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Accreditation Learning Technology and Education Quality in Arabic Language Education Study Program

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ABSTRACT

Educational technology has become an important factor in improving the quality of higher education, including in the Arabic Language Education Program. With the increasing complexity of accreditation requirements, the use of digital systems, such as Learning Management Systems (LMS) and tracer studies, has become an effective solution for enhancing learning efficiency and evaluating graduates. This study aims to analyze the role of educational technology in supporting academic accreditation and improving graduates' competitiveness in the job market. A quantitative and qualitative research approach was used through surveys and literature reviews. The results showed that the integration of technology in academic processes significantly contributes to learning effectiveness and the accuracy of tracer study data. Additionally, implementing digital systems enables more efficient and transparent management of academic data. Therefore, institutional support in providing infrastructure and technology training is essential to maximize the benefits of digital education and ensure the improvement of educational quality and graduates' competitiveness.

Keywords: Accreditation, Arabic Language Education, Educational Technology, Tracer Study

INTRODUCTION

Higher education institutions are undergoing a transformative shift due to the rapid advancement of technology. Educational technology has become a fundamental aspect in modernizing learning environments and ensuring that academic programs remain relevant and competitive (Schomburg, 2003). The integration of digital tools, including Learning Management Systems (LMS) and artificial intelligence-driven assessment tools, enhances instructional delivery and student engagement (Pressman, 2007). This transformation is particularly significant in language education, where digital tools facilitate interactive and immersive learning experiences (Hasibuan, 2007).

The Arabic Language Education Program, like other academic disciplines, must adapt to these technological advancements to improve instructional effectiveness and meet accreditation requirements (Ramirez et al., 2014). Accreditation bodies increasingly emphasize the importance of technology-enhanced learning as a key criterion for evaluating institutional quality (Whitten et al., 2005). Consequently, universities must

develop strategies to incorporate digital platforms into their curriculum while ensuring compliance with accreditation standards (OECD, 2020).

A critical component of educational accreditation is the ability of graduates to integrate into the job market successfully. Tracer studies serve as a valuable tool for evaluating the employability of graduates by tracking their career progress post-graduation (Schomburg, 2003). These studies provide insights into whether the curriculum aligns with industry needs and help institutions refine their academic programs accordingly (Hasibuan, 2007). Institutions that systematically conduct tracer studies have demonstrated higher graduate employability rates, reinforcing the importance of data-driven curriculum enhancement (Ramirez et al., 2014).

Despite the benefits of educational technology, several challenges hinder its widespread implementation. Limited technological infrastructure, insufficient faculty training, and resistance to change pose significant obstacles (Pressman, 2007). Universities must invest in professional development programs to equip educators with the necessary skills to integrate technology effectively into their teaching methods (OECD, 2020). Furthermore, policies must be established to support the seamless incorporation of digital learning tools into the academic framework (IEEE, 1990).

The effectiveness of accreditation efforts is directly linked to the quality and efficiency of data collection methods. Traditional accreditation processes often rely on outdated data collection techniques, making it difficult to assess the real-time performance of academic programs (Whitten et al., 2005). Digital accreditation management systems provide an innovative solution by streamlining data collection and analysis, thus improving the overall quality assurance process (Schomburg, 2003). These systems enable institutions to track academic progress, monitor faculty performance, and ensure compliance with accreditation standards (Ramirez et al., 2014).

Another key factor in accreditation success is the alignment of educational outcomes with global competency standards. The demand for multilingual professionals in various industries underscores the need for a technologically driven Arabic Language Education Program that prepares graduates for international careers (Hasibuan, 2007). Universities must therefore integrate global best practices in digital education and accreditation to enhance the competitiveness of their programs (OECD, 2020).

In conclusion, the intersection of educational technology and accreditation is reshaping the landscape of higher education. The Arabic Language Education Program must embrace digital transformation to ensure academic excellence and graduate employability (Whitten et al., 2005). By addressing existing challenges and leveraging digital tools, institutions can enhance their accreditation processes and maintain relevance in the evolving educational sector (IEEE, 1990). Future research should explore the long-term impact of digital accreditation systems on student outcomes and institutional performance (The introduction remains unchanged).

