
| RESEARCH ARTICLE

Implementation of Talent Mapping Through the IKIGAI Concept Self-Assessment System of Human Resources Competencies in Welcoming Indonesia Gold 2045

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| ABSTRACT

Along with Indonesia's efforts to realize the vision of Golden Indonesia 2045, there is an urgent need to equip university graduates with competencies that are in line with the demands of a dynamic business and industrial environment (DUDI). This imperative is increasingly relevant in the context of Industry 4.0 and Society 5.0, where technology, innovation, and social integration play an important role in economic activities. Therefore, human resources are needed who not only have technical skills but are also able to adapt to rapid social and economic transformations. The method to be used is the PAR (Participatory Action Research) Method. This research reveals students' preferences and enthusiasm for technology-based activities as well as the potential for their hobbies to develop into careers.

| KEYWORDS

IKIGAI, Talent Mapping, Self-Assessment, Indonesia Emas, SDM, Industri 4.0, Society 5.0.

| ARTICLE INFORMATION

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1. Introduction

21st century skills needed by the industrial world include critical thinking, creativity, effective communication, collaboration, and mastery of information technology. The World Economic Forum report (2020) underlines the importance of technology skills such as data analysis, cybersecurity, and artificial intelligence in the era of Industry 4.0 and Society 5.0. The change in the pattern of education in the 21st century that is felt at this time is one of the characteristics of the era of globalization or called the era of openness. This is evidenced by the development of science and technology (Ace, 2004; Wartoyo et al, 2024). A teacher must have one step of change in this century, such as changing traditional techniques (lectures) that are teacher-centered, to be more creative and innovative so that they are more student-centered in order to be able to develop the quality of human resources (HR) and the quality of education. In the 21st century, where a change in times has occurred, which is marked by the emergence of various scientific and technological advances that change lives, are increasingly complex (Nuryani, Abidin, and Herlambang, 2019). In the 21st century, it is necessary to increase human resources (HR) that can be done in the education sector to strive for the development of a new civilization in an increasingly advanced life order. With the existence of the 21st century, social change is needed, where social change is part of the educational process (Tillar, 2012). With education, it should be able to improve the quality of human beings who are competitive and have a critical attitude in all things (Nuryani et al. 2019). There are many challenges in life in the 21st century, for example in the aspect of education.

Ready or not, with the development of the times as well as the development of educational technology, we must adapt it to the development of the times. In every education, there must be something called a learning process, where a student interacts with each other or is closely related to the duties and roles of a teacher. The need for the role of education in developing human resources has been stated in the 1945 Law which aims for national development (Mangkunegara, 2011 ; Wartoyo et al, 2023). In other words, without an intelligent nation, it is impossible for the nation to participate in the competition for knowledge in the middle of the century of skill events. In contrast to the previous period, in the 21st century teachers are expected to be able to use

information and technology to develop children's potential in order to realize a quality nation and be able to compete with various nations in the international arena. The 21st century has very big changes in the world, including the State of Indonesia. Changes in thinking that are spreading, especially in the flow of information and technology, have been felt in this century. Humans know the 21st century as the century of knowledge which makes it the main foundation in various aspects, especially in social life. The 21st century thinking pattern emphasizes students to think more critically, be able to integrate all knowledge with real life, understand technology, and information, and be able to communicate and collaborate. Increasingly sophisticated technological advances make it easier for teachers and especially students to find information and be able to manage it and it is hoped that students will no longer only focus on theory, but more deeply apply it. This spirit must be instilled by teachers to students to be more independent and instill literacy in children and even the community. Teachers who are expected to be able to improve the quality of human resources (outcomes) should be more competent and have a spirit of innovation in the learning process in accordance with teacher standards. This is in line with Sudriarja's opinion in his book which states that educators are the key to success and are able to determine the direction of the nation's education quality (Sudriarja, 2014). This is also supported by the findings of Stephanou and Maria who state that learning by teaching students to think critically so that children are able to hone all the experiences obtained by the students themselves (Stephanou, et al., 2017). The 21st century is known as science (society) (Sastraparedja, 2015). Differences of opinion in this century are bound to occur, but educators must be smarter in responding to them. Therefore, it is hoped that prospective educators and educators will be able to filter all opinions of a person without having to say "no" to those who disagree. Respecting differences of opinion is one of the keys to establishing cooperative relationships in order to create a network to share knowledge, economics and so on. For this reason, every human being must have a great soul in filtering information, even though there are differences between languages, tribes or races, cultures and even religious beliefs. The 21st century is expected to be able to carry out its function in learning humans, so that it does not only learn in youth.

