learning at IAIN Kendari demonstrate the institution's efforts to adapt and improve in response to the transformations prompted by the COVID-19 pandemic. These efforts have continued post-pandemic, maintaining the sustainability of digitalization in learning. The dissemination of innovations is comprehensive and effective across all areas (information, learning, publication, and employee management). IAIN Kendari has shown a more substantial level of innovation compared to the other two institutions. The time required for adaptation aligns with the learning period, and the accessibility of all digital applications supports the digital learning management for both the internal and external academic communities of IAIN Kendari.

Readiness to Adapt to Innovative Arabic Language Learning Models in PTKI in Southeast Sulawesi

Readiness to adapt to innovative language learning models can synergize with the ability to adopt these innovations. The capacity of each element within a community to adopt innovation largely depends on their absorption and competency in accepting new ideas, whether newly created or newly used. In the context of Arabic language learning, lecturers and students, as adopters, are typically equipped with basic knowledge of these learning models. Rogers introduces five categories of innovation adopters: innovators, early adopters, early majority, late majority, and laggards (Rogers et al., 2008). However, findings show that the speed of adaptation and adoption is strongly related to the performance of each element in the process of adapting and adopting innovative Arabic language learning models within their respective institutional work units.

Face-to-face Arabic language learning has undergone a transformation into distance learning (PJJ). Open and distance learning leverages internet technology (Moore, M. G., & Kearsley, 1996) (Moore, 1993). Distance learning commenced in the even semester of the 2019/2020 academic year (at the onset of Covid-19) and continues to this day. Collaboration between lecturers and students utilizes digital media as the shift to distance learning (online learning) continues even in the post-pandemic period. This transformation affects the readiness of the academic community in the three PTKI institutions in Southeast Sulawesi. Human resources with adequate facilities and infrastructure are better prepared to implement learning tools, although they are required to align with the development of digitalized learning models, which vary according to the evolution of learning methods. Contemporary language learning is increasingly computer- or electronic media-based. Innovation (Zumrodi & Riyantomo, 2020). Similar findings mention that digital media impacts learning (Hembrough & Jordan, 2020).

Lecturers prepare learning designs (developing Semester Learning Plans / RPS and preparing materials) by adapting more to online guidelines and learning resources through digital access platforms. However, this requires lecturers to maximize their readiness and adaptation to digitalization. The shift to online lectures necessitates changes in lecturers' readiness. There are three categories of lecturer readiness based on their competence in adapting to the transformation of digital-based learning during the online learning phase:

some lecturers are ready and have utilized digital media, some are less ready and have only partially used digital media, and some are not ready and do not use digital media at all.

The RPS document for Arabic language learning at STAI YPIQ is not yet available online due to time constraints in its preparation. Formally, lecturers acknowledge having begun classes in a very basic form due to various limitations. The Arabic language course RPS at IAIN Kendari is explained and shared both orally and in writing as part of the course contract through WhatsApp (Word document) and Google Meet's "screen sharing" feature. These methods were prepared after first familiarizing themselves with the features available on WhatsApp and Google Meet, although lecturers admitted difficulty mastering all of them instantly. These applications have become familiar, as they have been used for several semesters during the Covid-19 pandemic.

Lecturers feel the need to adjust to the availability of digital media that is accessible based on their digital competency. In reality, the electronic media owned by lecturers do not always offer the appropriate features for necessary teaching actions. Moreover, it was confirmed that not all media used are conducive or relevant to the available infrastructure. For instance, poor signal quality can hinder the transmission of documents or explanations through the applications, even affecting the reception of information.

Lecturers demonstrate creativity and managerial skills by utilizing various internet-based applications to assist with lecture activities at the beginning of the semester. Data from the IT workshops attended by lecturers indicate efforts to maximize their capabilities by learning and understanding the use of several media. The institution-developed applications must be utilized; however, they should be evaluated when their use is not widespread and causes problems. Lecturers express that while e-learning is highly beneficial, they feel less prepared compared to other media applications, opting for those that are easier to access and more familiar.

