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## **Tracer Study Model in User Satisfaction Graduates Postgraduate Iain Purwokerto Juncto Uin Prof. K.H. Saifudin Zuhri Purwokerto**



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**ABSTRACT:** Tracer study is a study that traces graduates about their work in the world of work and society. The results of the tracer study describe the quality of higher education and are used as feedback to improve the quality of education. However, the tracer study encountered various obstacles due to the presence of graduates who spread across various agencies and regions. Therefore, a tracer study system is needed that can minimize these obstacles. In this study, a web-based tracer study conducted at UIN SAIZU will be studied with a waterfall model. The method used in this research is field research. Data collection techniques were carried out by observation, in-depth interviews with graduate informants and graduate users, documentation, and training. The data analysis technique used the Miles and Huberman method with the stages of data reduction, data presentation, and verification. The results of this study found that the tracer study using the web-based waterfall model became more effective and efficient. The information collected is systematic and tiered with real time, structured, and integrated data. Other results are the views of graduates who express their satisfaction with the implementation of postgraduate education and services at UIN SAIZU and the satisfaction of graduate users on the performance of UIN SAIZU graduates.

**KEYWORDS:** Tracer study, waterfall model, graduate user views

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### **A. INTRODUCTION**

The implementation of education in higher education has the responsibility not only to produce graduates who understand and master knowledge and technology, but are also able to synergize and contribute to national development and increase self-capacity. The achievement of educational goals is shown by alumni activities that contribute to national development and capacity building in the world of work (Rasiman et al., 2014). Postgraduate UIN SAIZU as one of the universities in Indonesia is committed to producing a superior generation, with good morals, and professionals in the development of integrative-Islamic sciences so that they are known and received national and international recognition, and are able to implement Islamic values so that they can realize a civil society. Islamic and civilized values.

Based on the Circular of the Directorate General of Learning and Student Affairs Number 471/SE/2017, universities are expected to have information about graduates related to their uptake and position in the world of work (Cahyo Nugroho & Nugroho, 2018). This information is collected through a tracer study known as a tracer study. Tracer study according to Cuadra, et al is an alumni tracking study that can provide information about the whereabouts, occupations and status of alumni (Cuadra et al., 2019) The results of the tracer study are used as feedback and evaluation by universities on medium and long-term programs in an effort to improve the quality of education (Kalaw, 2019).

Gathering information through tracer studies is not easy because the graduates have spread across various agencies and regions. The difficulty of collecting data results in the difficulty of universities conducting evaluations and reflections due to the lack of data as a reference for improvement (Diana & As'ad, 2017) so that an effective and efficient tracer study model is needed. This is where the tracer study was carried out considering the importance of providing information by universities as well as material for accreditation. Postgraduate of UIN SAIZU conducted a web-based tracer study with a waterfall model. The web system in the opinion of Bakti, et al has advantages such as making it easier for graduates to provide and obtain information related to alumni and campus activities as well as optimizing the results of tracer studies because the data obtained is real time, structured, and integrated. (Bakti et al., 2017), while the waterfall model is a systematic and tiered information collection model (Bakti et al., 2017) With this tracer study model, it is hoped that universities can obtain accurate results as material for evaluation, reflection, and contribution to the development and improvement of the quality of higher education.

This research will complement Nasuha and Siahaan's research which only describes the advantages of the tracer study model using the web system at IAIN Sulthan Thaha Saifuddin Jambi (Nasuha & Siahaan, 2016). This study will present the results of the

tracer study in the form of the views of graduates and users of UIN SAIZU postgraduate graduates. The views of graduate users are important in tracer studies because the satisfaction of graduate users can provide an overview of the good and bad performance of graduates (Diana & As'ad, 2017). As the opinion of Daigle & Cuocco quoted by Sukrisno that the indicator of the quality of higher education is the satisfaction of graduate users, namely when graduates have competencies that are in accordance with standards that have been determined by graduate users (Sukrisno, 2011).

Based on the explanation above, this research will examine a web-based tracer study with a waterfall model and the results of the tracer study in the form of the views of graduates and users of postgraduate graduates at UIN SAIZU Purwokerto as reflection and evaluation material for improving the quality of education.

