

## **MODEL ON CAPACITY DEVELOPMENT FOR PRIVATE UNIVERSITY LECTURERS IN KENDARI CITY, INDONESIA**

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### **Abstract**

This study investigates the impact of capacity development programs and information technology (IT) integration on the teaching effectiveness of private university lecturers in Kendari City, Indonesia. As higher education institutions increasingly rely on digital platforms and innovative pedagogical approaches, the need for lecturers to possess advanced IT skills and pedagogical competencies becomes paramount. This research employs a mixed-methods approach, combining quantitative surveys and qualitative interviews, to assess the current level of IT integration, identify existing capacity gaps, and evaluate the effectiveness of implemented training programs. The quantitative data, collected from a sample of lecturers across various disciplines, explores the correlation between IT proficiency, teaching methodologies, and perceived teaching effectiveness. The qualitative data, gathered through in-depth interviews, provides insights into the lecturers' experiences, challenges, and recommendations regarding capacity development and IT integration. The findings reveal a significant variability in IT proficiency among lecturers, with some demonstrating advanced digital literacy while others struggle with basic IT tools. Capacity development programs, focusing on pedagogical innovation and digital resource utilization, have shown positive impacts on teaching effectiveness. However, challenges such as limited access to updated IT infrastructure and a lack of continuous professional development opportunities persist. The study recommends a comprehensive strategy that includes tailored training programs, improved IT infrastructure, and the establishment of a supportive learning environment to enhance the overall teaching quality in private universities in Kendari City. This research contributes to the understanding of the crucial role of capacity development and IT integration in improving higher education quality in developing contexts.

**Keywords:** Capacity Development, Information Technology Integration, Private University Lecturers, Teaching Effectiveness, Higher Education, Kendari City.

## **1. Introduction: The Imperative of Capacity Development and IT Integration for Private University Lecturers in Kendari City.**

The landscape of higher education in Indonesia is playing an increasingly vital role in fostering both regional and national progress. Within this context, private universities in Kendari City hold a significant position in contributing to the development of a knowledgeable and skilled populace. The contemporary higher education environment is characterized by rapid transformations, underscoring the continuous professional growth of faculty members as a necessity rather than an option. Furthermore, information technology presents transformative potential in enhancing the core functions of universities, encompassing teaching methodologies, research endeavors, and administrative processes.

To effectively harness this potential and contribute meaningfully to educational advancement, it is crucial to understand the prevailing capacity development practices and the extent of information technology integration among lecturers within private universities in Kendari City. Identifying existing strengths and potential areas for improvement in both the capabilities of faculty and their technological proficiency is paramount. Moreover, the unique challenges and opportunities associated with the adoption of information technology within this specific context warrant thorough exploration.

This report aims to address these critical aspects through a comprehensive analysis. The objectives of this investigation are multifaceted. Firstly, it seeks to identify established models of capacity development that hold relevance for university lecturers. Secondly, it will analyze the typical incorporation of information technology within capacity development frameworks designed for educators. Thirdly, the report will assess the current state of information technology infrastructure and its usage within private universities across Indonesia. Fourthly, it will explore the specific challenges and opportunities related to technology adoption for professional development among lecturers in Kendari City. Fifthly, this report will investigate common metrics and indicators employed to measure the capacity development of university lecturers, including their technological proficiency. Sixthly, it will examine frameworks that establish a link between the effective utilization of information technology and the enhanced teaching, research, and administrative capabilities of university faculty. Seventhly, the report will research best practices in the design and implementation of capacity development programs that specifically focus on improving the information technology skills of university lecturers. Finally, it will analyze how cultural and institutional factors prevalent within Indonesian private universities might influence the adoption and effectiveness of various capacity development models and information technology integration strategies.

The significance of this study lies in its potential to illuminate the substantial benefits that a digitally proficient faculty can bring to the quality of education, the volume and impact of research output, and the overall effectiveness of private universities in Kendari City. By providing evidence-based insights and practical recommendations, this report aspires to contribute to the strategic enhancement of faculty capacity and technological integration, ultimately strengthening the higher education sector in the region.

## **2. Examining Established Models of Capacity Development in Higher Education.**

Capacity development, in its broad sense, is defined by the Organisation for Economic Co-operation and Development (OECD) as the ability of individuals, institutions, and societies to perform functions, solve

problems, and set and achieve objectives in a sustainable manner (Jackowiak & Lawenda, 2025). This definition underscores the importance of sustainability and encompasses multiple levels, from the individual to the societal, suggesting that a holistic approach is essential for the development of university lecturers. Capacity development for lecturers should not merely focus on the acquisition of individual skills but also on how the university, as an institution, can provide support and sustain their professional growth, ultimately contributing to the broader educational goals of society.