Learning design can be easily prepared by lecturers using tools or assistive media that facilitate the transfer of knowledge. However, not all of this can be accepted and absorbed by the public, especially human resources working in educational environments, including Islamic higher education institutions. Digital-based learning saves time in planning and preparing teaching materials by allowing instructors to access relevant information and knowledge through available online access, requiring only specific keywords to find comprehensive descriptions of the required materials and information (Ritonga et al., 2016).

The readiness of IAIN Kendari students to adapt to Arabic language digital-based learning is supported by sufficient IT knowledge. However, this ability is more dominant in using social media and entertainment content. Thus, the attention given to using digital media for the purpose of Arabic language course learning has not yet shown optimal readiness. Students use digital media with varying levels of preparedness, with a clear dominance of smartphone use. These phones have features, capacities, and specifications corresponding to their individual models. Meanwhile, administrative staff, another element of the academic community, show readiness through their ability to respond to digital services. For instance, during student consultations and requests for schedules, faculty staff share schedule links through academic data banks stored on Google Drive.

Digital-based learning in the era of disruption has had an impact on human life, especially in achieving learning objectives. Students can easily find the studies they need by simply using their creativity to search for information in online data repositories. The effort required is reduced as much of the work is aided by electronic tools operated by machines (Baso et al., 2016). Tasks that humans should perform can now be completed by these machines. However, it is essential to note that education in this digital era aims to create

professional human resources with the advantages and competitiveness to excel. The implementation of education must be in synergy with the concept and goals of developing human resources competent in language, particularly the four skills (Bahri & Karmila, 2017).

Therefore, there are still educational institutions facing challenges in implementing digital-based Arabic language learning. This is due to several factors: inadequate supporting facilities to facilitate the implementation, the human resources involved being less responsive to the acceleration of digital technology and information development, an environment relatively influenced by traditional practices, and the alignment of the learning design with students' needs. For example, if students are more familiar with Instagram, then it should be used as a medium, since Instagram can enhance language skills (Aloraini, 2018). Based on the data presented, it can be understood that the readiness and adaptation of each element of the academic community largely depend on the objective technological capabilities, which focus on the proficiency to carry out tasks and functions by utilizing digital features on applications programmed by higher education institutions in Southeast Sulawesi. In practice, it is evident that each element adapts according to the scope of innovation, and the attitude demonstrated falls into the category of early adopters, with lecturers acting as opinion leaders who have the responsibility and important role of socializing and utilizing the Arabic language learning innovation. Subsequently, students will become early majority adopters once lecturers have adapted to the innovation.

Various Innovations in Digital-Based Arabic Language Learning Models at PTKI in Southeast Sulawesi

Each educational institution strives to develop and introduce innovations in learning, including Arabic language learning. Various innovative learning models emerge from different teaching practices. Innovators are those with the capability to introduce new ideas and methods related to their respective tasks. Lecturers have the space and potential to innovate in areas such as models, methods, media, and forms of assessment in learning. Meanwhile, students can improvise their ability to respond to instructions and assignments given during lectures. Likewise, administrative staff often show diverse innovations in performing their tasks. Each element must have the ability to adapt and adopt innovations, which is influenced by both internal and external factors. Rogers mentions several factors influencing innovation adoption, including relative advantage, compatibility, complexity, trialability, and observability (Rogers et al., 2008).

The innovations in Arabic language learning models implemented by lecturers at PTKI in Southeast Sulawesi are diverse, reflecting efforts to adapt to the development of learning. Studies on the development of Arabic language learning to anticipate the arrival of the 4.0 globalization era have been conducted (Alfan et al., 2021). The evolution of perceptions and thoughts through a system of representation based on action, imagery, and language (Bruner, 1973) specifically pertains to the development of 21st-century language skills (Toifah, 2021). For example, a lecturer at IAIN Kendari utilizes cooperative and contextual learning models through the use of digital media features, such as the "breakout room" feature in Zoom meetings. Students are divided into groups for Arabic language learning in an online environment, with the ease of grouping facilitated by the breakout room feature. Another method involves sharing teaching materials via the "chat box"

feature, where all participants in the breakout rooms can access, download, and upload documents.

Lecturers implement digital-based Arabic language learning through web-based methods by utilizing available Arabic language learning websites on Google. The choice of web addresses is based on the students' need to master Arabic. For instance, learning activities may require students to independently access the "Araabuna" website, which contains the lecture materials. The innovation here is ensuring that each student has read the materials on the website, followed by requesting them to share the accessed links online. Students are then tasked with summarizing the main themes of the materials and sharing them in a WhatsApp group, allowing everyone to share their learning experiences and newly acquired knowledge.