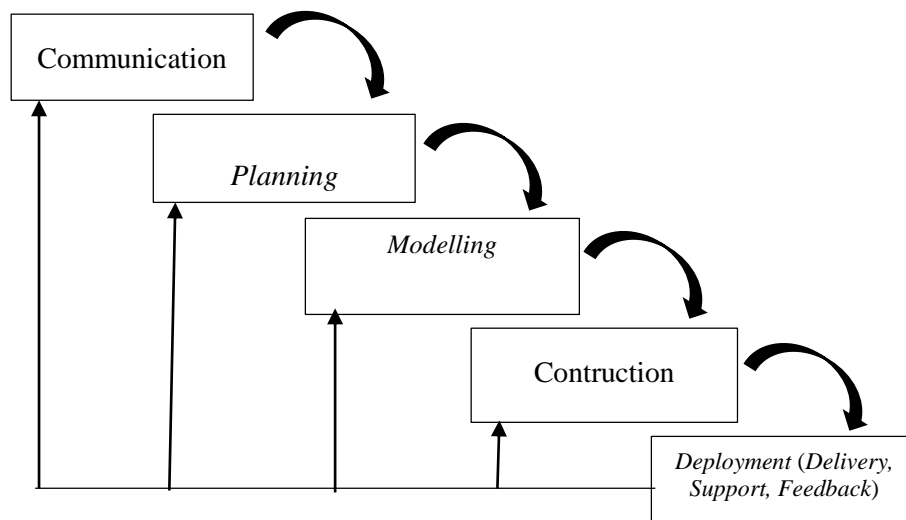
## **B. METHOD**

The research method used in this study is field research, namely collecting data directly from respondents (Suryabrata, 2010) with a focus on web-based tracer studies, views of graduates and users of postgraduate graduates of UIN SAIZU Purwokerto. Data collection techniques were carried out through observation, in-depth interviews, and documentation. The informants in this study were graduates and users of postgraduate graduates of UIN SAIZU Purwokerto. The data analysis technique uses the Miles and Huberman model which includes three stages, namely data reduction, the researcher sorts the collected data related to the tracer study, the views of graduates and graduate users and discards unnecessary data. Presentation (data display), researchers present important data related to the focus of research in the form of narrative text so that it is easy to understand. Conclusion drawing/verification, the findings obtained will be concluded to provide information, evaluation, and recommendations for improving education implementation.

## **C. RESULTS AND DISCUSSION**

### **1. Web Based Tracer Study with Waterfall Model**

The postgraduate tracer study at UIN SAIZU Purwokerto is conducted on a web-based basis. The World Wide Web (www) or referred to as the web can make it easier for users (users) to store and manage various information related to student affairs and graduation more effectively and efficiently. Web information is distributed via a hypertext approach, allowing a short text to be the basis for opening other documents. By using the hypertext approach one can obtain information by jumping from one document to another (Sutanto et al., 2020) The system design uses a software development process model, namely the waterfall model. The model in the manufacture of information systems is used as a reference during the system creation process (Sutanto et al., 2020).



**Figure 1. Waterfall method**

The stages of a web-based tracer study with the waterfall model are as follows:

#### **a. Communication**

Communication is carried out to determine and equalize the understanding between UIN SAIZU postgraduates and graduates in order to achieve the goals. Not only that, through communication, topic specifications are also obtained to analyze the problems encountered in collecting materials and the required data related to job profiles, views of graduates and graduate users so that they can determine application features and functions. The collection of additional data in this tracer study was obtained through communication with various agencies in the socialization program, institutions using graduates, stakeholders. The communication stages are taken through New Student Admissions (NSA), Forum Group Discussions (FGD) organized by the campus by involving graduates and building communication through the official postgraduate website of UIN SAIZU, social media, WhatsApp groups

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and personally by the head of study programs and supervisors. Komunikasi dilakukan dengan menelusuri lulusan berdasarkan *database* akademik pascasarjana IAIN Purwokerto tahun 2019-2021 untuk kemudian berkomunikasi dengan memanfaatkan data lulusan yang ada seperti alamat tinggal, nomor *handphone* yang dapat dihubungi, nomor *WhatsApp* aktif serta email aktif. Tim juga melakukan komunikasi dengan *SMS gateway* melalui kontak pribadi. Pesan SMS dikirimkan beberapa kali melalui perangkat lunak/PC maupun telepon genggam pada pusat pesan yaitu *Short Message Service Center (SMSC)*. Melalui data tersebut, tim menyampaikan informasi yang hendak didapat dari lulusan untuk kemudian dijadikan sumber data penelitian.

### b. Planning

The planning stage aims to adjust the design to the system to be built (Antares et al., 2021a) Through planning, estimation of the tasks to be carried out, the possible risks that occur, the ability of human resources in forming the system, performance results, scheduled performance planning to the tracing process in a system can be known and formulated by the team. The planning stage is carried out by making a tracer study flow to make it easier for researchers to conduct searches.