The progress of the 21st Century is marked by the era of the industrial revolution 4.0 which in the 21st century makes the century of openness or the century of globalization. At this time, Indonesia is entering and even running the era of the industrial revolution 4.0 which is believed to open up job opportunities and also wider and more employment opportunities and build human work to be faster, easier and with satisfactory results. It can be interpreted that human life in the 21st century has undergone many changes and also in this century requires the quality of quality human resources in all their efforts and work. Changes in this era cannot be denied by anyone. As is known, in the 21st century it has changed completely in terms of society, environment and also in daily life. The changes that occur are very fast and, if done well, will produce good fruits.

Some examples of very rapid changes are in the field of information technology and in the field of digital technology, especially with the existence of social networks or often called social media which are familiar to all people regardless of caste and degree. In addition, the 21st century is also known as the industrial age and also the knowledge age of "Knowledge age", in this case all efforts to master skills through self-habitation and also the fulfillment of life needs in various things are based on knowledge (Mardhiyah, et al., 2021). In the 21st century, not only relying on knowledge but skills also play a role in 21st century learning. Skills are an important component needed in various areas of life. Trilling & Fadel (Wijaya, Sudjimat, 2016) argues that the skills of the 21st century are (1) life and career skills, (2) learning and innovation skills, and (3) Information media and technology skills. Thus, education is an effort to improve the level of human welfare and is part of national development.

Skills must not only be possessed by teachers but students must also understand the skills that must be possessed by students in 21st century learning. Human Resource Development every year must always be upgraded and must also be able to keep up with existing developments, in order to be able to be highly competitive. The progress of a nation depends on the quality of the nation's Human Resources (HR). Quality human resources are one of the main capitals in the progress of a nation both in the fields of economy, science and technology, politics, culture, and national character (Mulyani: 2020). Regarding better Human Resources, of course, the role of education is the most important thing, especially teachers as the main spear to trigger the nation's successor. How can educators change the perspective of students and also adapt to this era of industrial revolution 4.0. The most important role of educators is that educators must be able to maintain the delivery of knowledge and skills to students, but with this delivery, the longer these students will lose the role of technological developments and changes in their learning methods. In such conditions where educators must explore and create more learning that is not boring and can keep up with existing developments, not only continue to be given past methods to forget developments that continue to change or change. Not only teaching knowledge but also skills is a requirement for the success of learning in the 21st century (Mardhiyah, et al., 2021).

Along with Indonesia's efforts to realize the vision of Golden Indonesia 2045, there is an urgent need to equip university graduates with competencies that are in line with the demands of a dynamic business and industrial environment (DUDI). This imperative is increasingly relevant in the context of Industry 4.0 and Society 5.0, where technology, innovation, and social integration play an important role in economic activities. Therefore, human resources are needed who not only have technical skills but are also able to adapt to rapid social and economic transformations. In this regard, higher education is crucial in shaping a workforce that is not only aligned with the demands of the current industry but also equipped to anticipate and overcome future challenges. Achieving this requires the implementation of a flexible and innovative curriculum designed to foster essential skills, analytical competence, and high levels of emotional and social intelligence. In addition, it is essential to increase collaboration between educational institutions and the industry sector to foster synergies that facilitate the effective dissemination of knowledge and allow rapid adaptation to technological advances. Therefore, it is imperative to regularly reassess and refine education strategies and human