Another innovation in digital-based listening learning models is the use of video resources available on YouTube. Lecturers instruct students to access YouTube links featuring Arabic conversations. Students are given the opportunity to watch videos that demonstrate practical use of Arabic, either by non-native speakers (Indonesians) or native speakers. This innovation emphasizes the use of online and internet-based resources, as students must access YouTube. The lecturer's innovation combines two learning models in a single session, where students are tasked with practicing similar conversational situations presented in the YouTube videos.

The learning process often combines various digital media using internet-based applications. For example, materials on YouTube are supplemented with explanations via Google Meet, communication through WhatsApp for permission and confirmation purposes, attendance tracking via web-based administrative systems (SIA), and assignment submission through Google Classroom. This integration of various digital media into one lecture session becomes increasingly complex but facilitates assignment collection, assessment, and feedback processes.

At IAI Al-Mawaddah Warahmah Kolaka, an Arabic writing model focuses on strengthening vocabulary mastery (*mufradat*). Each student is required to write vocabulary manually in a notebook, which is easily portable. The aim of this vocabulary mastery is to enhance both writing and speaking fluency in Arabic once the vocabulary has been acquired. Although the vocabulary is written manually, the internet is still utilized when students access online dictionaries to look up necessary words. Although this model minimally employs digital media, it can be further developed by students through other innovative means. For example, the vocabulary could be written and stored on Google Drive, making it accessible anytime and anywhere. Educational institutions should initiate simple learning models, such as the previously researched "Kahoot" media, which is relevant for various education levels, including elementary school classrooms (Busiri, 2020).

The digital-based learning models applied by lecturers at the three PTKI in Southeast Sulawesi still exhibit significant differences. Lecturers at IAIN tend to use digital Arabic learning models aligned with global competition and digital advancements. However, at STAI YPIQ and IAI Al-Mawaddah Warahmah, digital learning is not fully implemented, thus limiting the optimization of digital media development in learning situations. The paradigm regarding the advantages and disadvantages of certain media is complex and

often influenced by the lecturer's comfort zone with particular models. Consequently, some lecturers make innovations to overcome methodological stagnation, which is still strongly influenced by environmental conditions.

The innovations in Arabic language learning models at the three PTKI in Southeast Sulawesi exhibit diversity and fall within the categories of relative advantage, compatibility, and complexity. The advantage of Arabic learning innovations lies in the new technology utilized, which is easy to understand and can replace previously used manual methods. In terms of compatibility, the innovations are well-received and align with the teaching and learning experiences of each participant, making them easy to adapt. However, there are elements of complexity in the innovations, which can be anticipated by a responsive approach from lecturers, administrative staff, and students alike.

CONCLUSION

The innovation of Arabic language learning models based on digital platforms at PTKI in Southeast Sulawesi has been implemented through online application channels with an adequate adoption period among lecturers, educators, and students involved in the learning process. The adoption and adaptation readiness of these stakeholders is largely dominated by early adopters, who are quick to adapt to innovation, although not all participants fall into this category. The range of digital Arabic language learning innovations at the three PTKIs can be categorized as having characteristics of advantage, compatibility, and complexity. However, not all PTKIs have undertaken innovations that are fully relevant to the development needs of digital Arabic language learning. The gaps observed between the institutions pertain to the availability of digital infrastructure and the competencies of the academic community in implementing the various innovations initiated.

This article is limited to discussing three characteristics of innovation in digital Arabic language learning. It is recommended that future studies delve into the trialability and observability of such innovations more deeply. Another limitation is that this paper does not explore the creation of a comprehensive digital program as part of the innovation in Arabic language learning. Therefore, it also recommends further in-depth research on the formulation of innovative digital application models for Arabic language learning that are centralized and comprehensively connected across PTKIs.