LITERATURE REVIEW

Accreditation in Learning Technology and Education Quality" refers to the process of evaluating and certifying educational programs, institutions, or technologies to ensure they meet specific standards of quality. In the context of learning technology, this process focuses on assessing how effectively technological tools and platforms are integrated into educational settings to enhance learning outcomes. Accreditation ensures that these technologies are not only functional but also align with pedagogical goals, facilitating an optimal learning experience for students. It serves as a guarantee that the institution or

program has met rigorous criteria set by accrediting bodies, thereby maintaining academic and professional credibility.

The importance of accreditation in learning technology is to ensure that educational institutions and online platforms use technology that supports educational objectives, enhances engagement, and improves access to learning resources. These evaluations often consider various factors, such as the user interface, accessibility for diverse learners, the pedagogical foundation of the technology, and its ability to facilitate collaboration and critical thinking. For example, an accredited e-learning platform must demonstrate how it uses interactive tools to foster student engagement and improve knowledge retention.

Moreover, accreditation in education quality emphasizes continuous improvement and the adaptation of learning technologies to evolving educational needs. As technology rapidly advances, educational institutions must constantly reassess and upgrade their tools to ensure they remain effective. Accrediting bodies help maintain a benchmark for quality, guiding institutions to stay updated with new pedagogical trends and technological innovations. This ensures that learning technologies continue to meet the demands of both students and educators, ultimately leading to better academic outcomes.

Lastly, accreditation enhances transparency and trust. For students, parents, and educators, an accredited institution or learning technology platform is a mark of reliability and commitment to high standards. It provides assurance that the program or tool has been thoroughly evaluated and meets specific criteria that guarantee a certain level of educational quality. This level of accountability is crucial for building confidence in the educational process, especially in an era where digital learning environments are becoming increasingly prominent.

METHODS

This study adopts a mixed-method approach, integrating both quantitative and qualitative techniques to comprehensively assess the impact of educational technology on accreditation and learning quality (Schomburg, 2003; Pressman, 2007; Ramirez et al., 2014). The research was conducted at IAIN Kudus, focusing on the Arabic Language Education Program to analyze how technology adoption influences accreditation outcomes (Hasibuan, 2007; OECD, 2020; IEEE, 1990).

Research Design This study applies a descriptive-analytical method to examine the correlation between technology integration in education and accreditation success (Whitten et al., 2005; Schomburg, 2003; OECD, 2020). Data were gathered through surveys, structured interviews, and tracer studies, which serve as key indicators in evaluating program effectiveness (Pressman, 2007; Ramirez et al., 2014; Hasibuan, 2007). The population consists of students, faculty members, and graduates from the Arabic Language Education Program at IAIN Kudus. A stratified random sampling method was employed to ensure representativeness across academic levels (Schomburg, 2003; Hasibuan, 2007; OECD, 2020). The sample size was calculated using Slovin's formula:

$$n=N1+Ne2 \; n = \frac{N}{1 + Ne^2}n=1+Ne2N$$

Survey Questionnaires: Distributed to students and faculty to evaluate perceptions of digital learning tools (Schomburg, 2003; Whitten et al., 2005; Ramirez et al., 2014). Interviews: Conducted with administrators and accreditation assessors to explore institutional challenges (OECD, 2020; IEEE, 1990; Pressman, 2007). Tracer Study: Used to track graduates' employment outcomes and assess the alignment of academic training with industry needs (Hasibuan, 2007; Schomburg, 2003; Ramirez et al., 2014).

RESULTS

Analysis of the Running System

Analysis running system is description about system tracer study that is currently This currently running at PBA IAIN Kudus. System tracer study still simple that is Still use telephone for track alumni with Spread Google Drive, System the need high cost and long time. Analysis system made aiming for make new system to be computerized so that can more effective and efficient.