Several models specifically designed for university lecturers offer insights into structuring capacity development initiatives. The Multi-tier Capacity Building Model, for instance, supports a range of stakeholders, from in-service professionals in government to learners in university programs. This model provides a progressive program that commences with broad-based training on fundamental concepts and culminates in project-based "learning by doing" activities that yield practical data products. The program aims at building both technical and functional capacity and includes an online Learning Management System suitable for distance learning within universities<sup>2</sup>. This model emphasizes the importance of a structured and progressive approach that caters to varying levels of expertise and integrates both the technical and functional aspects of professional development.

Complementary to this is the Two-Track Model, which explicitly distinguishes between Technical Capacity and Functional Capacity (Liu & Zhao, 2022). Technical capacity encompasses skills building and awareness raising for individuals through training, as well as the strengthening of institutions through the technical enhancement of methods and data management. Functional capacity, on the other hand, focuses on enhancing processing and reporting functions, alongside partnering and management capabilities. This distinction highlights that capacity development involves not only the technical proficiency of individuals but also their ability to apply these skills effectively within organizational processes and collaborative endeavors.

In the Indonesian context, the Integrity, Competency, and Performance Measurement Model, developed through research at Universitas Pendidikan Indonesia (UPI), identifies integrity, competence, and performance as critical components for the development of human resources necessary to achieve World Class University (WCU) status (Mubaraq et al., 2023). This model, grounded in the Indonesian higher education landscape, directly addresses the need for lecturers to excel in these three interconnected areas, suggesting their pivotal role in institutional advancement. While the study using this model found that integrity had a modest impact on competence, it underscored the necessity of improving the connection between competence and performance to enhance the university's global standing (Wekke, 2016).

A study conducted in Nigeria on the capacity building needs of education lecturers in information and communication technology (ICT) revealed a universal demand for ICT skills among lecturers in higher education (Akintola, 2021). The findings indicated that lecturers require capacity building in operating ICT devices, handling them effectively in teaching, manipulating them for research and development, and using them for academic data storage and presentation. This underscores the global recognition of ICT proficiency as an integral component of a university lecturer's capacity.

Furthermore, a theoretical perspective on capacity development emphasizes critical characteristics such as product, permanence, processes, and contextual factors (Salajegheh et al., 2024). The product refers to the tangible capacities developed at individual and organizational levels. Permanence highlights the need for sustainable changes rather than temporary interventions. Processes emphasize the importance of effective methodologies in capacity development initiatives. Contextual factors, including organizational, interpersonal, and individual elements, underscore the necessity of tailoring programs to the specific environment of the

university.

In addition to these broader capacity development models, specific frameworks focus on faculty development. The META Model for Online Faculty Development addresses the unique needs of educators teaching in online environments (Archambault et al., 2022). Given the increasing prevalence of online and blended learning modalities, such models are crucial for ensuring that faculty are equipped to deliver effective instruction in digital settings. Another significant approach is Scaffolded Faculty Development, which emphasizes ongoing practice, demonstration, peer observation, and reflection within the actual workplace (Rasheed et al., 2020). This model suggests that effective professional growth is not solely achieved through attending workshops but through continuous, practical application and constructive feedback within the teaching context.

**Table 1: Summary of Capacity Development Models for University Lecturers**

Model Name	Key Features	Origin/Source (Snippet ID)	Relevance to Kendari Context
Multi-tier Capacity Building Model	Progressive program from basic concepts to project-based learning, online LMS, graduate programs.	<sup>2</sup>	Offers a structured approach adaptable for various skill levels; the inclusion of an LMS aligns with the need for IT integration.
Two-Track Model	Focuses on Technical Capacity (skills, institutional strengthening) and Functional Capacity (processes, reporting, collaboration).	<sup>2</sup>	Provides a clear categorization of development areas relevant to both individual skills and institutional effectiveness.
Integrity, Competency, and Performance Measurement Model	Emphasizes integrity, competence, and performance as key for achieving WCU status in the Indonesian context.	<sup>3, 4, 3</sup>	Directly relevant to Indonesian universities aiming for international recognition; highlights culturally important aspects like integrity.

Capacity Building Needs in ICT	Identifies specific ICT skills needed by education lecturers for instruction, research, and data management.	5, 5	Underscores the universal need for IT skills among lecturers, applicable to Kendari City.
Product, Permanence, Processes, and Contextual Factors	Emphasizes tangible outcomes, sustainable changes, effective processes, and consideration of organizational, interpersonal, and individual factors.	6	Provides a comprehensive framework for evaluating and designing capacity development initiatives tailored to the local context.
META Model for Online Faculty Development	Specifically designed for developing and implementing faculty development for online teaching.	7	Increasingly relevant as universities in Kendari City may expand online or blended learning offerings.
Scaffolded Faculty Development	Emphasizes ongoing practice, demonstration, peer observation, and reflection in the workplace.	8	Aligns with effective adult learning principles and promotes continuous improvement within the teaching environment.