REFERENCES

- Abdelkader, A., Souilem, D., Al-Mukarramah, M., Salma Boumiza, S. A., & Boumiza, S. (2015). Scorm-Compliant Course in E-Learning Environment for the Arabic Language. *International Journal of Computer Engineering & Technology (IJCET)*, 6(12), 35–43. <http://www.iaeme.com/IJCET/index.asp35http://www.iaeme.com/IJCET/issue.s.asp?JType=IJCET&VType=6&IType=12http://www.iaeme.com/IJCET/index.asp36http://www.iaeme.com/IJCET/issues.asp?JType=IJCET&VType=6&IType=12>
- Alfan, M., Khasairi, M., Nurhidayati, N., & Maziyah, L. (2021). Interactive Android Based Learning Media sebagai Inovasi Pembelajaran Membaca Bahasa Arab di Perguruan Tinggi: Desain Pengembangan Rekursif, Reflektif, dan Kolaboratif. *Jurnal Pendidikan: Teori, Penelitian, Dan Pengembangan*, 5(10), 1435–1445. <https://doi.org/10.17977/JPTPP.V5I10.14112>
- Aloraini, N. (2018). Investigating Instagram as an EFL Learning Tool. *Arab World English Journal*, 4(4), 174–184. <https://doi.org/10.24093/AWEJ/CALL4.13>

- Bahri, A., & Karmila, M. (2017). Peningkatan Kemampuan Membaca Intensif dengan Menggunakan Metode SQ4R(Survey, Read, Review, Recite, Reflect) di Kelas VIII SMP. Guppi Samata Gowa. *KONFIKS : Jurnal Bahasa dan Sastra Indonesia*, 2(1), 24. <https://doi.org/10.26618/JK.V2I1.402>
- Bandura, A. (1977). *Social learning theory*. Prentice Hall.
- Bandura, A. (1986). Social Foundations of Thought and Action. In *A Bandura Englewood Cliffs, NJ, 1986*•*books.google.com*. Englewood NJ, Undefined. [https://books.google.com/books?hl=id&lr=&id=PdY9o3l5vpYC&oi=fnd&pg=PA94&dq=Bandura,+A.+\(1986\).+Social+foundations+of+thought+and+action:+A+social+cognitive+theory.+Prentice+Hall.&ots=uHcUwU1ndR&sig=9xWa6gmrQh-4oyoWf6tN0_kqMJM](https://books.google.com/books?hl=id&lr=&id=PdY9o3l5vpYC&oi=fnd&pg=PA94&dq=Bandura,+A.+(1986).+Social+foundations+of+thought+and+action:+A+social+cognitive+theory.+Prentice+Hall.&ots=uHcUwU1ndR&sig=9xWa6gmrQh-4oyoWf6tN0_kqMJM)
- Baso, Y. S., Rahman, F., Haeruddin, H., & Safa, N. A. (2016). Hubungan Penguasaan Mufradat dan Tingkat Pemahaman Membaca Teks Asli Bahasa Arab Mahasiswa. *Arabi : Journal of Arabic Studies*, 1(2), 50. <https://doi.org/10.24865/AJAS.V1I2.12>
- Bloom, B. S. (1984). The 2 sigma problem: The search for methods of group instruction as effective as one-to-one tutoring. *Educational Researcher*, 13(6), 4–16.
- Bruner, J. S. (1966). *Toward a theory of instruction*. Harvard University Press.
- Bruner, J. S. (1973). *Beyond the Information Given: Studies in the Psychology of Knowing*. W.W. Norton & Company.
- Busiri, A. (2020). Pemanfaatan Media Kahoot dalam Pembelajaran Bahasa Arab di IAI Sunan Kalijogo Malang. *Mubadasab: Jurnal Pendidikan Bahasa Arab*, 2(2), 225–240. <https://doi.org/10.51339/MUHAD.V2I2.209>
- Chapelle, C., & Jamieson, J. (1986). Computer assisted language learning as a predictor of success in acquiring English as a second language. *TESOL Quarterly*, 20(1), 27–46. <https://doi.org/10.2307/3586387>
- Foristek, M. Y.-, & 2012, undefined. (n.d.). E-learning sebagai media pembelajaran interaktif berbasis teknologi informasi. *Academia.EduM Yaz'diForistek, 2012*•*academia.Edu*. Retrieved August 4, 2024, from <https://www.academia.edu/download/93424087/584.pdf>
- Frei-Landau, R., Muchnik-Rozanov, Y., & Avidov-Ungar, O. (2022). Using Rogers' diffusion of innovation theory to conceptualize the mobile-learning adoption process in teacher education in the COVID-19 era of innovation · Mobile learning · Distant learning · Multilevel analysis · Higher education. *Education and Information Technologies*, 27, 12811–12838. <https://doi.org/10.1007/s10639-022-11148-8>
- Gentala, J., & Dasar, P. (2020). Penerapan Model Pembelajaran Kooperatif Tipe Roundtable Berbantuan Media Gambar Seri Dalam Meningkatkan Kemampuan Menulis Cerita Pendek Pada Siswa Sekolah Dasar. *Jurnal Gentala Pendidikan Dasar*, 5(1), 78–90. <https://doi.org/10.22437/GENTALA.V5I1.9424>
- Hembrough, T., & Jordan, J. (2020). Creating a digital writing classroom: A mixed methods study about a first-year composition tablet initiative. *International Journal of Instruction*, 13(2), 567–586. <https://doi.org/10.29333/IJI.2020.13239A>
- Hidayah, I., & Kusumaningrum, N. (2021). Model Pembelajaran Bahasa Arab Berbasis Internet. *El-Jaudab: Jurnal Pendidikan Bahasa Dan Sastra Arab*, 2(1), 65–90. <https://jurnal.stain-madina.ac.id/index.php/ej/article/view/355>
- Hikmawati, S. A. (2020). Efektifitas Model Pembelajaran Daring dalam Perkuliahan Bahasa Arab di Institut Agama Islam Sunan Kalijogo Malang. *Mubadasab: Jurnal Pendidikan Bahasa Arab*, 2(1), 77–89. <https://ejournal.iaiskjmalang.ac.id/index.php/muhad/article/view/152>
- Hoi, V. N. (2020). Understanding higher education learners' acceptance and use of mobile