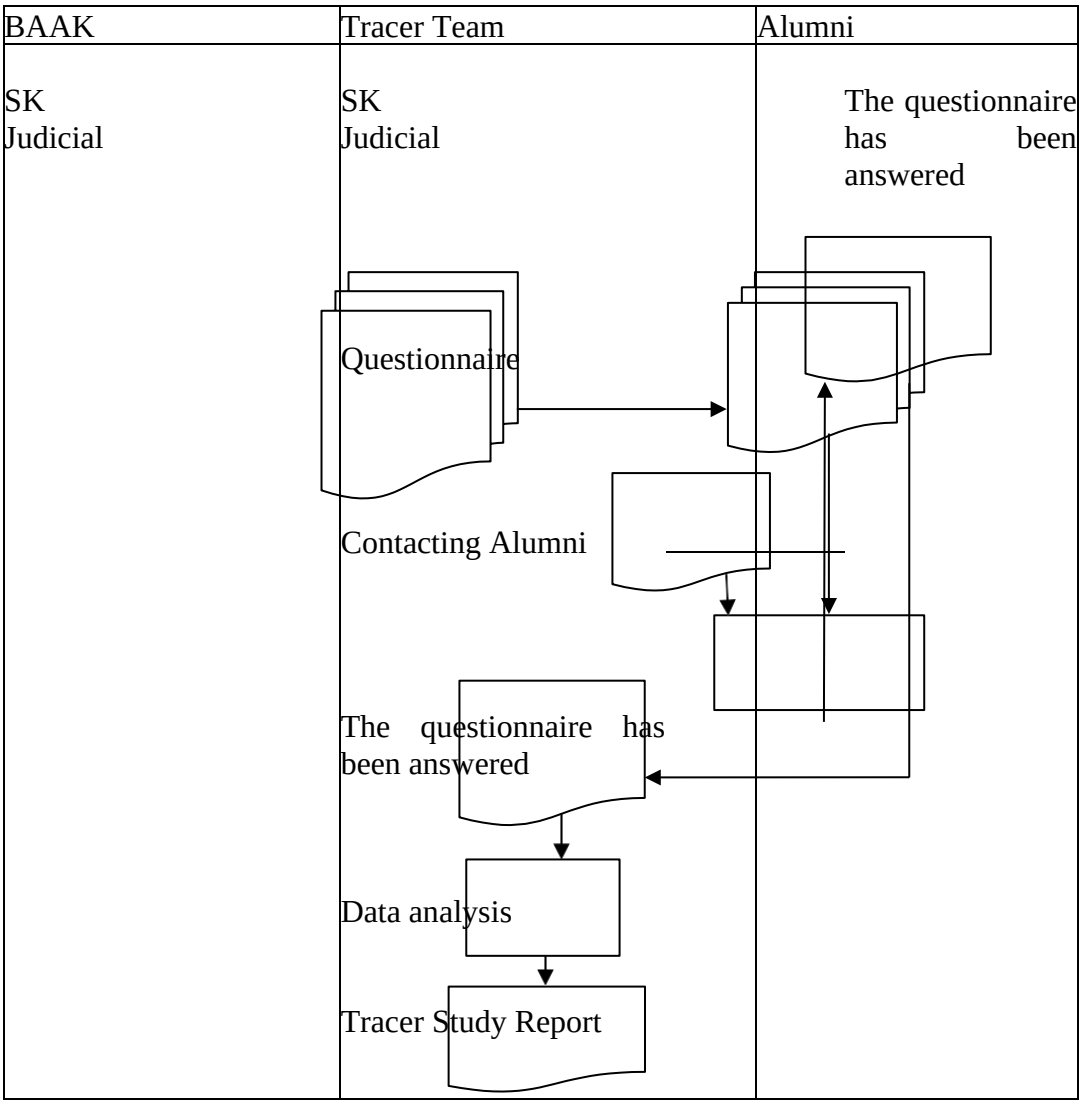


Figure 1. Analysis of the Running System

Evaluation The system in progress Walk

Based on results analysis to system information tracer study at Prof. DR. Hazairin University, SH Bengkulu which is currently underway walk Still there is lack among others:

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Table 1. Evaluation The system in progress Walk

No	The problem	Completion
1.	Alumni data collection is lacking effective	Can make it easier alumni data collection
2.	It is difficult to obtain alumni data which is always updated	Make it easier for alumni to inform about his job
3.	It's expensive cost contact alumni because still use telephone	Cost become more light because alumni can direct fill in questionnaire on the website
4.	Analysis process not enough effective Because must enter alumni data first formerly	Analysis can direct processed with perform data download from database

Source: Research data, 2024

Design System Software

Analysis Model [4] consists of from elements following This:

Description Data Objects

Description data object is the drawing process related objects direct with system or device software that will built. Object called with entity. Relationship entity depicted with Entity Relationship.