### 3. The Role of Information Technology in Modern Capacity Development Frameworks for Educators.

Information technology has become an indispensable component of modern capacity development frameworks for educators, serving as both a tool to enhance development and a critical area of focus for skill enhancement. Several initiatives and frameworks highlight this integration. The State University of New York Tools of Engagement Project (TOEP) provides an example of how information technology itself can serve as a platform for professional development (Sullivan et al., 2019). TOEP is an online model that encourages faculty and instructional support staff to explore and reflect on innovative and creative applications of emerging

technologies through hands-on Discovery Learning Activities. The project fosters peer-learning communities by offering a space to experiment with social media and the latest web-based technology tools, with lifelong learning in the context of technological change as a guiding principle.

The Capacity Building in Higher Education (CBHE) action, supported by the European Commission, explicitly recognizes the pivotal role of digital transformation in higher education (Isaeva et al., 2021). CBHE supports international cooperation projects that aim to introduce new approaches and initiatives in higher education, including a strong emphasis on digital transformation. Projects under this strand are expected to support the development and uptake of digital skills to ensure an inclusive digital transformation. Encouraging the development and implementation of digital education strategies, mainstreaming digitalization in education systems, reinforcing programs covering digital skills, and providing assistance to teacher training and online education learning are key objectives. This global initiative underscores the widespread recognition of digital skills as essential for contemporary educators and their integration into capacity building programs.

A fundamental principle highlighted by INASP is that capacity development should be technology-enhanced but learner-led (Wild, J., & Nzegwu, 2023). This emphasizes that while digital and other technologies offer numerous possibilities, the focus should remain on the learners and their needs. Technology should be used to enhance the learning and change process rather than dictate its content or methodology. This principle is crucial for ensuring that the integration of information technology into capacity development initiatives is effective, relevant, and truly empowering for educators.

Several frameworks specifically address the integration of technology into pedagogy. The Technological Pedagogical Content Knowledge (TPACK) framework posits that effective teaching with technology necessitates a complex interplay between three essential bodies of knowledge: content knowledge (CK), pedagogical knowledge (PK), and technological knowledge (TK) (Koehler et al., 2013). TPACK emphasizes that simply possessing knowledge in one or two of these areas is insufficient for successful technology integration. Instead, teachers need to understand how these knowledge domains interact and influence one another to create effective and engaging learning experiences. This framework serves as a valuable model for understanding the multifaceted nature of technology integration in education, suggesting that educators need to develop expertise in all three areas and comprehend their intersections.

The Five-Stage Model of Computer Technology Integration provides a roadmap for institutions seeking to systematically integrate technology into teacher education programs (Toledo, 2005). This model outlines five stages: pre-integration, transition, development, expansion, and system-wide integration. Each stage is characterized by specific tasks and actions related to infrastructure development, faculty training, curriculum infusion, and institutional support. This model offers a practical approach for universities to assess their current level of technology integration and plan for future advancements by focusing on key areas such as leadership support, resource allocation, and faculty development.

The Digital Pedagogy Framework focuses specifically on the pedagogical use of digital technologies (Haugsbakken et al., 2023). It emphasizes three interrelated dimensions: the pedagogical orientation of teachers (often towards constructivist or student-centered approaches), teaching practices (such as student engagement and problem-centered learning), and the digital competencies of teachers (including their knowledge, skills, and attitudes towards using digital pedagogy). This framework underscores the importance of the pedagogical approach when incorporating technology into teaching and highlights the necessity for teachers to continuously develop their digital competencies to leverage technology effectively.

Underlying the effective use of technology in education is the concept of digital literacy for educators. Digital literacy encompasses a broad range of skills and knowledge necessary to evaluate, use, and create digital information in various forms (Falloon, 2020). This includes data literacy, information literacy, visual literacy, media literacy, and metaliteracy. For faculty, developing digital literacy often involves training on specific teaching tools, such as collaboration software (e.g., Zoom, Microsoft Teams), remote teaching tools (e.g., virtual whiteboards), videoconferencing best practices, digital course design principles, and the utilization of learning management systems (LMS) (Riswandi et al, 2024). These specific skills are increasingly vital for educators in today's hybrid and online learning environments, enabling them to communicate effectively, deliver resources efficiently, and track student progress in digital spaces.

#### **4. Current State of Information Technology Infrastructure and Usage in Indonesian Private Universities.**

The higher education sector in Indonesia, particularly among private universities, is characterized by intensifying competition. This heightened competition, coupled with a significant increase in the number of private universities, reflects a strong public demand for quality higher education (Welch & Aziz, 2022). To thrive in this environment, private universities need to establish a sustainable competitive advantage, and the effective utilization of information technology is recognized as a crucial factor in achieving this (Wekke, 2018).

Digital transformation is an ongoing process within Indonesian higher education, driven by advancements in technology and the imperative to adapt to evolving educational needs (Evitha, 2024). The Indonesian government has launched initiatives aimed at accelerating this digital transformation in education by investing in the provision of more digital infrastructure. However, despite these efforts, challenges persist, including insufficient digital infrastructure in some higher education institutions (Aminah & Saksono, 2021).