- devices for language learning: A Rasch-based path modeling approach. *Computers & Education*, 146, 103761. <https://doi.org/10.1016/J.COMPEDU.2019.103761>
- Khomsah, A. F., & Imron, M. (2020). Pembelajaran Bahasa Arab melalui Kolaborasi Metode Questioning dan Media Kahoot. *Tarbiyatuna: Jurnal Pendidikan Ilmiah*, 5(1), 99–118. <http://ejournal.kopertais4.or.id/mataraman/index.php/tarbiyatuna/article/view/3867>
- Makrifah, N. (2020). Inovasi Pemecahan Pembelajaran Bahasa Arab di Madrasah Ibtidaiyah. *Syaikhuna: Jurnal Pendidikan Dan Pranata Islam*, 11(1), 16–30. <https://doi.org/10.36835/SYAIKHUNA.V11I1.3840>
- Moore, M. G., & Kearsley, G. (1996). *Distance Education: A systems View*. Wadsworth Publishing.
- Moore, M. G. (1993). *Theory of Transactional Distance (in D. Keegan (Ed.)), Theoretical Principles of Distance Education*. Routledge.
- Murda, N., & Purwanti, P. D. (2017). Penerapan Strategi Pembelajaran Think Pair Share untuk Meningkatkan Kemampuan Membaca Intensif Siswa. *International Journal of Elementary Education*, 1(1), 11. <https://doi.org/10.23887/IJEE.V1I1.11434>
- Piaget, J. (1972). *The Psychology of the Child*. Basic Books.
- Pokhrel, S., & Chhetri, R. (2021). A Literature Review on Impact of COVID-19 Pandemic on Teaching and Learning. *Higher Education for the Future*, 8(1), 133–141. <https://doi.org/10.1177/2347631120983481>
- Prasetyo, H., & Sutopo, W. (2018). Industri 4.0: Telaah Klasifikasi Aspek dan Arah Perkembangan Riset. *J@ti Undip: Jurnal Teknik Industri*, 13(1), 17. <https://doi.org/10.14710/JATI.13.1.17-26>
- Promadi, P., Rusdi, R., Firdaus, D., & Kasdi, J. (2022). Inovasi Pelaksanaan Pembelajaran Bahasa Inggris di Dynamic English Course Flamboyan Nine (DEC-FN) dan Lembaga Kursus Bahasa Arab Al-Farisi Pare, Kediri, Jawa Timur. *Jurnal Al Ma'any*, 1(2), 44–60.
- Putra, A., Gamasari, R., & Novebri, N. (2022). Inovasi Pembelajaran Bahasa Arab Daring di Masa Pandemi Covid-19. *Lectura: Jurnal Pendidikan*, 13(1), 15–28.
- Putri, W. N., & Billah, A. (2019). Pengembangan Media Pembelajaran Bahasa Arab berwawasan Sains berbasis Mobile Android. *LISANIA: Journal of Arabic Education and Literature*, 3(2), 163–179. <https://doi.org/10.18326/LISANIA.V3I2.163-179>
- Rayanto, Y. H. (2018). The Implementation of C-ID, R2D2 Model on Learning Reading Comprehension. *Education of English as A Foreign Language*, 1(1), 19–25. <https://doi.org/10.21776/UB.EDUCAFL.2018.001.01.04>
- Ritonga, M., Nazir, A., & Wahyuni, S. (2016). Pembelajaran Bahasa Arab Berbasis Teknologi Informasi dan Komunikasi di Kota Padang. *Arabiyat: Jurnal Pendidikan Bahasa Arab Dan Kebahasaaraban*, 3(1). <https://doi.org/10.15408/A.V3I1.2879>
- Rogers, E. M., Singhal, A., & Quinlan, M. M. (2008). Diffusion of Innovations Chapter. *An Integrated Approach to Communication Theory and Research*, 432–448.
- Rogers, E. M., Singhal, A., & Quinlan, M. M. (2014). Diffusion of Innovations. *An Integrated Approach to Communication Theory and Research*, 432–448. <https://doi.org/10.4324/9780203887011-36>
- Silahunudin, S., & Azhari, A. (2019). Inovasi Media Pembelajaran Bahasa Arab Berbasis E-Learning. *CIRCUIT: Jurnal Ilmiah Pendidikan Teknik Elektro*, 3(1), 40. <https://doi.org/10.22373/crc.v3i1.4426>
- Suhartoyo, E., Wailissa, S. A., Jalarwati, S., Samsia, S., Wati, S., Qomariah, N., Dayanti, E., Maulani, I., Mukhlis, I., Rizki Azhari, M. H., Muhammad Isa, H., & Maulana Amin, I. (2020). Pembelajaran Kontekstual Dalam Mewujudkan Merdeka Belajar. *Jurnal*