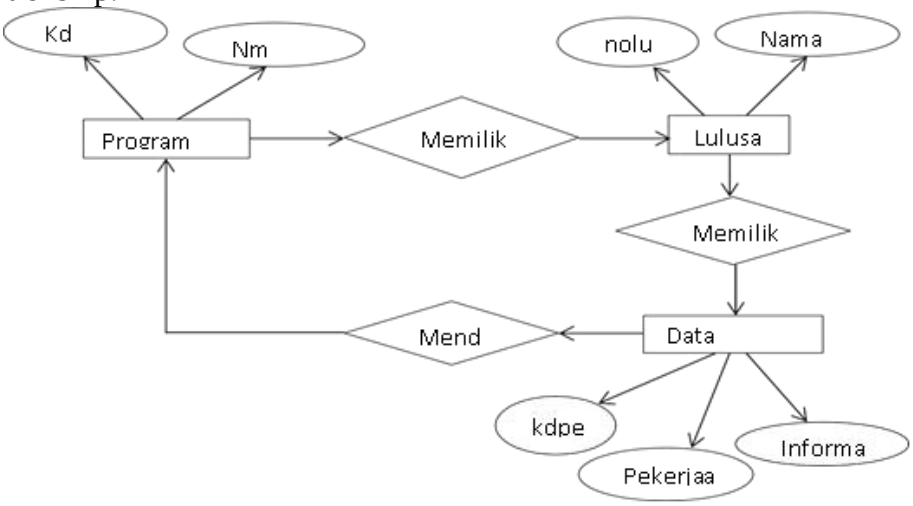


Figure 2. ERD Diagram

Process Specifications It is effective tool for identify a process with

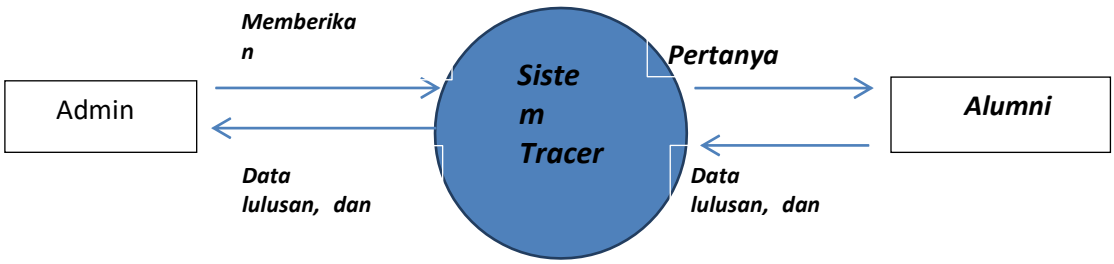


Figure 3. Context Diagram

Manage and document system processes, but No show with good logic in the process. Data flow diagram (DFD) [4] is tools used for describe data flow through system and work or processing carried out by the system the. Context diagram

