Competency-Based Model of Human Resource Development in Higher Education

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ABSTRACT

This research aims to find the model that best suits the development of Human Resources (HR) in higher education based on the competencies determined by the Indonesian National Work Competency Standards (SKKN). Until now, HR competency standards in higher education have not been standardized, making it difficult to prepare HR development models. Meanwhile, various HR development models are being implemented by the industrial sector. Meanwhile, human resource development in higher education still focuses only on lecturers. There are educational staff (tendik) who are human resources that also need to be developed. The research was conducted using qualitative methods through literature reviews and interviews with HR experts in organizations, companies and the academic world. The results were analyzed using SWOT (Swot Analysis) and decided by experts in a Focus Group Discussion (FGD). The results of this research found important variables that were mapped to the tree structure, namely root variables, stem variables, and fruit/leaf variables.
1. INTRODUCTION

As institutions that manage people, universities should implement human resource management (HR) as is more advanced in the industrial world. Even though the ultimate goal of these two institutions is different, namely companies that are profit and growth oriented, while universities aim to create good humans as well as good citizens (Al-Attas, 1977), both agree that human resources are the main asset. organization so that development must be carried out.

The results of the literature review study show that research in several countries, including India, Bangladesh, Spain and Latvia, as researchers found in journal observations, implemented a human resource management development model or system in higher education that was not optimal. At least far behind its brothers in the industrial world. The delay in implementing HR management in higher education is because HR managers only focus on developing lecturers on the topic of the tridharma of higher education, namely teaching, research and community service, as is the obligation given to lecturers in the form of BKD. (Lecturer Workload).

Apart from that, lecturers' administrative duties in teaching, research and community development are very busy so that lecturer development such as training and quality improvement (upgrading) is difficult to implement. The presence of permanent lecturers who teach not only at the home campus also makes it difficult to carry out training. Moreover, if the salary paid is insufficient, it causes lecturers to have to look for additional income outside of teaching hours, resulting in minimal time for self-development. The development given to students is more about skills that help the campus carry out its obligations. Such as administration, computer training, creating and managing websites, preparing technology-based systems and implementing technical regulations from the ministry. Meanwhile, personal development, especially related to soft skills, is not provided because it is deemed unnecessary. In fact, development includes two things, namely hard skills and soft skills.

Apart from that, the basic development principles used between the two professions (lecturers and staff) are not the same, so there is a need to equalize the fields or variables of both. So far, higher education development has been carried out individually, namely between lecturers and staff. To equalize development variables between lecturers and education staff, it is necessary to refer to human resource competencies in the industrial world. Competencies which cover three aspects, namely knowledge, skills and attitudes, are given differently in each industrial sector. However, in general it can be equated as stated in HR development theory.

The Ministry of Manpower (Kemenaker), which is in charge of employment issues in the country, issued a Ministerial Decree regarding the Determination of Indonesian National Work Competency Standards (SKKNI) for almost all professions in Indonesia. Every profession that has SKKNI can have its competency tested by assessors under the Professional
Certification Institute (LSP) and certified by the National Professional Certification Agency (BNISP), which is an institution that is directly under the president and is a working partner of the Ministry of Manpower. The competency units in the SKKNI can be used to equalize competency between lecturers and staff, although adjustments must be made to each competency unit.

This SKKNI is rarely seen and used in universities because it is felt that this SKKNI is intended for the industrial world, different from educational institutions such as universities. However, considering that there are similarities in human resources everywhere, this SKKNI is actually suitable for use in universities by adjusting the context.

After getting the same competency variables, the next task is to look for a human resource development model that is in accordance with human resource development in higher education. Therefore, the aim of this research is to find a survey HR development model that is suitable for application in higher education.

According to Lim et al., in Nur Syuhada Ab Ghani and Maslin Masrom (2014), human resource management (HR) is very important in designing management systems to determine human skills that are used impressively and competently to achieve organizational goals. Activities include planning, managing, developing and coaching people in the organization. In other words, HRM is a guide to ensure employees achieve the highest level of productivity with skills and alignment with the organization and employees towards direction and contribution in paying attention to their respective goals.

Meanwhile, employee development can have a narrow meaning, namely training. However, it can also have a broader meaning, including development through various means. Development is the preparation of individuals to assume different or higher responsibilities within the organization. Development is usually related to increasing intellectual or emotional abilities needed to do work better (Simanora, 1999). Human resource development is one part of HR management. Human resource development is also a process of increasing the quantity and quality of human resources (Usman, 2014).

Verata (2010) defines HR as an organization's needs management system to ensure the right number of employees with the skills needed in their field are available when needed. Therefore, this definition indicates that human resources are necessary to attract and develop individuals, keeping them within the limits of realizing organizational and employee goals.