resource development policies to ensure that graduates from Indonesian universities are ready to engage and contribute meaningfully to the global economy, driven by knowledge and innovation. The era of the Industrial 4.0 revolution is the era of the application of automation concepts carried out by machines. In this era, human labor has become reduced in the completion of some jobs. The use of information technology, in this case the internet of things (IoT) has an important role that can connect humans and machines through the internet network. In the era of the 4.0 revolution, there will be several jobs that were originally done by humans. It is employed by machines but there will also be many new roles and new types of jobs. which humans will do. Workers are challenged to be more creative and innovative in doing their work. Reliable human resources are needed to be able to survive and compete in this era. The role of secretary is one of many positions that must be able to compete and survive. Their duties and roles in assisting current and future leaders require a qualified qualification to make them professional secretaries according to the demands of the era. The increasingly complex and fast-paced demands of the job require the minimum qualifications that a secretary must have. Although digital personal assistants are available today, the human touch in the secretary's personality cannot be replaced. Syekhnurjati State Islamic University Cirebon (UIN SSC), as one of the leading higher education institutions in Indonesia, has a strategic responsibility to prepare its graduates to be able to compete on the global stage.

According to a report by the McKinsey Global Institute (2019), educational institutions that use Talent Mapping tend to produce graduates who are better prepared to face industry changes and challenges. Talent mapping is very important to find dominant talent in the company. Without acknowledging the talent that exists within the company, it will be difficult for the company to perform optimally. Ultimately, it expands the company's talent potential. Talent mapping allows companies to use their talents to determine which work areas are best suited for their employees. Talent mapping can be interpreted as an assessment test that can be used to find out what talents a person has. Assessment tests in talent mapping usually consist of 34 types of talents, which will be sorted from the most dominant talent to the weakest talent found in employees. Talents Mapping, according to Abah Rama Royani, is a way of assessing or exploring our talents (productive characteristics) and potential strengths with a complete, easy-to-understand and attractive display of results. This method can identify the potential of individual strengths which includes measuring and declaring personal strengths (M. Febrida, 2014). Talents Mapping can also help find hidden talents, and direct people not to focus only on their weaknesses (Karyaone, 2020). Many organizations develop their employees through the *Deficit Approach*, which is an approach to finding someone's weaknesses and then trying to improve those weaknesses to become competent so that the expectation is that the person concerned can provide the expected performance. In some ways, this approach is quite good, but in many ways it is considered inappropriate and does not have an impact on improving organizational performance. With this Talents Mapping, it is hoped that people will no longer focus on their weaknesses and how to overcome them, but rather look at the strengths they have in each of them.

In order to fulfill this responsibility, UIN SSC needs to develop a more comprehensive graduate arrangement policy. This policy should be based on students' potential, interests, and expertise and refer to the Talent Mapping and IKIGAI approaches, which assess not only competence but also happiness and satisfaction in their careers. This approach is important to ensure that UIN SSC graduates not only have the technical skills needed by the industry, but also have a harmonious balance between personal interests, community needs, and income-generating professions. This will not only increase the relevance of higher education to the needs of industry, but also ensure that education provides added value to students' lives as a whole, equipping them with the ability to contribute effectively and satisfactorily in a knowledge-based and innovation-based society. Furthermore, with integrated and future-oriented policies, UIN SSC strives to position itself as a center of excellence in higher education that is responsive to the changing times and the real needs of the industry and society.

2. Literature Review

IKIGAI is a Japanese concept that means "reason for life" or "purpose for life". This concept combines four main elements: passion (what you love), mission (what the world needs), vocation (what can provide income), and profession (what you are good at). Research by Ken Mogi (2017) states that individuals who find balance in these four elements tend to have a more meaningful and productive life.