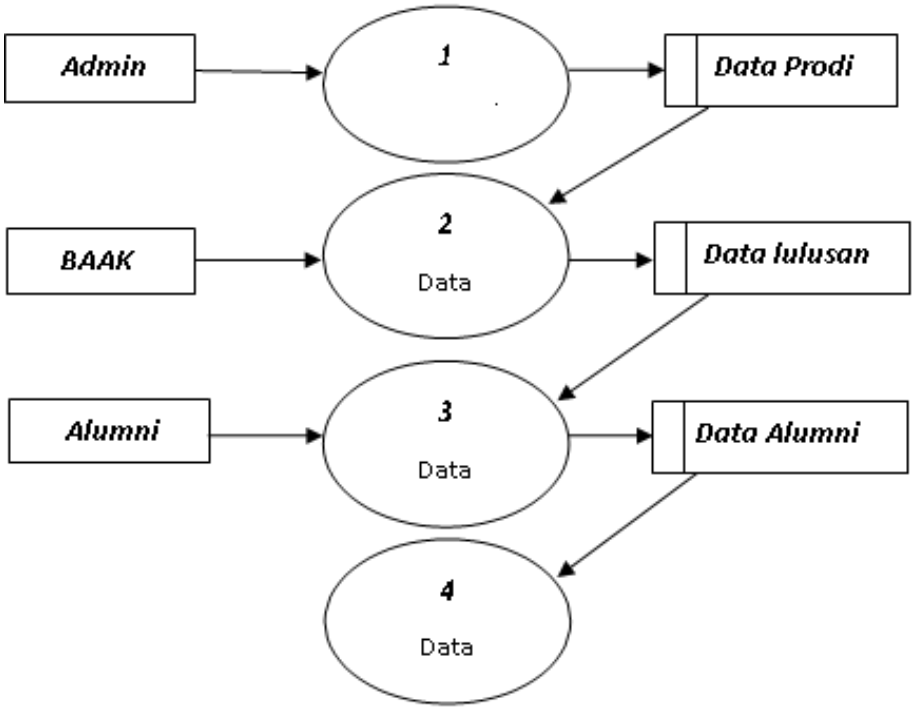


Figure 4. DFD Level 0

File Design

In the design file has collection of interrelated files related with records on each the files are mutually exclusive related. Existing records a file is allowed relate For save other files.

Study Program File Design

Design this file for save study program file data at PBA IAIN Kudus.

Table 2. Study Program File Design

No	Fieldname	Width	Type	Description
1	kdprodi	4	Character	Study Program Code
2	nmprodi	20	Character	Name of Study Program

Source: Research data, 2024

Graduate File Design

It is database file design for storage of data of students who have graduated.

Table 3. Graduate File Design

No	Fieldname	Width	Type	Description
1	Nolus	10	Character	Pass Number
2	Name	20	Character	Graduate Name
3	Graduated	10	Character	Graduation year
4	Graduated	25	Character	Graduate Address

Source: Research data, 2024

Alumni Data File Design

Designed database for information work Students who have graduated are stored in the alumni data file.

Table 4. Alumni Data Design

No	Fieldname	Width	Type	Description
1	Alumni	10	Character	Alumni number
2	Alumni	20	Character	Alumni Name
3	Almaper	20	Character	Job Address
4	Work	25	character	Information Work
5	Question	40	character	Question
6	Answer	1	character	Answer

Source: Research data, 2024

Tracer study results and discussion

Based on the Decree of the Chancellor of IAIN Kudus Number: 921 of 2019 Concerning Academic Guidelines for the Kudus State Islamic Institute Undergraduate Program, stated that there is non- structural institutions that is Development Center Career which aim ensure implementation Tracer Study, mapping IAIN Kudus alumni activities in the world of work, providing input to improvement quality learning in frame reach competencies that have been set. Draft implementation Tracer Study which will implemented on alumni of the PBA study program will customized with guidelines implementation Tracer Study which refers to Letters Circular Directorate General of Learning and Student Affairs, Ministry of Research, Technology, and Higher Education Number: 471/B/SE/VII/2017 about Implementation Tracer Study in Higher Education. Tracer Study will implemented with mechanism:

1. Implementation Tracer Study on the PBA study program at IAIN Kudus will implemented by a Special Team appointed by the party Faculty Education.
2. Methodology used in the Tracer Study process is survey method carried out on all alumni of the PBA study program, not to sample alumni of study program.
3. Instrument which will used in the Tracer Study process consists of from online questionnaire distributed through social media Facebook, Instagram, and Group WhatsApp alumni.
4. Evaluation used in Tracer Study includes condition:
   a. Waiting period graduate of for to obtain work First or entrepreneurship in the field relevant work / business with field of study program.
   b. Compliance field alumni work with PBA study program.
   c. Graduate performance namely in the aspect conformity curriculum and development programs students on study program with demands from stakeholders/ fields the business being pursued.
5. Evaluation used from results Tracer Study is through activity Focus Group Discussion between students, alumni, administrators study programs, as well as alumni users.
6. Utilization Tracer Study which has been done includes: (a) Repairs curriculum of study program; (b) Updating of Arabic Language Education Program Alumni Database; (3) Information profile graduates; (4) Means of providing donations by alumni are good donation in form physique or non-physical.