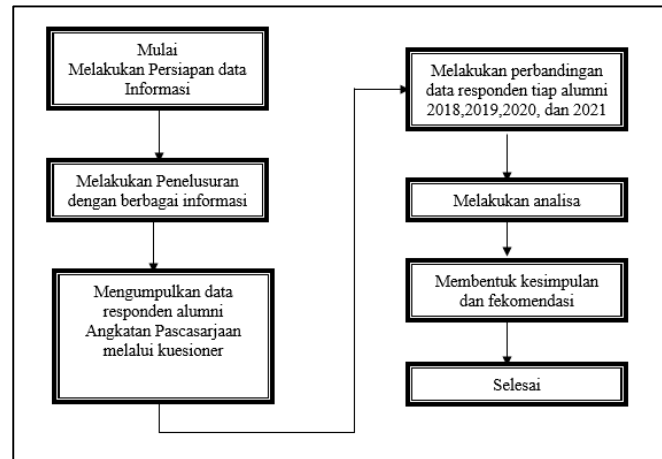


Figure 2. Tracer study flowchart

At this stage, anticipatory planning for incoming information is also carried out. The form of information collected as a whole is processed by the admin flexibly by adding, reading, changing or deleting. Questionnaire data related to tracer studies filled out by graduates are then stored in a database. This process is expected to continuously update information related to graduates. Therefore, data collection for graduate graduates of UIN SAIZU is carried out periodically.

### b. Designing/ modeling

The design stage is the formation and modeling of the system architecture/layout that focuses on designing the contents of the data structure, the form of the display in the software, the interface display to the program algorithm. This is done to make it easier to understand the picture that has been included in the data. Collecting information from graduates using an instrument in the form of a questionnaire. The development of the questionnaire is adjusted to the needs of accreditation because accreditation acts as an external control on the quality of education (Sukrisno, 2011)



Figure 3. IAIN Purwokerto postgraduate website “survey” section

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The tracer study instrument in the form of a questionnaire made an online version and uploaded on the postgraduate page of IAIN Purwokerto <http://pps.iainpurwokerto.ac.id/> Each category is set into one sheet with a total of 12 questions in the form of essays and multiple choice. Google forms are set with the activation of the "required" button so that graduates must fill out each question completely. Forms that are not completely filled in cannot be submitted.

The figure displays three overlapping screenshots of the online questionnaire. The top screenshot shows the title page with the text: "Kuesioner Tracer Study Pascasarjana UIN Prof.K.H.Saifudin Zuhri Purwokerto Lulusan 2019,2020,2021 (IAIN Purwokerto)". Below the title, there is a greeting and a request for participation. The middle screenshot shows a question: "1. Bagaimana Persepsi anda tentang layanan Akademik di Pascasarjana tempat anda sebelumnya dalam menerima ilmu?". It has five radio button options: "Sangat Baik", "Baik", "Cukup Baik", "Kurang Baik", and "Tidak Baik Sama Sekali". The bottom screenshot shows a question: "1. Kapan status anda diterima bekerja?". It has two radio button options: "Setelah Lulus Kuliah" and "Sebelum Lulus Kuliah". Below it is another question: "2. Bagaimana anda mencari pekerjaan tersebut? Jawaban bisa lebih dari satu." with two checkbox options: "Melalui iklan di koran/majalah, brosur" and "Melamar ke perusahaan tanpa mengetahui lowongan yang ada".

Figure 4. Display of the Postgraduate Tracer Study Questionnaire of UIN SAIZU

### c. Construction

The construction stage is the process of forming a design into a code or language form that is read by the machine. After inputting a data is complete, then a test is carried out on the system that has been made to assess the performance results that have been made. If there is an error, it will be corrected immediately.

At this stage, changes are made to the pattern of website content structure when there is a change in campus status from IAIN Purwokerto to UIN Prof. K.H. Saifudin Zuhri (UIN SAIZU). The tracer study information collection page changed from [pps.iainpurwokerto.ac.id](http://pps.iainpurwokerto.ac.id) to [pps.uinsaizu.ac.id](http://pps.uinsaizu.ac.id). The tracer study was originally found in the academic section in the "survey" section, on the new website the tracer study was placed on the "information" menu in the "alumni vote" column. Not only that, several sections of information relating to graduates are equipped according to need. The results of the questionnaire via the web will record the data of the graduates so that the incoming data will be stored in a structured manner.