According to Adhaini (2023), Happiness is an important thing for humans. That humans will not be separated from their goal of seeking happiness, of course as humans we don't want a life filled with difficulties and hardships, right? Therefore, it is not surprising that humans struggle to achieve happiness. It is not uncommon for humans to be willing to work hard first so that later in old age, they can feel happiness. As the saying goes, 'raft upstream, swim to the edge. Hurt first, have fun later. So, what makes a person happy? Will having a lot of wealth, a high position, or academic success guarantee one's happiness? There is actually no specific way to get happiness. Every typical situation in a person's life, in their own way, can certainly bring the foundation for happiness. However, most people believe that to be happy you need a lot of wealth, a high position, or academic success, which is not necessarily a factor in a person's happiness. True happiness can also be obtained with simple things, as simple as having a reason to wake up in the morning. Therefore, Ikigai is here to show that to obtain happiness does not have to be like what was mentioned earlier, but with small things, happiness will also be realized. A number of previous studies are valuable for the preparation of this research framework. Happy means a state or feeling of joy and peace that is free from everything that makes it difficult. While happiness has a meaning, namely pleasure and peace of life, luck or happiness that has innate and inner qualities.

Happiness also has a meaning as a feeling and state that is inherently and mentally peaceful without having a sense of anxiety (Putri, 2018).

According to Aristotle, the ultimate goal of human life is happiness (eudaimonia). Happiness according to Aristotle is not a condition, because if happiness is a condition, then happiness can be possessed by someone who sleeps all his life, who lives a boring life, or someone who experiences the worst suffering. So according to Aristotle, this happiness is included in the group of activities, where there are several activities that are necessary, activities that deserve to be chosen for other things. There are also activities that are inherently worth choosing. According to Aristotle, this happiness needs to be classified as one of the things that is basically worth choosing, not as one of the things that should be chosen for the sake of something else (Aristotle, 2020). In obtaining happiness, there are different ways. However, in general, people think that to achieve happiness requires a lot of wealth, a decent job, an adequate level of education or an ideal life partner. However, this will not necessarily bring happiness. As explained in the concept of Ikigai, Ikigai means reason to live. As people born in Okinawa say, Ikigai is a reason why we wake up in the morning. This ikigai is the reason for a person to live a life, or what makes a person have passion in his life, as well as what makes a person have the spirit to start a new day (Gracia & Miralles, 2016).

This research uses the Ikigai Ken Mogi theory. Ikigai is a concept that describes the reason for life for Japanese people. According to Ken Mogi, there are 5 pillars in Ikigai, namely the first is to start with small things. Second, set yourself free. Third, harmony and continuity. Fourth, the joy of small things. And fifth, present in the present place and time (Mogi, 2017). According to Astuti and Novandra (2022) Ikigai is a term from Japanese society which is a combination of two words "Iki" which means for life and "gai" which means reason, so Ikigai can be interpreted as finding the meaning of life that is worth living. And according to Panjaitan (2021) Ikigai is a Japanese concept of life. Ikigai is something important for human life that can provide satisfaction in achieving life goals. This means that a civil servant who applies the Ikigai principle will know the reason for living their life and choose the profession as Widyaswara. A person will find Ikigai in their own way, such as habits, hobbies and work, including the profession as a Widyaiswara. Astuti and Novandra (2022) said that everyone certainly wants to choose a job or profession in accordance with the phrase "do what you love and love what you do". But in fact, the profession of work that we are currently living in turns out to be far from that term. Widyaiswara's Functional Position is often in a position between choice and necessity.

According to Hasegawa, the origin of the word ikigai appeared in the Heian period (794 to 1185). "Gai comes from the word kai (seashell in Japanese) which is considered very valuable, and from there ikigai is interpreted as a word that means the value of life." Hasegawa found that the Japanese believe that gathering small joys in daily life will make life more meaningful and full. So it can be concluded that Ikigai is a Japanese term to describe the pleasure and meaning of life. Ikigai, a Japanese concept that is increasingly popular in the world, offers a holistic view of the meaning and purpose of life.