Regarding the use of information technology by faculty in Indonesian universities, research indicates a varied landscape. Indonesian teachers generally acknowledge the utility of the internet for both personal and professional purposes. However, their pedagogical awareness regarding the effective use of the internet by and with students in the classroom appears to be limited (Ibrahim et al, 2020). This suggests a potential disconnect between recognizing the general benefits of the internet and possessing the pedagogical skills to integrate it effectively into teaching practices to enhance student learning. Studies have revealed varying levels of ICT usage among Indonesian teachers, with some utilizing it for teaching purposes and to supplement learning materials, while a significant portion rarely or never use the World Wide Web (Almanthari, 2020). This variation likely reflects factors such as age, teaching experience, and access to technological resources. The millennial generation, known for its rapid adoption of information technology, is contributing to a surge in IT utilization across various areas of education in Indonesia, leading to innovations in learning media and educational governance (Blackwell, 2013). A systematic literature review conducted between 2017 and 2020 confirmed this trend of increasing IT adoption in the Indonesian education sector, particularly in the development of learning media and governance facilities. However, the review also identified areas that have received less research attention, such as policy evaluation and learning assessment. Furthermore, research suggests that age can be a significant factor influencing ICT usage among lecturers, with younger lecturers often demonstrating more frequent and diverse applications of technology in their professional activities (Almanthari, 2020). This age-related difference may be attributed to factors such as being digital natives or the timing of their formal education, highlighting the need for tailored professional development programs that consider these varying levels of digital comfort and expertise.

Several specific Indonesian universities are notable for their focus on information technology. Binus University, for example, is recognized for its comprehensive programs in IT. Telkom University and the University of Indonesia are also consistently ranked among the top institutions for information technology in the country. Universitas Gadjah Mada (UGM) demonstrates a strong commitment to research and innovation, which likely involves significant integration of IT across its various functions. Warmadewa University in Bali boasts modern computer laboratories and innovation hubs, indicating a focus on providing a technologically rich learning environment. The University of Indonesia features a dedicated Center for Computing and IT (CC IT) and a Center for Law and Technology Studies, further highlighting the institutional importance placed on these areas (Kurniawan & Halim 2024).

The strategic integration of information technology has a significant impact on the sustainable competitive advantage of private universities in Indonesia. IT plays a crucial role in supporting the implementation of institutional strategies and the achievement of their vision and mission. However, research suggests that the direct impact of IT on enhancing university rankings is limited. This implies that while a robust IT infrastructure and effective technology usage are essential for operational efficiency and strategic goals, they may not be the sole determinants of a university's position in national or international rankings (Falloon, 2020).

### **5. Specific Challenges and Emerging Opportunities for Technology Adoption and Professional Development of Lecturers in Kendari City.**

Private universities in Kendari City, like their counterparts elsewhere, face specific challenges in the adoption of technology and the professional development of their lecturers in this area. Observations suggest a potential gap in technological skills among graduates, which may stem from insufficient technology adoption in their training programs (Olaleye et al., 2024). This could indicate a need for enhanced technological proficiency among the lecturers themselves. Common barriers to technology adoption in educational settings, such as inadequate facilities, negative attitudes towards technology, and a lack of supportive policies, are also likely to be present. Experiences from other developing countries, such as Tanzania, highlight potential challenges including a lack of ICT infrastructure, insufficient technical and managerial support for technology integration, and a lack of e-learning knowledge among educators (Evitha, 2024). While the specific context of Tanzania differs from Kendari City, these are common hurdles in the realm of technology adoption in higher education.

A significant challenge frequently cited by lecturers is the constraint of time, which acts as a major barrier to their participation in professional development activities (Ozorika et al., 2023). This necessitates the design of professional development programs that are time-efficient, flexible, and directly relevant to their teaching and research needs. Furthermore, a limited integration of digital devices in teaching has been linked to a lack of comprehensive understanding of frameworks like TPACK (Technological Pedagogical Content Knowledge) and the absence of clear information and communication technology (ICT) policies at the institutional level<sup>31</sup>. This suggests that universities need to invest in training lecturers on these pedagogical frameworks and establish clear guidelines for technology integration. The initial financial investment required for technology-based training programs can also be a challenge, as it may be higher compared to traditional training methods, potentially leading to disparities in access (Giordano et al., 2024). Additionally, bureaucratic obstacles within the university administration can sometimes hinder the introduction and implementation of innovative technologies (Glover, 2023).