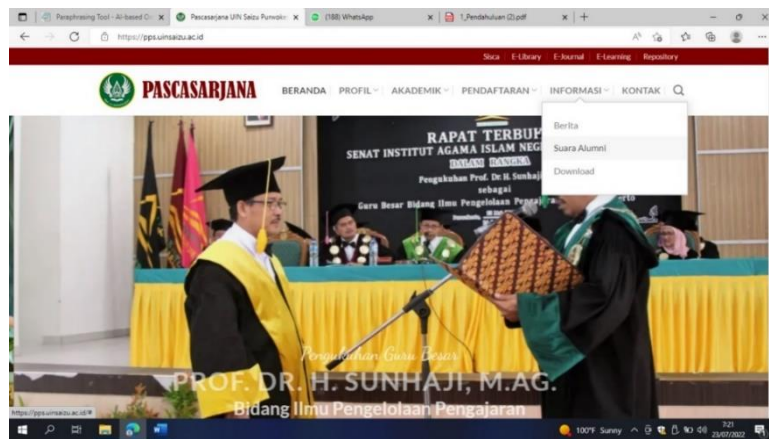


Figure 5. UIN SAIZU postgraduate website

Several improvements were made to the questionnaire to be later completed related to tracer study needs, including: (1) Postgraduate academic services; (2) Graduate advice on postgraduate academic services; (3) Graduates' responses to the learning process according to their respective study programs; (4) Employment status; (5) The way graduates get a job and the type of work; (6) The waiting period between graduation and getting a job; (7) The condition of graduates after completing their education; (8) Graduates' income with estimated income intervals that have been determined; (9) The suitability of the field of work with the education program pursued; (10) Curriculum conformity with the institution where graduates work; (11) Feedback from the institution where the graduate works..

d. Deployment (Delivery, Support, Feedback)

This stage is the implementation in software through the website for graduates and users of UIN SAIZU graduate graduates. Incoming data is used as feedback for evaluation and improvement of the quality of education. Actors in this web-based tracer study with the waterfall model are admins, graduates, and graduate users. Data collection is carried out by graduates and graduate users online through the UIN SAIZU postgraduate website in the form of a google form. Each respondent is required to have a Google account by registering and then filling out the registration form on the link provided. The respondent then verified the account by entering an active mobile number and an active google account. One of the advantages is that this Google account can be used to login to all Google applications such as YouTube, Google Drive, Google Play, Google Maps, and Google Forms.

A total of 48 graduates filled out online questionnaires. Most of these respondents are postgraduate graduates of IAIN Purwokerto who graduated under 2019 where the campus has not experienced a status transition with a total of 20 graduates under 2019; 3 graduates in 2019; as many as 15 graduates in 2020, while respondents who filled out IAIN had changed status to UIN SAIZU; 10 graduates in 2021. The implementation stage means applying the design/design to the components that have been prepared. The following is a tracer study research diagram in available applications.



Figure 6. Information on tracer study respondents

These results indicate that tracer studies using software and internet media are very helpful for UIN SAIZU postgraduates in fulfilling alumni information according to the needs to be achieved. This is in line with the opinion of Naasuha & Siahaan (2016)

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which states that information systems using the internet facilitate the dissemination of information to alumni and make it easier for alumni to access various alumni needs related to campus and student activities. (Diana & As'ad, 2017)

The results of the analysis of 48 respondents found that 3 graduates of the Master of Economics study program, 3 Masters of Islamic Broadcasting Communications, 7 Masters of Islamic Economic Law, 7 Masters of Islamic Education Masters of Education, 14 Masters of Islamic Education Management, and Masters of Education Islam as many as 14 graduates. The results of the tracer study can be displayed in statistical form so that it is easier to understand.



**Figure 7. Results of filling out surveys through online media/applications**

Based on the results of the tracer study, it was found that the graduates of MPAI (Megister of Islamic Religious Education) and MMPI (Megister of Islamic Education Management) filled out the most questionnaires. As the results of observations in the field, the two study programs are most in demand by the public. The third place is MPGMI (Master of Teacher Education for Madrasah Ibtidaiyah) followed by MKPI, MHES, and MES. The results of the tracer study provide information to universities that the interests and needs of the community at the postgraduate level are greatest in the field of education, namely MPAI, MMPI and followed by MPGMI.

Through this data, UIN SAIZU postgraduates get feedback regarding public interest in the postgraduate level and study programs needed by the community. This makes IAIN Purwokerto postgraduates more motivated to improve performance by preparing graduates more professionally and more oriented to the needs and demands of society. This is done so that graduate graduates of UIN SAIZU with many enthusiasts can take part in their field of education with good competence so that they can contribute positively to both the institution where they work and the community. In line with the opinion of Rusli and Ilyas quoted by Antares, et al, that the results of the tracer study are used as evaluation material and become a reference for improving and perfecting the quality of a university (Antares et al., 2021b)