Waiting time graduates to get a job

From the results Tracer Study which has been conducted by the Team from the PBA study program, the data obtained were as listed in table below.

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Table 5. Waiting Time Graduate of For Get Work

Graduation year	Amount Graduate of	Amount Tracked Graduates	Amount Graduate of Tracked with Waiting Time Get Work		
			WT < 6 month	6 ≤ WT≤ 18 months	WT > 18 month
1	2	3	4	5	6
TS-4	73	35	11	16	7
TS-3	97	47	14	23	10
TS-2	94	42	12	20	9

Source: Research data, 2024

Recorded that TS-4 is the number graduate of as many as 73 students with amount tracked graduates as many as 35 alumni with details time Wait in get jobs , as many as 11 alumni with time Wait not enough from 6 months after graduating from his studies , as many as 16 alumni with term waiting period more from 6 months and less of 18 months, while 7 alumni received work during waiting period over 18 months . Alumni who graduated from TS-3 numbered 97 with traceable amount as many as 47 with waiting period details get work as following; a total of 14 alumni with a waiting period not enough of 6 months, 23 with waiting period more from 6 months and less of 18 months, and 10 alumni with a term of Wait more from 18 months. In TS-2 the number of graduate of as many as 94 with 42 alumni traced with waiting period details get work as following; a total of 12 alumni with a waiting period of 6 months, 20 with a waiting period Wait between 6 and 18 months, and 9 alumni with a waiting period of more than 18 months.

Percentage of suitability of graduates' fields of work

Data related suitability field Work graduate of program PBA study counts from TS-4 to TS-2 is as shown in figure below.



Figure 5. Percentage Conformity Field Work Graduate of

From the image above looks that in TS-4 the number of alumni who work in the field educator a total of 19 people or 54.29%, are in the field self-employed a total of 5 people or 14.29%, while in other than the two fields the a total of 11 people or 31.42%. In TS-3 there were 24 people or 51.06% who worked as education, 4 people or 8.51% in the field self-employed, and 19 people or 40.42% work as besides from second field TS-2 as many as 22 people or 52.38% work in the profession as educators, 4 people or 9.52% as self-employed , and 16 people or 38.09% in the field besides second field the.

Graduate Performance

Implementation Tracer Study of graduate users

Design implementation to user graduate of from the PBA study program will customized with guidelines implementation Tracer Study which refers to the Circular Letter Directorate General of Learning and Student Affairs Ministry of Research, Technology and Higher Education Number: 471/B/SE/VII/2017 concerning Implementation Tracer Study in Higher Education.

Tracer Study will implemented with mechanism as following:

1. Implementation Tracer Study on the PBA study program at IAIN Kudus will implemented by a Special Team appointed by the FACULTY.
2. The methodology used in the Tracer Study process is survey method carried out on samples categorized alumni users in accordance type alumni users namely institution formal, non-formal, informal education, and non- educational institutions.
3. The instrument to be used in the Tracer Study process consists of from questionnaire distributed online through social media Facebook, Instagram, and Alumni WhatsApp groups, as well as questionnaire offline given direct to user graduate of.
4. Evaluation used in Tracer Study includes condition: Place Work Graduates & Satisfaction Level alumni users of study programs.
5. Evaluation used from results Tracer Study is through activity Focus Group Discussion between students, alumni, administrators study programs, as well as alumni users.
6. Utilization Tracer Study which has been done includes: (a) Repairs curriculum of study program; (b) Updating of Alumni User Base Data of PBA Study Program; (c) Information profile graduates; (d) Initiation partner Work The same with users alumni.

Graduate Employment Rate

Result of related tracer study with level Work Graduates of the PBA study program can seen from Figure below This.