In an increasingly complex and stressful world, the concept of ikigai provides a strong foundation for individuals to find contentment, balance, and deep meaning in every aspect of their lives. Ikigai today is also associated with reasons that make a person more enthusiastic about living their days. The concept of Ikigai is believed to have been trusted and lived by most people in Japan, they believe that by growing Ikigai in life they can find meaning in life and this is what makes Japanese people have a high life expectancy. The meaning of ikigai is simply "the happiness of always being busy". This understanding is due to the fact that this book discusses from the perspective of Japanese people who tend to be busy working and are among the highest levels of longevity in the world. Ikigai is a slightly abstract concept of life

which is more directed in order to achieve our meaningful life goals. The concept of ikigai has a more complex meaning than just 'finding passion'. The Ikigai philosophy has been known for a long time by the Japanese people which gives a sense to every purpose of life and plays a role in always maintaining health and longevity, but long life here is accompanied by physical and mental health. The human body and mind are interconnected with each other, therefore we must take care of our physical and mental health together so that even though we are old, we still have a positive attitude and emotional awareness. Most of the book tells about the real experiences of Okinawans who have been named the area with the longest life expectancy in the world. The World Record has even crowned one of the longest-lived women in Japan at 122 years old.

This book also explains various things such as ikigai itself, diet, exercise, and social life. Ikigai itself motivates a person to be excited to wake up in the morning and do a better routine. Ikigai is an important concept that everyone must have because with a clear goal, life will become more meaningful and encourage us to do things that we think are meaningful. The way to find ikigai is to continue to take the time to do activities that get us into the flow, this flow is important to improve focus. In addition, we try a lot of new things that make us curious and interested, and are always busy looking for new things. There are so many lessons that can be learned from this book, one of which is to focus on the present because the present is the reality of real life, while the past and the future are just shadows that exist in our minds. So focus on what we can change now.

Talent Mapping is a systematic method used to map an individual's talents, skills, and potential in relation to the needs of the industry. In education, Talent Mapping helps students to understand their strengths and weaknesses and align them with the demands of the job market. One of the ways to discover a person's potential talents and strengths is with Strength Typology (ST-30). Measuring a person's talent potential with the ST-30 is considered the quickest way to find oneself. The ST-30 can also display measurement results which are an overview of the abilities/competencies and interest in the role. The ST-30 has thirty human typologies associated with productive power. In addition, it can also be used as a personal brand or self-awareness for a person (M. Febrida, 2014).

One of the applications developed by Abah Rama Royani to read talent with the questionnaire method is ST-30. The application can be accessed on the <https://temubakat.com/id/> website. There are two types of questionnaire applications in the application, namely ST-30 which contains a simple ST-30 questionnaire that can be done for free, and the other is the Talents Mapping Assessment with a much more complete questionnaire with 170 questions about Talents Mapping and 114 questions about Personal Strength (Fajria, 2019). Talents Mapping Assessment (TMA) can generally be done well by high school students. Although there are several cases of junior high and elementary school children who can fill out the Talents Mapping Assessment well. Therefore, it can be concluded that Talents Mapping Assessment is more appropriate to be used to read the talents of a person with high school age and above well (Andri Fajria, n.d.).

With the Talents Mapping assessment, participants will receive a talent order from the most dominant (first) to the least dominant [last], and by knowing the 7 to 10 dominant talents (T. Indonesia, 2011). Based on the experience felt after taking the Talents Mapping test, test takers, including teachers, concluded that the accuracy level reached 90 to 94 percent. So that by knowing one's potential, a person will try to maximize the potential that exists and can be more beneficial to his environment. Talents Mapping is useful for everyone and from all walks of life. Not only beneficial for teenagers, but also those who want to retire, even teachers. Teachers are a strategic variable in the Indonesian education system. By teachers following and understanding Talents Mapping, they can have the experience to evaluate themselves and provide assessments to direct their students. With Talents Mapping, teachers can evaluate careers and prepare for careers for those who are about to retire. Meanwhile, for young teachers, it is for further career development (Fauzan, 2019).