*The tracer study must also contain information about the graduate's occupation. According to Nugroho & Nugroho (2018)* Graduate employment information is useful for knowing the uptake and position of alumni in the world of work. In web-based data collection at UIN SAIZU postgraduates, information on graduate employment includes the waiting time for graduates to get their first job after graduation. The data recorded in the system obtained 34 people or 70.83% of graduate graduates of UIN SAIZU had worked before completing their postgraduate studies, while the remaining 14 people or 29.17% got a job after graduating from college. The tracer study data informs that UIN SAIZU postgraduates have produced competitive and competent graduates according to the demands and needs of the community. This is in line with the opinion of Diana & As'Ad (2017) that competitive graduates can be demonstrated through the short waiting time to get their first job, being able to compete with other college graduates in selection, and the salary they get.

In addition to being able to monitor graduate achievement and career development, these results are also input for UIN SAIZU postgraduates to be able to develop policies in the implementation of education by evaluating the medium and long-term curriculum as well as various other aspects that can improve the quality of education, provide training, equip skills and knowledge that is more in line with the needs of the community (Kalaw, 2019) open a career development center that collaborates with relevant agencies that function to provide information and increase productivity and efficiency for graduates from the world of education to the world of work (Akareem & Hossain, 2016).

### 1. Graduates' View of Postgraduate UIN SAIZU Purwokerto

Nuryake, as quoted by Antares, et al, stated that alumni are products of educational institutions that can provide an illustration of whether or not the vision and mission of the institution concerned have been achieved. (Antares et al., 2021a) Therefore, graduates' views on the quality of education and postgraduate services are important in efforts to advance the institution so that it can be accepted by the community and graduate users. The results of Athiyaman's research found that a positive assessment of the perceived quality of higher education was a consequence of consumer (student) satisfaction. For students, the assessment of

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the quality of higher education is measured at each learning implementation meeting and when receiving educational and administrative services for a certain period, while the quality will be felt by students after graduation, namely when students become alumni (Athiyaman, 1997) So it can be concluded that the view of graduates towards higher education depends on the satisfaction they feel.

The tracer study carried out by the UIN SAIZU graduate related to the graduate's view of the campus is not only taken from the data recorded in the application, but also through interviews. This is intended so that the information obtained is credible so that the postgraduate of UIN SAIZU can determine the appropriate follow-up. One of the MPI study program students expressed his satisfaction with the quality of education and postgraduate services at UIN SAIZU. For him, UIN SAIZU postgraduate has lecturers who are competent in both the use of media and learning strategies. Not only that, the lecturers are also very patient in guiding students, especially for students who are elderly. The positive view of graduates towards UIN SAIZU postgraduates is supported by the opinion of Akareem & Hossain (2016) which states that the qualifications of academic teachers (lecturers) are one of the factors that influence the positive perceptions of students and graduates. His research reports that personal qualities and professional insight are the most significant factors to become an ideal lecturer. Personal qualities include personality qualities in general, friendly, leadership spirit, and other attitudes that reflect their profession. Meanwhile, personal qualities include the ability to master the material and didactic competencies, including knowledge of general insight/knowledge and skills as social agents.

Another student who took the MPGMI study program expressed his impression of the lecturer's teaching strategy which directly practiced the material being studied, namely making original learning media and then directly piloting it in schools. He added that postgraduate learning at UIN SAIZU is not only about transferring knowledge but also honing skills and experience. Based on the narratives of graduates, UIN SAIZU postgraduate educators have shown themselves to be effective lecturers in implementing learning programs. College is an opportunity for students to receive "preliminary" training before entering the real world of work (Akareem & Hossain, 2016) Through field practice, students are prepared to be able to face problems in the real world of work after graduating from college. Effective learning not only provides training but also provides teaching that provides work experience where the experience leads to problems in the world of work today and in the future.

A KPI graduate expressed his pride in acquiring scientific article writing skills at his campus. These skills are very useful when he enters the world of work. He also hopes that his writings can be widely useful for the community. The results of the tracer study provide information for UIN SAIZU Postgraduates who continue to strive to provide the best quality education for their students. One of them is the writing program and submitting scientific articles as a condition for taking the thesis exam. It begins with discussing and reviewing contemporary journals, so that students can learn something that is actual and factual. Students will then receive guidance through special training through the general stage and during the learning process. This makes UIN SAIZU postgraduates more enthusiastic in creating a quality campus atmosphere and scientific staff based on studies, producing professional research candidates who can provide benefits and progress for the country according to their scientific background. As in Sila's opinion, he expects universities to become agents of change and renewal in the implementation of knowledge and technology (Sila, 2017).