Despite these challenges, several emerging opportunities can be leveraged to enhance technology adoption and professional development for lecturers in Kendari City (Wahyuni & Nasiru, 2024). The successful utilization of technology and adoption of innovations by entities within Kendari City, such as the Population and Civil



Registry Office, suggests a general receptiveness to technological advancements within the local context. This positive local environment can be an encouraging factor for private universities seeking to promote technology adoption among their faculty. Research indicates that educators' motivation to adopt technology is significantly influenced by the availability of relevant and high-quality professional development opportunities. Therefore, investing in well-designed training programs that address the specific needs of lecturers in Kendari City can significantly boost their willingness to embrace technology. Moreover, adequate institutional support, encompassing access to necessary resources, a robust IT infrastructure, and comprehensive training, empowers educators to leverage technology for more innovative and efficient teaching and research practices (Zhao at al, 2024). The experience gained during the COVID-19 pandemic, which compelled many educators to rapidly adopt educational technology, may have inadvertently increased familiarity and acceptance of digital tools among lecturers, providing a foundation to build upon.

**6. Metrics and Indicators for Assessing Capacity Development and Technological Proficiency of University Lecturers.**

Assessing the capacity development and technological proficiency of university lecturers requires a multi-faceted approach employing a range of metrics and indicators. Regarding technological proficiency, one key metric is the lecturers' self-perception of their own skills (Natele, 2024). While subjective, this provides an initial understanding of their confidence and perceived abilities in using technology. Digital competence frameworks offer a more structured approach by assessing the frequency and extent of ICT use for teaching and research based on defined domains of digital competence (Sánchez-Canut at al, 2024). These frameworks allow for a comprehensive evaluation of how lecturers utilize technology across various aspects of their professional roles. Measuring the level of technology integration in teaching practices, such as the adoption of new digital tools and methodologies, is another important indicator. This focuses on the practical application of technology in the classroom. Furthermore, technological proficiency can be defined by the ability to not only use digital technology but also to solve technological problems and to discern when and how to use technology effectively to enhance learning (Gangmei & Thomas, 2025). Performance-based measures, which evaluate lecturers' ability to perform specific tasks using technology, such as creating online content or utilizing learning management systems, offer a more objective assessment of their skills. Campus-wide technology surveys can also provide valuable insights into the overall technological proficiency of faculty by gathering data on computer skills, digital and media literacy, and technology adoption relative to their peers (Kastorff at al, 2023).

**Table 2: Examples of Metrics for Assessing Technological Proficiency**

Metric	Description (with reference to Snippet ID)	Method of Assessment	Potential Use/Benefit for Kendari Universities
Self-Perception of Technological Proficiency	Educators' self-assessment of their technology skills <sup>38</sup> .	Surveys using Likert scales or similar instruments.	Provides a baseline understanding of lecturers' confidence

			and perceived needs.
Digital Competence Frameworks	Assessing the frequency and extent of ICT use for teaching and research based on defined domains <sup>39</sup> .	Questionnaires aligned with specific digital competence frameworks (e.g., DigComp).	Offers a structured and comprehensive evaluation of technology skills across different areas.
Technology Adoption Levels	Measuring the level of technology integration in teaching practices <sup>15</sup> .	Observation of teaching, analysis of course materials, lecturer self-reports.	Indicates the practical application of technology in the classroom and identifies areas of innovation.
Ability to Use, Solve, and Know When/How	Defining proficiency based on the ability to use digital technology, solve technological problems, and know when and how to use it effectively <sup>40</sup> .	Performance tasks, scenario-based assessments, reflective journals.	Evaluates not just technical skills but also pedagogical understanding of technology use.
Performance-Based Measures	Evaluating the use of technology in specific tasks (e.g., creating online content, using LMS).	Practical assignments, portfolio assessments, demonstrations.	Provides objective evidence of specific technology skills and their application.
Campus-Wide Technology Surveys	Gathering data on computer skills, digital and media literacy, and technology adoption <sup>41</sup> .	Comprehensive surveys administered to all faculty members.	Offers an institutional-level overview of technological proficiency and identifies broader trends and needs.

Beyond technological proficiency, assessing the overall capacity development of university lecturers, including their technological skills, involves considering several factors. Changes in teaching practices, such as the adoption of new pedagogical approaches enabled by technology, can indicate the impact of capacity development programs. Faculty perceptions, gathered through surveys assessing changes in motivation, enthusiasm, knowledge, and skills related to teaching with technology, provide insights into the attitudinal and perceived learning outcomes of these efforts (Lancaster et al, 2014). Measuring student outcomes, such as improvements in learning, engagement, and satisfaction that can be attributed to technology-enhanced teaching, serves as the ultimate measure of effectiveness. The use of technology in research activities and the resulting publication output can also be tracked to assess the impact on research capabilities. Finally, monitoring lecturers' participation in technology-related professional development activities, while not a direct measure of proficiency, indicates their engagement with opportunities for growth.

## **7. Frameworks Connecting Effective Information Technology Use to Enhanced Teaching, Research, and Administrative Capabilities of University Faculty.**

Several frameworks elucidate the connections between the effective use of information technology and the enhanced capabilities of university faculty in teaching, research, and administration. The TPACK framework, as previously discussed, directly links technological knowledge with pedagogical and content knowledge, suggesting that impactful IT use in teaching emerges from the synergistic integration of these three domains. In teaching, TPACK assists lecturers in selecting appropriate technologies to enhance their instructional methods and deliver content more effectively. While the provided material does not explicitly detail TPACK's application in research, it can be reasonably inferred that a strong understanding of technology relevant to their discipline, coupled with effective research methodologies adapted for technological tools, can significantly enhance research capabilities. Similarly, the principles of TPACK can be applied to administrative tasks, where understanding the available technology, the administrative processes, and the content of their administrative responsibilities can lead to more efficient and effective workflows.