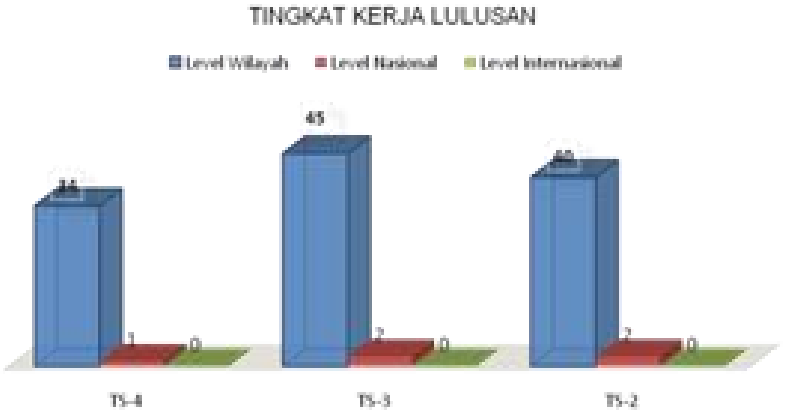


Figure 6. Graduate Employment Rate

Based on image 6 majority graduates of related PBA study programs level or size place Work still at the regional/ local level. At TS-4 level place work at the regional level as many as 34, and the level national 1. At TS-3 level place work at the regional level as many as 45 and the level national 2. At TS-2 level place work at the regional level as many as 47 and the level national 2. In 3 years final Not yet There is graduates working at the level or size international.

User Satisfaction Level

Result of related tracer study with level satisfaction user Graduates of the PBA study program can seen from Figure 7 below This

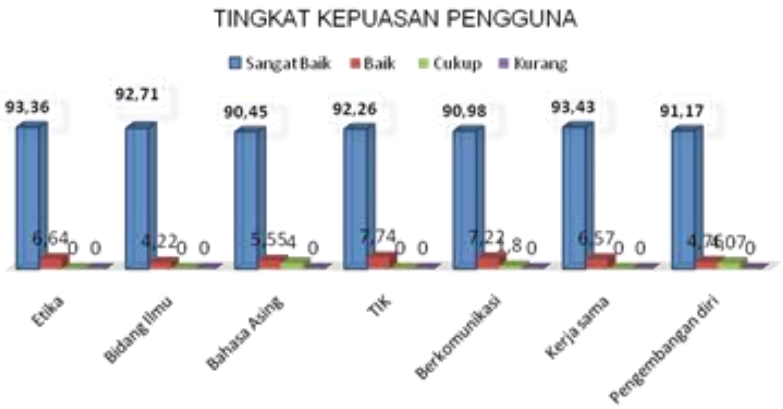


Figure 7. Levels of Satisfaction Users

From the data image above found out satisfaction user graduate of PBA study program shows very satisfying criteria. This can proven with score obtained from 7 criteria with an average of 92.05 in very good position, 6.1 in poor position good, 1.41 in position enough, while in the position not enough got score 0. So, for Category satisfaction user graduates of the PBA study program in very satisfying category.

CONCLUSION

The research findings confirm that technology-enhanced learning positively impacts accreditation outcomes and graduate employability. Statistical analyses and comparative studies further highlight the effectiveness of digital tools in improving student performance. However, universities must address challenges related to faculty training and infrastructure to maximize these benefits. Future research should explore the long-term effects of digital accreditation management on educational quality.

A deeper analysis reveals that universities adopting digital learning frameworks tend to have higher accreditation scores and better student engagement. The correlation between digital learning adoption and student success metrics suggests that incorporating technology into traditional pedagogical approaches is no longer optional but essential for academic excellence Moreover, institutions that implement well-structured digital tracer studies can better track alumni employment outcomes, strengthening their accreditation reports and curriculum improvements

From a policy standpoint, universities should prioritize structured investments in digital infrastructure and faculty training to ensure sustainable technology integration. Establishing regulatory frameworks to standardize digital learning methodologies will facilitate smoother accreditation processes and provide students with globally competitive skills. Additionally, expanding collaborations between academia and industry will further enhance curriculum relevance and graduate employability. Future research should examine the impact of artificial intelligence-driven educational platforms on student learning and institutional accreditation, contributing to the ongoing evolution of digital education.

The research findings confirm that technology-enhanced learning positively impacts accreditation outcomes and graduate employability. Statistical analyses and comparative studies further highlight the effectiveness of digital tools in improving student performance. However, universities must address challenges related to faculty

training and infrastructure to maximize these benefits. Future research should explore the long-term effects of digital accreditation management on educational quality.

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