3. Methodology

The method to be used is the PAR Method. The Participatory Action Research method or commonly called the PAR method is an approach used to overcome various obstacles or problems that occur in society (Septianti et al., 2021). According to Afandi (2020), the PAR method can be used to change attitudes and thinking patterns and increase the awareness of the parties involved so that the decisions and solutions created to overcome the problem can provide satisfactory results, because if there is something that is not in accordance with the needs and desires, then the results of the decision can be evaluated by the parties involved. In this method, the community plays the role of a collaborative partner. The goal is to produce appropriate solutions and ease of downstreaming.

In addition to this explanation, this PAR method is very helpful in terms of research, because with direct thinking from the parties involved, especially the active participation of stakeholders (the community), it can create sustainability even if the researcher does not accompany it anymore, so that solutions to the problems that have been produced can be applied in business activities (Achadiyah, 2019). PAR (Participatory Action Research) involves conducting research to define a problem or apply information into action as a solution to a problem that has been defined. PAR (Participatory Action Research) is "research by, with, and for people" rather than "research on people". PAR (*Participatory Action Research*) is participatory in the sense that it is a necessary condition in which people play a key role in it and have relevant information about the social system (community) that is under review, and that they participate in the design and implementation of the action plan based on the results of the research.

4. Results and Discussion

Based on the data that has been processed, it was found that students from the FITK faculty excelled in several aspects. Judging from the calculation of the percentage of FITK students, there are aspects with a better percentage than other faculties, including enthusiasm for being involved in technology-based activities, and communication skills in a digital environment.

Table 1. Student enthusiasm when engaging in technology-based activities

Answer	Frequency	Percentage
Very excited	209	50%
Quite excited	196	47%
Ordinary	16	4%
Total	421	100%

Based on Table 1. The majority of students (97%) have a high enthusiasm for technology-based activities, showing great interest in engaging in digital technology. FITK students showed higher enthusiasm in engaging in technology-based activities with 52% of students being very excited, compared to FEBI where only 47% of students were very excited. This shows that FITK students are more enthusiastic about the use and application of technology in their activities. There are 61% of FITK students who consider it very important to have good communication skills in a digital environment, slightly higher than 59% at FEBI. This condition shows

that FITK students have a high awareness of the importance of effective communication in the digital environment which is a key skill in today's digital era.

Table 2. Skills needed by the digital industry

Answer	Frequency	Percentage
Data analysis and data-driven decision-making	126	49%
Creative design and multimedia	65	25%
Digital project management and remote team coordination	64	25%
Total	255	100%

Data analytics is the most in-demand skill in today's digital industry (49%), followed by creative design and project management. In addition, FEBI Faculty students also have advantages in several aspects, namely Collaboration Ability in Digital Teams, Confidence in Income from Technology-Based Careers, and Digital Career Opportunities in Indonesia in the Next 10 Years. FEBI students have a higher percentage of "Very prepared" in digital team collaboration, with 48% compared to 41% of FITK. This suggests that FEBI students may be better prepared to work in the collaborative environment often encountered in the digital industry. In terms of confidence that technology-based careers will provide adequate income, 77% of FEBI students are very confident, which is much higher than the 65% of FITK. This shows greater optimism among FEBI students towards the financial potential of a career in technology. As many as 59% of FEBI students consider digital career opportunities in the future very important, which is higher compared to 48% of FITK. This condition shows that FEBI students have a more positive and future-oriented view of the growth of the digital industry.

Table 3. What technical expertise are you most good at today?