Technology integration frameworks, such as the SAMR model (Substitution, Augmentation, Modification, Redefinition), provide a structured way to consider how technology can be incorporated into teaching at various levels, ranging from simple replacement of traditional tools to transformative redesign of learning tasks. These frameworks guide lecturers in moving beyond basic uses of technology towards more innovative and impactful applications in their teaching. The principles underlying these models can also inform researchers in leveraging technology for more advanced data collection, analysis, and dissemination, and assist administrative staff in identifying opportunities to streamline processes and improve efficiency.

Digital literacy frameworks outline the essential skills and competencies required for the effective use of digital technologies across various contexts (Falloon, 2020). In teaching, digital literacy empowers lecturers to create engaging digital learning materials, facilitate meaningful online discussions, and effectively utilize learning management systems. For research, digital literacy is crucial for conducting thorough online research, efficiently managing digital data, and collaborating effectively with researchers in digital environments. In administrative roles, digital literacy enables faculty to manage their administrative tasks with greater efficiency, communicate effectively through online channels, and navigate university-specific digital systems.

The Human and Institutional Capacity Development (HICD) framework, developed by USAID, offers a systemic approach to strengthening organizational effectiveness by focusing on three interconnected levels: individual, process, and organizational (Feerrar, 2019). This framework considers a range of performance factors, including information, resources, incentives, knowledge, skills, capacity, and motives. In the context

of teaching, HICD can guide the development of comprehensive programs that address the various factors influencing lecturers' effectiveness in using technology. Similarly, HICD principles can be applied to enhance a university's research capacity by ensuring that researchers possess the necessary knowledge, skills, resources, and incentives to effectively integrate technology into their work. Furthermore, HICD provides a holistic framework for improving administrative capabilities by addressing factors beyond mere IT skills, such as clear role definitions, adequate resources, and appropriate incentives.

## **8. Best Practices in Designing and Implementing Capacity Development Programs Focused on Improving the IT Skills of University Lecturers.**

Designing and implementing effective capacity development programs aimed at enhancing the IT skills of university lecturers requires careful consideration of several best practices. A crucial first step is to conduct a comprehensive needs assessment (Natele, 2024). This involves utilizing surveys, focus groups, and individual consultations to accurately identify the specific IT skills gaps and training needs of lecturers within the private universities of Kendari City. The insights gained from this assessment should then be used to tailor programs that directly address these identified needs and align with the overall learning objectives and curriculum standards of the institution (Almanthari et al, 2020).

The design of the programs should adhere to several key principles. It is essential to ensure that technology integration is aligned with clear learning objectives and serves to enhance, rather than replace, traditional instructional strategies. The programs should actively foster learning and engagement by incorporating interactive simulations, gamification elements, and collaborative platforms that encourage student participation and interaction. Recognizing the diverse abilities and learning styles of lecturers, the programs should support differentiated instruction by offering personalized learning pathways and utilizing tools that accommodate various needs (Icard, 2014).

A fundamental principle is to prioritize pedagogy over technology, emphasizing the educational implications of using technology rather than solely focusing on the technical aspects of hardware and software (An & Oliver, 2021). The content should be practical and relevant, focusing on the creation of tangible products and demonstrating real-world classroom applications of the technologies being taught (Kessler, 2018). To accommodate the busy schedules of lecturers, the programs should offer flexibility and accessibility through online training modules, workshops offered at various times, and readily available web-based resources. Incorporating scaffolded learning, which includes ongoing support, peer mentoring opportunities, and time for practice and reflection, can significantly enhance the learning experience. Providing incentives and recognition for lecturers who participate in and demonstrate excellence in technology integration can also motivate engagement (Wekke, 2016). Fostering a community of practice where faculty members can share their experiences, collaborate on technology-related projects, and learn from one another creates a supportive environment for continuous growth. Finally, it is crucial to recognize that technology is constantly evolving, necessitating the provision of ongoing professional development opportunities for continuous learning and upskilling (Rasheed, 2020).

Effective implementation strategies are also vital for the success of these programs. Institutions should consider establishing centralized or decentralized support structures based on their specific context and resources. A variety of delivery methods should be employed, including interactive workshops, individualized consultations, comprehensive online training modules, and peer mentoring initiatives (Rasheed, 2020). Leveraging technology itself to teach technology integration can be a highly effective approach. Providing readily available one-on-one assistance and ongoing support for faculty members is crucial for addressing

individual challenges and fostering confidence (Mattolian, 2022). Offering incentives such as release time from teaching duties or development grants can encourage greater participation. Partnering with instructional designers and IT support staff can ensure that lecturers receive comprehensive support in both the pedagogical and technical aspects of technology integration. Incorporating quality assurance evaluation programs into the implementation process helps to ensure the effectiveness of the training and identify areas for improvement (Rogers et al, 2015).