In another view, one of the students expressed his satisfaction with the guidance given by the Head of Study Program and his supervisor. He revealed that both the Head of Study Program and the supervising lecturer often invited students to discuss strategies for completing lectures on time. Before the lecture starts, the Head of Study Program also provides motivation and various inputs so that new postgraduate students are ready to receive lectures from lecturers. Various forms of education quality assurance are pursued by UIN SAIZU postgraduates to provide the best for their students. Kotler as quoted by Sila stated that one of the quality of higher education is academic advisory (academic guidance), namely assistance so that students can complete their studies properly and on time. This service is not only physical service, but can be in the form of human personal, spiritual, and various other psychological problems (Sila, 2017).

The satisfaction of postgraduate graduates of UIN SAIZU is not only felt with the quality of their education but also with the administrative services. The implementation of postgraduate services at UIN SAIZU carried out by the Director, Deputy Director, Head of Study Programs, and Secretary of Study Programs through administrative services. The results of questionnaires and interviews showed that the graduates expressed their satisfaction with the excellent service they received and supported the implementation of education. This can be seen from the results of interviews with HES graduate students who work as employees of the Cilacap Ministry of Religion, he expressed his satisfaction with the professional work of all educators and education staff at UIN SAIZU. He revealed that all components of UIN SAIZU were very friendly and proactive in providing information, asking students' needs and being responsive to problems faced by students. In line with Cuadra (2019), in his journal he reports that graduates believe that the quality of a university that provides satisfaction is demonstrated when the university shows behavior that is responsive to student needs.

A postgraduate graduate from Medan who received a lecture program from the Ministry of Religion gave a thumbs up for the postgraduate services of UIN SAIZU, which he considered not only to work professionally but also full of family. He found it helpful when looking for a place to live in Purwokerto. This makes graduates have a positive view of the services of UIN SAIZU.

His view is supported by the opinion of Athiyama (1997) that a good perception of higher education will have an impact on specific attitudes and positive transactions towards an institution.

In order to support the implementation of a good education, as a form of quality service to postgraduate students, UIN SAIZU prepares adequate facilities and infrastructure for students. Postgraduate UIN SAIZU provides wifi facilities, a discussion area in the campus area, air-conditioned classrooms, a large parking area and clean and comfortable toilets. The physical facilities owned by the UIN SAIZU graduate based on the results of the tracer study are considered satisfactory for graduates. However, some graduates still complain about the lack of smooth wifi available. The provision of facilities that support the learning needs of students is one of the efforts to improve the quality of higher education (Cuadra et al., 2019) Therefore, UIN SAIZU continues to improve to continuously improve facilities. One of them is by increasing the wifi network accompanied by other supporting facilities such as completeness and library services, and so on so that the implementation of learning can run as expected.

## 2. User's View of Graduates of UIN SAIZU Purwokerto

The tracer study conducted by UIN SAIZU's postgraduates involved graduate users to be asked for their views. This refers to the opinion of Daigle & Cuocco (Sukrisno, 2011) that the quality of education of a university can be identified from the satisfaction of graduate users as seen from the suitability of the graduate's performance with the standards set by the customer/graduate user. In line with this, Diana & As'ad (2017) argues that the satisfaction of graduate users can give a good picture of the poor performance of graduates. The benchmark for the quality of graduates of a university is seen from the quality of performance in meeting the needs of the community and institutions that use graduates. The results of this tracer study are expected to be able to evaluate the implementation of education at UIN SAIZU postgraduates by emphasizing the type of conformity that occurs. The discrepancy can be in the form of competencies or skills needed in the agency (world of work) or the community. According to Badillo-Amador & Villa (Cuadra et al., 2019) argued that the mismatch of skills and competencies of graduates can cause problems on the job, have a negative effect, and of course reduce the satisfaction of graduate users.

Through interviews with graduate users, the quality tracking of UIN SAIZU postgraduate graduates can be identified. The respondent whose views were asked was the head of MIN 1 Banyumas. He proudly shared his satisfaction with the graduates of PGMI UIN SAIZU who worked as teachers at MIN 1 Banyumas. According to him, after studying for master's degree at UIN SAIZU, the teacher has a very good performance, not only in the learning process related to strategies, methods, media utilization, evaluation and administration of learning tools. The teacher is also more disciplined, responsible and excellent time management. Another positive response was shown by the head of MAN 2 Purwokerto. Based on interviews, the ability of teachers who are postgraduate graduates of UIN SAIZU in writing scientific articles has succeeded in bringing MAN 2 Purwokerto to be the best MAN. The teacher can even train other teachers to write scientific articles as a condition for promotion for ASN. The attitude of the graduate is in line with the opinion of Athiyaman (1997) which states that the quality of graduate work has an impact on graduate user satisfaction. His theoretical opinion states that perceived quality is a function of satisfaction. In other words, the quality of the work of graduates depends on the satisfaction of graduates' customers/users