In managing and developing human resources, mutually agreed competency standards are needed to achieve one goal. Competency is the ability of each individual which includes aspects of knowledge, skills and work attitudes according to predetermined standards (Velde, 2010). Meanwhile, according to Spencer and Spencer (2010), competent people can work with easy, fast and intuitive skills and rarely or never make mistakes. Competency standardization in the world of work is regulated in regulations called SKKNI.

SKKNI is an abbreviation for Indonesian National Work Competency Standards, a work ability formulation that includes aspects of knowledge, skills and/or expertise, as well as work
attitudes that are relevant to the implementation of assigned tasks and job requirements. SKKNI was developed in consultation with relevant industries to ensure suitability to workplace needs. SKKNI is used primarily to design and implement job training, assess training output, and assess a person's level of skills and expertise. SKKNI is determined by the Ministry of Manpower.

In SKKNI, the main objectives of HR management are described in superior functions. Then, the main functions are described in main functions, which are broken down into essential functions. This main function is then called the Competency Unit (UK), which as a whole is a competency that HR managers must have. Furthermore, Competency Units are further divided into Competency Elements (EK), and each competency element consists of Performance Criteria (KUK). Usually after KUK an indicator of a person's success in mastering KUK is created which is categorized as knowledge, skills or attitudes.

Can these competency units be applied in higher education? This means that all of them have a function that is carried out in higher education in one way or another. This is different from companies that are concentrated in one department, namely the HR department. Thus, there is no need to adjust the competency units. It's just that unique terms in the industrial world such as tripartite/bipartite trade union relations must be adjusted because the substance can be implemented in human resource development in higher education.

In general, each university has its own human resource management policy or is affiliated with DIKTI regulatory policies or laws related to the ministry's HR development. Because this research focuses on developing human resource character in higher education. Important HR development and management variables are mapped in a tree model structure.

2. RESEARCH METHODS

The research was conducted using qualitative methods through literature reviews and interviews with HR experts in organizations, companies and the academic world. The results were analyzed using SWOT (Swot Analysis) and decided by experts in a Focus Group Discussion (FGD).

A literature review was carried out by collecting 120 articles from online journals related to human resource development. However, because the time limit is less than 10 years and the journals chosen are journals indexed by Scopus and Sinta 1 and 2, the remaining articles are 90 articles.

A total of 90 articles were reviewed to look for similarities in discussion according to the research objectives. The parts of the article that are searched for similarities are: (1) novelty (novelty), (2) problem formulation, (3) research objectives, (4) hypothesis (if any), (5) research methods used, (6) variables or indicators used by researchers, (7) theories cited by researchers, (8) research results, (9) relevance to the objectives of this research.

So the results obtained from collecting 90 articles in 50 journals indexed by Scopus, Sinta 1 and 2 obtained three categories of articles, namely (1) HR development in general (2) HR
development in higher education and (3) HR development models. The number of articles in these three categories is relatively the same, namely almost 30 articles. So that in accordance with the objectives of this research, a model of human resource development in higher education can be created.

Interviews with experts from companies and the academic world were conducted in 6 regions (West Java, Central Java, East Java, Kalimantan, South Sumatra and Aceh), 10 universities (Ibnu Khaldun University, IPB University, IAIN Laroiba, Veteran Bangun Nusantara University Sukoharjo, Airlangga University, Gajah Mada University, STIE Indonesia Banjarmasin, Bina Dharma University Palembang, USK Banda Aceh and UNIKI Bireuen), and in 10 cities in Indonesia, namely: Bogor, Jakarta, Bandung, Surabaya, Sukoharjo, Yogyakarta, Banjarmasin, Palembang, Banda Aceh and Bireuen. Interviews with HR experts from practitioners and companies from 5 companies/organizations, namely (1) PT Quantum HR Internasional, (2) Indonesian Management Forum, (3) P2SDM IPB University, (4) Ulil Albab Islamic Boarding School Bogor, (5) Napan Persada Consultants.

The results of the literature review and expert interviews carried out mapping and SWOT analysis. The results of the SWOT Analysis were reviewed in Focus Group Discussions which were held 4 times, namely at (1) STIE Indonesia Banjarmasin, (2) Bigland Sentul Bogor, (3) UGM club hotel Yogyakarta, and (4) Zoom meeting with management statistics experts from Bina Dharma University Palembang.