Answer	Frequency	Percentage
Data analysis	128	35%
Graphic design	166	46%
Project management	68	19%
Total	362	100%

From all the survey questions that have been carried out and analyzed, it can be found that there is a link between statements that may affect students' activities in considering their careers. Graphic design is the most proficient technical skill (46%), followed by data analysis. Some of the things that can be formed can be explained in the following paragraphs. The relationship between Table 1 and Table 24, namely table 1, shows students' enthusiasm for technology-based activities, while table 24 measures how often students feel "flowing" when working or studying. The relationship between these two tables lies in the influence of enthusiasm on the ability to engage deeply in an activity, which can increase the frequency of "flow" experiences.

Meanwhile, based on the relationship between Table 5 and Table 25, table 5 evaluates the readiness of graduates in meeting the needs of the digital industry, and table 25 assesses the ability to collaborate in a digital team. Graduate readiness for the digital industry may require strong collaborative skills, so these two aspects are intertwined. The relationship between Table 6 and Table 20 i.e. table 6 discusses the skills needed by the digital industry today, while table 20 measures how often the technical skills learned are used in everyday life. Skills relevant to industry needs tend to be used more frequently, showing a correlation between industry needs and the practical application of those skills.

The relationship between Table 10 and Table 12 is that table 10 focuses on the belief in adequate income from technology-based careers, and table 12 assesses the earning potential in the digital industry compared to other industries. These two tables are connected through the theme of income and financial potential of a career in the digital sector. The relationship between Table 23 and Table 25, table 23 explores how well students understand their talents and interests that support digital careers, while Table 25 again looks at the ability to collaborate in digital teams. A good understanding of personal talents and interests can affect how effective a person is in working collaboratively in a digital setting. The relationship between Table 30 and Table 32 i.e. table 30 asks about the preparation of additional skills outside the main field of study, and table 32 evaluates the clarity of self-development plans related to digital careers. These two tables are interconnected as they both focus on preparation and planning for the future of digital careers, which is essential in continuous professional development.

Based on the data analysis that has been carried out, it can be seen that students from two different faculties (FITK and FEBI) have varying perceptions and skills related to digital technology, industry readiness, and career potential in the digital field. Some of the findings based on the data can be seen as follows:

1. **Technology Skills and Understanding**
Students tend to have a good understanding of technology and the skills needed for a digital career. For example, in Table 23, the majority of students from both faculties feel adequately able to understand their talents and interests that support digital careers.
2. **Satisfaction and Engagement in Learning**
The data showed a high level of satisfaction in helping others use technology and a good level of engagement in technology-related learning activities (Table 3 and Table 24).
3. **Industry Readiness and Skills Development**
Although many students feel quite ready for the digital industry, there is still a need for skill improvement, particularly in data analysis and digital-based project management (Table 5 and Table 6).
4. **Perception of Digital Careers**
There is high optimism related to earning potential and career opportunities in the digital field. The majority of students are very confident that technology-based careers will provide adequate income (Table 10).
5. **Learning and Self-Development**
Students demonstrate a high awareness of the importance of lifelong learning and the development of additional skills outside their primary field of study to expand digital career opportunities (Table 29 and Table 30).
6. **Collaboration and Digital Communication**
Most students feel ready to collaborate in digital teams and consider communication skills in a digital environment to be very important (Table 25 and Table 27).
7. **Interest in Technology and Humanity**
The high interest in working in a field that combines technology and humanities indicates a high level of social awareness among students (Table 28).
8. **Willingness to Explore Digital Careers**
Most students are very open to exploring a variety of digital career options that suit their interests and talents (Table 13).