The Head of Sub-Division of FEBI UIN SAIZU revealed that the performance of postgraduate graduates of UIN SAIZU was very good with wider insight, ability to collaborate, responsibility, work hard, have initiative, discipline so that the results of their work can be trusted. The attitude of the graduate is in line with Cuadra's opinion which states that a person's educational strata (collage degree) has a significant and decisive role in the field of work occupied (Cuadra et al., 2019) The provision of knowledge and skills obtained at the postgraduate level of UIN SAIZU increases a person's competence compared to before so that they can produce better jobs.

Based on the results of interviews with various sources and data recorded by the application, through this tracer study it was found that users of postgraduate graduates of UIN SAIZU felt satisfaction with the performance of graduates who were judged to be in accordance with the demands and needs of the agency. Customer satisfaction/graduate users show that the implementation of postgraduate education at UIN SAIZU has been relevant to the needs of the community (Kalaw, 2019). The positive views of graduate users do not stop UIN SAIZU postgraduates from innovating. Customer satisfaction actually encourages UIN SAIZU postgraduates to continue to make continuous efforts to improve competencies, processes and the environment by implementing quality management. Things that have been done by UIN SAIZU postgraduates include improving, updating and adjusting the curriculum, learning process, administrative services, and facilities and infrastructure for students. Improvements and improvements made are based on data and facts both quantitative and qualitative, involving all elements in the process of providing education, controlling the educational and administrative processes so that they remain in line with the needs and challenges of the times.

The tracer study conducted by the UIN SAIZU postgraduate using the web-based Waterfall model succeeded in providing information, recommendations, and evaluations that would be followed up. The information obtained from the tracer study carried out is regarding the position of graduates in the world of work, the process of providing education, graduates' perceptions of the quality of education and administrative services. Graduates of IAIN Purwokerto are fairly competitive and competitive. It is shown that most of the students have got a job before graduating and only a few are waiting to get a job. However, tracking studies show UIN SAIZU graduate graduates with relatively short waiting times. Other information obtained from the results of the tracer study



is that both graduates and graduate users expressed their satisfaction with the educational services and postgraduate administration services of UIN SAIZU. The learning process, curriculum, and quality lecturers support the needs of students and prepare graduates to be able to take part in the world of work and society according to their needs and demands. While administrative services, it is recognized that the postgraduate staff of UIN SAIZU are friendly and responsive to student problems and needs. The facilities owned by the campus are quite supportive for the lecture process. For graduate users, postgraduate at UIN SAIZU is seen as a university that has succeeded in producing competent graduates with excellent performance and contributing positively to the institution/institution where they work and society.

The recommendation for UIN SAIZU postgraduates from the results of the tracer study is the holding of programs that support the improvement of the competence and skills of graduates that are continuously adapted to the needs and demands of the community. Building partnerships between campuses and institutions (the world of work) that ensures the effectiveness of the transition period of graduates from the campus world to the world of work so that students who have completed their studies can easily get access to institutions/agencies in accordance with their field of knowledge. Develop career center services for students. Career center services include adequate career development for students and graduates before entering the real world of work, career planning guidance, becoming a training center with increased knowledge, expertise, and skills needed. Expanding and increasing social activities so that psychological bonds are established between the entire postgraduate academic community of UIN SAIZU and the community which indirectly has a positive impact on the work of graduates in real life.

The evaluation obtained is to fix and perfect deficiencies in educational services, administrative services, and the provision of facilities. These include: (1) revising the curriculum continuously in accordance with the demands of the times and the needs of the community; (2) improvement of facilities and infrastructure that support the implementation of education both for lecturers, staff and students; (3) regular tracer studies with better tools; (4) build an alumni network so that UIN SAIZU postgraduates get the latest information about graduates. The results of the tracer study are then used as reference material in improving the quality of education and services (Antares et al., 2021) postgraduate UIN SAIZU.