- Pembelajaran Pemberdayaan Masyarakat (JP2M)*, 1(3), 161.
<https://doi.org/10.33474/JP2M.V1I3.6588>
- Syafe'i, I. (2017). Lembaga Pendidikan Pembentukan Karakter. *Al-Tadzkiyyah: Jurnal Pendidikan Islam*, 8(1), 61.
- Toifah, N. (2021). *Pengembangan pendidikan karakter dalam pembelajaran bahasa Arab berbasis keterampilan abad 21*.
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Harvard University Press.
- Wahyuni, I. (2017). Bahasa Arab Dalam Konteks Simbol Agama. *Zawiyah*, 3(2), 78–92.
- Wekke, I. S. (2014). Tradisi pesantren dalam konstruksi kurikulum bahasa Arab di lembaga pendidikan minoritas muslim Papua Barat. *KARSA: Jurnal Sosial Dan Budaya Keislaman*, 22(1), 20–38.
- Wekke, I. S. (2015). *Model pembelajaran bahasa Arab*. Deepublish.
- Wekke, I. S., & Astuti, R. W. (2017). Kurikulum 2013 di Madrasah Ibtidaiyah: Implementasi di Wilayah Minoritas Muslim. *Tadris: Jurnal Keguruan Dan Ilmu Tarbiyah*, 2(1), 33. <https://doi.org/10.24042/tadris.v2i1.1736>
- Wiersma, W. (1976). *Research Method in Education* (5th ed.).
- Zumrodi, M., & Riyantomo, A. (2020). Inovasi Media Edukasi Bahasa Arab. *Jurnal Informatika Dan Rekayasa Perangkat Lunak*, 2(1), 42–48.
<https://doi.org/10.36499/JINRPL.V2I1.3196>