The data shows a high level of engagement and a positive perception of technology and digital careers among college students. However, there is a need identified for the improvement of certain skills such as data analysis, which is in high demand in the digital industry. Optimism towards digital careers is high, with many students seeing great opportunities in earning and career development in the future. Based on data analysis from the results of a survey conducted on students of the Faculty of Tarbiyah and Teacher Training (FITK) and the Faculty of Islamic Economics and Business (FEBI), there are several strategic recommendations that can be taken by the leaders of each faculty to increase student readiness and involvement in facing the digital era, including:

1. **Digital Skills Training and Course Enhancement**
Data shows that a large number of students have never taken a course or training to improve digital skills (FITK 44%, FEBI 40%). Faculty leaders can implement more mandatory and optional training programs focused on essential digital skills such as data analysis, graphic design, and digital project management.
2. **Focus on Self-Study and New Skills:**
Although many college students learn new skills occasionally, few do so on a regular basis. Faculty can develop initiatives that encourage more consistent self-learning, such as providing access to online learning platforms and holding regular competitions or hackathons.
3. **Integrating the Curriculum with the Needs of the Digital Industry:**
Some students feel that the skills they have are suitable for the needs of the digital industry, but there are still those who feel that they are only suitable sometimes. The curriculum must be constantly updated to reflect changes in technology and the needs of the job market, including improvements to courses related to digital technology and industry 4.0.
4. **Raising Digital Awareness and Career Preparation**
Many students are open to exploring digital careers, but still need more support and guidance in planning and preparing for the career. The faculty can provide more career resources, including career counseling, career planning workshops, and collaboration with the digital industry.
5. **Encouraging Collaboration and Digital Communication Skills**
Collaboration and communication skills in a digital context are highly valued by students. Programs that facilitate cross-disciplinary group projects and the use of digital collaboration tools can help strengthen these skills.
6. **Adopting and Adapting to the Latest Technology**
Students show a high interest in technology adaptation and lifelong learning. The faculty should support this by providing access to the latest technologies and holding seminars and workshops on the latest technology trends.
7. **Soft Skills Development and Industrial Readiness**

Although many students are quite ready to face the digital industry, there is still a need to improve soft skills such as leadership, creativity, and adaptability. Leadership and creativity development programs can be further integrated into the curriculum and extracurricular activities.

An important implication that can be taken for curriculum development at universities, especially in the context of increasing student readiness for the needs of the digital industry, is that most students consider it important to have skills that are in accordance with the needs of the digital industry. This indicates the need to include more digital technology-related content in the curriculum, such as programming, data analysis, and cybersecurity. Students assessed their collaboration and communication skills as showing the importance of soft skills. The curriculum should include modules that focus on developing communication skills and working in teams, particularly in digital and multicultural contexts, realizing the importance of lifelong learning in the digital era. The curriculum should support this by providing opportunities for self-study and continuous learning, including courses accessible after graduation. With many students showing interest in adapting to evolving technologies, universities must constantly update their curriculum to keep relevant to the latest industry trends. Given that most students feel that the skills they learn are quite relevant to the needs of the industry, there is room to increase industry involvement in education through internships, collaborative projects, and work-based learning. Students have a positive view of the earning potential of a technology-based career. The curriculum should include career guidance and information about career opportunities in technology, as well as preparing students for roles they may take. With the high interest of students to work in fields that combine technology and humanity, as well as preparation for the Industry 4.0 era, the curriculum should reflect the integration between technology, society, and human needs.

5. Conclusion

This research reveals students' preferences and enthusiasm for technology-based activities as well as the potential for their hobbies to develop into careers. From the data collected, it is clear that activities such as "Learning new technology" and "Teaching or helping others learn" are the most enjoyed and have significant value in the context of developing human resources that are ready to face the era of Industry 4.0 and Society 5.0. Technology-based activities received a very enthusiastic response, with the majority of students showing high enthusiasm, which reflects their readiness to adopt and integrate technology in their studies and daily life. The era of the Industrial Revolution 4.0 requires high adaptability of human resources to rapid and dynamic changes, especially in integrating information technology. In the context of Golden Indonesia 2045 and efforts to prepare graduates who are able to compete on the global stage, there is an urgency for learning that includes not only technical competencies but also interpersonal skills and emotional intelligence.

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