#### D. Conclusion

The conclusions obtained after conducting this research are as follows:

1. The tracer study model used by UIN SAIZU postgraduate is using a web-based waterfall model and a google form application. The search can be accessed by graduates through the website [pps.iainpurwokerto.ac.id](https://pps.iainpurwokerto.ac.id) which then transitions to [pps.uinsaizu.ac.id](https://pps.uinsaizu.ac.id) as the status of IAIN Purwokerto changes to UIN SAIZU. This tracer study system runs more effectively and efficiently. The data collected is systematic and tiered with real time, structured, and integrated data so that the results of the tracer study are more optimal.
2. The view of graduates on the quality of education and postgraduate services at UIN SAIZU is considered satisfactory. The results of the tracer study, namely: 22.92% stated very good; 54.17% said it was good; 18.75% said it was quite good; and 4.17 stated not good. Meanwhile, regarding the quality of postgraduate academic services at UIN SAIZU, it was found that: 14 graduates thought it was very good; 27 people think well; 5 people stated quite well; and 2 people stated that it was not good as the data recorded in the tracer study application. Meanwhile, the results of observations and interviews with alumni stated that the quality of education and postgraduate services at UIN SAIZU was of good quality. This is indicated by the quality of educators and education staff (staff), learning programs and available facilities.
3. Graduate/alumni users express their satisfaction with the performance of UIN SAIZU postgraduate graduates who show discipline, responsibility, creativity, high initiative, have good leadership, broad-minded and open-minded, able to operate technological devices, ability to collaborate and have advantages in the skills of writing papers and journal articles. Graduates are considered to contribute positively to the institution where they work and the community.

#### REFERENCES

- 1) Akareem, H. S., & Hossain, S. S. (2016). Determinants of education quality: what makes students' perception different? *Open Review of Educational Research*, 3(1), 52–67. <https://doi.org/10.1080/23265507.2016.1155167>
- 2) Antares, J., Gustiana, Z., & Rusydi, I. (2021a). Information System Design in the Development of Tracer Study Models at Dharmawangsa University. *JURTEKSI (Journal of Technology and Information Systems)*, VII(2), 151–158.
- 3) Antares, J., Gustiana, Z., & Rusydi, I. (2021b). Information System Design in the Development of Tracer Study Models at Dharmawangsa University. *JURTEKSI (Journal of Information Technology and Systems)*, 7(2), 151–158. <https://doi.org/10.33330/jurtekxi.v7i2.1002>
- 4) Athiyaman, A. (1997). Linking student satisfaction and service quality perceptions: the case of university education. *European Journal of Marketing*, 31(7), 528–540. <https://doi.org/10.1108/03090569710176655>
- 5) Bakti, V. K., Noval, M., & Purnomo Bayu Aji, E. (2017). DataTracer PreCompilation SystemOnline Study of the Directorate General of Belmawa Ristekdikti (Case Study: Harapan Bersama Polytechnic). *Journal of Informatics: Journal of IT Development*, 2(1), 50–53.

- 6) Cahyo Nugroho, E., & Nugroho, I. (2018). Career Center System And College Tracer Study. *Ijns.Org Indonesian Journal on Networking and Security*, 7(1), 1–5.
- 7) Cuadra, L., Aure, M. R. K. L., & Gonzaga, G. L. (2019). The Use of Tracer Study in Improving Undergraduate Programs in the University. *Asia Pacific Higher Education Research Journal*, 6(1), 13–25.
- 8) Diana, E., & As'ad, A. (2017). Web Based Tracer Study Information System Analysis and Design. 11(2).
- 9) Kalaw, M. T. B. (2019). Tracer study of bachelor of science in mathematics. *International Journal of Evaluation and Research in Education (IJERE)*, 8(3), 537–548. <https://doi.org/10.11591/ijere.v8i3.17343>
- 10) Nasuha, A., & Siahaan, K. (2016). Analysis and Design of Web-Based Alumni Information System (Tracer Study) At Iain Sulthan Thaha Saifuddin Jambi. *Journal of Information Systems Management*, 1(1).
- 11) Rasiman, R., Widodo, S., & Setyawati, R. D. (2014). Tracing graduates of the Mathematics Education Study Program of IKIP PGRI Semarang as a Relevance Study Effort. *AKSIOMA: Journal of Mathematics Education Study Program*, 5(1), 67–71.
- 12) Please, I. M. (2017). Realizing Quality Education The Role Of Higher Education Management Based Spmi In Improving Service To Create A Quality Education Quality education is a necessity in the implementation of higher education and as one of the determinants for country d.*Journal of Educational Studies Widya Accarya FKIP Dwijendra University*, 2085–0018, 1–10.
- 13) Sukrisno, H. (2011). Higher Education Service Quality Accountability. *Journal of Education and Learning*, 18(1), 81–89.
- 14) Suryabrata, S. (2010). *Research methodology*. Raja Grafindo Persada.
- 15) Sutanto, S., Widyawati, W., & Denoor, F. A. (2020). Design of Information Systems Tracer Study at the University of Banten Jaya. *Journal of Information Systems and Informatics (Simika)*, 3(2), 95–109. <https://doi.org/10.47080/simika.v3i2.987>



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