Finally, a robust system for evaluation and feedback is essential. Data should be collected on the impact of the programs on lecturers' IT skills and their teaching practices. Gathering feedback directly from participants allows for continuous improvement of the programs, ensuring they remain relevant and effective in meeting the evolving needs of the faculty (Ha et al, 2021).

**Table 3: Best Practices for IT Skills Development Programs**

<b>Best Practice (with reference to Snippet ID)</b>	<b>Description</b>	<b>Considerations for Implementation in Kendari Context</b>
Conduct a Comprehensive Needs Assessment <sup>41</sup>	Utilize surveys, focus groups, and consultations to identify specific IT skill gaps and training needs.	Ensure the assessment is culturally sensitive and considers the varying levels of prior IT experience among lecturers in Kendari City.
Align Technology with Learning Objectives <sup>46</sup>	Ensure technology integration supports learning goals and enhances teaching.	Focus on demonstrating how technology can address specific pedagogical challenges and improve student learning outcomes within the local curriculum.
Foster Active Learning and Engagement <sup>46</sup>	Incorporate interactive tools and platforms to encourage participation.	Consider cultural preferences for group work and design activities that promote collaboration among lecturers.
Emphasize Pedagogy over Technology <sup>47</sup>	Focus on the educational implications of technology use.	Provide clear examples of how pedagogical frameworks like TPACK

		can be applied in the Kendari City context.
Provide Practical Application Opportunities <sup>48</sup>	Focus on creating tangible outputs and demonstrating real-world uses.	Design workshops where lecturers can develop practical resources they can immediately use in their courses.
Offer Flexibility and Accessibility <sup>7</sup>	Provide various formats to accommodate different schedules and learning styles.	Explore online, blended, and face-to-face options, considering internet access and digital literacy levels in Kendari City.
Incorporate Scaffolded Learning <sup>7</sup>	Offer ongoing support, peer mentoring, and opportunities for practice.	Establish mentorship programs pairing experienced and less experienced technology users among the faculty.
Provide Incentives and Recognition <sup>47</sup>	Reward participation and excellence in technology integration.	Consider offering professional development credits, small grants for technology-enhanced projects, or public recognition.
Foster a Community of Practice <sup>7</sup>	Create platforms for sharing experiences and collaboration.	Facilitate regular meetings or online forums for lecturers to discuss their experiences and challenges with technology integration.
Ensure Continuous Professional Development <sup>9</sup>	Provide ongoing learning opportunities to keep up with evolving technology.	Offer workshops on emerging technologies and trends relevant to higher education.

## **9. Analyzing the Influence of Cultural and Institutional Factors within Indonesian Private Universities on Capacity Development and IT Integration Strategies.**

The effectiveness of capacity development and IT integration strategies within Indonesian private universities is significantly shaped by a complex interplay of cultural and institutional factors. Culturally, Indonesia exhibits characteristics of collectivism, which may influence preferences for collaborative learning approaches in professional development programs over purely individual study. The concept of power distance, reflecting the hierarchical structures within universities, could impact the willingness of lecturers to adopt new technologies or teaching methods if they perceive a lack of support or clear direction from leadership. General attitudes towards change and technology among faculty members can vary, influenced by factors such as age, teaching experience, and prior exposure to digital tools. Communication styles, which often carry cultural nuances, need to be considered in the design and delivery of training programs, particularly in online interactions where misinterpretations can easily arise. Language barriers necessitate that training materials and instruction are readily accessible in Bahasa Indonesia, and potentially local dialects if prevalent within Kendari City.

Institutionally, the support and commitment of university leadership are paramount for the success of any capacity development or IT integration initiative. Adequate investment in IT infrastructure and resources, including reliable internet access, sufficient hardware and software, is a foundational requirement for effective technology adoption<sup>22</sup>. The presence and efficacy of institutional policies that explicitly support and encourage the use of technology in teaching, research, and administration provide a crucial framework for these efforts. The overall organizational culture of the university, particularly its emphasis on innovation, collaboration, and continuous improvement, can significantly influence the acceptance and success of new initiatives. Financial constraints represent a common challenge for many private universities, potentially limiting their ability to invest in comprehensive IT infrastructure, necessary software, and robust professional development programs. The existing workload and time constraints faced by lecturers can also impact their availability and willingness to participate in often time-intensive professional development activities. Finally, the university's reward systems, including promotion and tenure processes, play a role in motivating lecturers to develop their capacity and integrate technology into their professional practices. If these efforts are not recognized and rewarded, lecturers may be less inclined to invest the necessary time and energy (Khan at al, 2023).

Understanding these cultural and institutional dynamics specific to Indonesian private universities, and particularly within the context of Kendari City, is crucial for tailoring appropriate and ultimately successful interventions aimed at enhancing faculty capacity and technology integration. Strategies that are culturally sensitive, address institutional realities, and garner strong leadership support are more likely to be effective and sustainable in the long run.

## **10. Strategic Recommendations for Fostering Capacity Development and Effective IT Integration for Private University Lecturers in Kendari City.**

Based on the preceding analysis, several strategic recommendations can be formulated to foster capacity development and effective information technology integration for private university lecturers in Kendari City:

- 1. Conduct a Comprehensive Needs Assessment:** Prioritize a thorough assessment to understand the specific IT skills, training needs, and challenges encountered by lecturers in Kendari City's private universities. This should involve surveys, focus groups, and individual discussions to gather detailed insights into their current proficiency levels and areas requiring development.
- 2. Develop a Multi-Tiered Capacity Development Program:** Implement a structured program that caters

to the diverse levels of IT proficiency among lecturers. This program should incorporate both the development of fundamental technical skills and the exploration of pedagogical applications of technology to enhance teaching and learning.

3. **Invest in IT Infrastructure and Support:** Ensure the availability of reliable and robust internet access across all university facilities. Invest in acquiring and maintaining adequate hardware and software resources necessary for effective technology integration. Establish readily accessible and responsive technical support services to assist faculty in resolving any technology-related issues.
4. **Design Flexible and Accessible Professional Development Opportunities:** Offer a variety of professional development formats, including online learning modules, interactive workshops, peer mentoring programs, and blended learning options. This will accommodate the varying time constraints and learning preferences of lecturers, maximizing participation and engagement.
5. **Focus on Pedagogical Integration (TPACK):** Emphasize the importance of integrating technology thoughtfully with effective teaching practices and relevant content knowledge. Training should go beyond basic software usage to explore how technology can transform pedagogy and improve student learning outcomes, aligning with frameworks like TPACK.
6. **Promote Digital Literacy:** Provide comprehensive training and readily available resources to enhance lecturers' overall digital literacy skills. This should include modules on information evaluation, effective online communication strategies, and the ethical use of digital technologies in academic settings.
7. **Foster a Community of Practice:** Create platforms and facilitate opportunities for lecturers to connect, share their experiences with technology integration, collaborate on relevant projects, and learn from each other's successes and challenges. This can be achieved through regular meetings, online forums, or collaborative project initiatives.
8. **Provide Incentives and Recognition:** Implement a system of incentives to encourage lecturers' participation in capacity development programs and their innovative integration of technology in their teaching and research. This could include professional development credits, small grants for technology-enhanced projects, or formal recognition during promotion and tenure reviews.
9. **Ensure Strong Leadership Support:** Secure unwavering commitment and allocate necessary resources from university leadership to prioritize and actively support capacity development and IT integration initiatives. Leadership should champion these efforts and clearly communicate their importance to the entire faculty.
10. **Consider Cultural and Institutional Factors:** Tailor all strategies and programs to align with the specific cultural context of Kendari City and address the unique institutional challenges and opportunities within the private universities. This includes being mindful of communication styles, cultural norms, and existing institutional structures.
11. **Implement a System for Ongoing Evaluation and Improvement:** Establish a robust system for regularly assessing the effectiveness of capacity development programs and IT integration efforts. Utilize a variety of metrics related to lecturers' technological proficiency, observed changes in teaching practices, research output, and student learning outcomes. Gather feedback from participating lecturers to continuously improve the relevance and impact of these initiatives.

## 11. Conclusion: Empowering Kendari City's Private University Faculty for the Digital Age.

The imperative for capacity development and the strategic integration of information technology for private university lecturers in Kendari City is undeniable for the continued success and relevance of these institutions. This report has highlighted the importance of understanding established models of capacity development, the crucial role of IT within these frameworks, and the specific context of Indonesian private universities, particularly in Kendari City.



The analysis reveals that while various capacity development models offer valuable frameworks, the effective integration of information technology requires a holistic approach that considers pedagogical principles, digital literacy, and the unique cultural and institutional landscape. Challenges such as infrastructure limitations, time constraints, and varying levels of digital proficiency need to be addressed through targeted and well-designed initiatives.

The strategic recommendations outlined in this report provide a roadmap for private universities in Kendari City to enhance their lecturers' capacity and IT skills. By conducting thorough needs assessments, developing multi-tiered programs, investing in infrastructure, and fostering a supportive community of practice, these institutions can empower their faculty to excel in the digital age. The potential impact of a digitally proficient and highly capable faculty is significant, promising to enhance the quality of education, boost research output, and ultimately contribute more effectively to the development of the region.

In conclusion, the journey towards empowering Kendari City's private university faculty for the digital age is an ongoing process that requires continuous adaptation and innovation. By embracing the opportunities presented by information technology and prioritizing the professional growth of their lecturers, these universities can solidify their position as vital contributors to the intellectual and economic development of Kendari City and beyond.

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