3. RESULTS & DISCUSSION

The results of 90 pieces of literature reviewed, in three categories of articles collected are:

**General HR Development Category.** The discussion of the first category of articles relates to recruitment of team members, competency of team members, performance of team members/organization, motivation, innovation, work discipline, job satisfaction, work atmosphere, leadership, training, management of turnover of team members, involvement of team members, giving awards, personality team members, talent management, team member commitment and organizational commitment. Some articles are needed as insight but are not related to discussions such as issues of gender discrimination in the work environment, spiritual leadership, knowledge management, artificial intelligence and social media.

In this category of articles it can be concluded that all these variables are interconnected and have significant direct and indirect influences. If a variable is studied to find out whether it has a big influence on other variables, then the research says some have a big influence and some don't. Variables that do not have a significant influence or even have no influence, there will be other mediating variables that make these variables have an influence. For example, the work environment does not affect the performance of team members. However, if mediating variables are included, for example the job satisfaction variable, then the work atmosphere variable controls the job satisfaction variable and then the job satisfaction variable influences the performance of team members.
In research that involves quite a lot of variables, mediating variables are always needed. This is interesting because to state that an independent variable influences a fixed variable, a mediating variable is needed; This means that HR managers in an organization must make many variations in improving the performance of their employees. HR departments should not just stop when research finds that a variable does not affect team member performance. However, it can be done through other media variables which ultimately improve the performance variables of team members or organizations.

Although the articles in this first category can be said to be general in nature regarding HR development, we can find variables that are often discussed. This variable will later be equated with the competency discussion variable obtained from the SKKNI model. Some suitable variables are recruitment, training and development, performance, rewards, organizational development, and talent management. The industrial relations function is one of the essential functions in SKKNI which is not detected in this category. However, the industrial relations articles in this research appear in the third category when discussing HR development models.

**Higher Education Human Resources Development Category.** In this research there are several articles that discuss human resource development in higher education because the keyword "university" was added to the search. The research aims to obtain a model for human resource development in higher education. There are 26 articles about human resource development in universities in various countries. In particular, several articles discuss the application of HR management in higher education at universities in Kazakhstan, Bangladesh, India, Portugal, Malaysia, Jordan, Oman and universities in India.

In this category, articles discuss the development of individual and organizational human resources in higher education. The HR development studied is almost similar to the first category, namely describing the relationship between variables, such as team member recruitment, job satisfaction, work atmosphere, work motivation, team member involvement, team member turnover, leadership, work ethics, organizational commitment, and work stress. There are also quite a lot of articles that discuss the implementation of HR management as a whole and its influence on organizational performance, campus reputation, future campus development, its impact on the curriculum, university competitiveness, quality of education and sustainability of higher education.

One or two articles discuss things other than the above, such as Green HRM (environmentally friendly HR management), HR productivity, work ethic, university image and quality. Discussions outside this topic are still related to the research objective of providing a broader picture of the implementation of HR management in higher education and what matters are of concern to higher education institutions in managing human resources in their institutions.

**Category of HR Development Model.** There are 33 articles in this third category. Various human resource development models are obtained from tracing the pieces that fall into this category, both overall and per variable. Widespread implementation is also related to the industries studied, such as the banking industry, palm oil plantation industry, Fintech industry,
and MSMEs/entrepreneurship. Models typically include one variable, for example industrial relations, training, competency, career and performance models. Some people model the manager's leadership style with a sense of humor. In this category, you could say that there are various types of models presented.

Not all models in this third category of articles are depicted visually. There are those who only explain with narration, there are also explanatory tables, and the most helpful ones are of course using pictures or diagrams. Overall, the model involves all variables or in some references is called the HR management pillar; not much different from the critical functions of SKKNI in the field of human resource management. Meanwhile, models that involve one variable or several variables, but not all of them, can complete the overall model.

This third model is also compared to the previous HR development model. Islamic HR management models have developed such as the Harvard HR development model, the Michigan model, the Harvard model, even in Malaysia. The entire model will be compared with the critical functions in the SKKNI which are adapted to human resource development in higher education.

The HR development model discussed is a model for industry, therefore it is necessary to display business processes in higher education. The business process in higher education is certainly different from the industrial world which is oriented towards business and development (profit and growth). Business processes in higher education are determined by the main activities (core business), namely academic activities, namely the tri dharma of higher education which includes teaching, research and community service. Apart from the main activities, there are also non-academic supporting activities in the fields of human resource management, finance, infrastructure, organization and student affairs.

The end of the business process in higher education is not profit, although some private universities emphasize profits in managing their higher education. However, universities in their business processes aim to have a respectable academic and academic reputation in society as educational institutions by presenting the superiority of the Tri Dharma of Higher Education. This business process model is taken from Law No. 12 of 2012 concerning Higher Education and Government Regulation No. 4 of 2014 on the Implementation of Higher Education and Management of Higher Education. Then modified based on the Porter model by IPB (2012) as in Figure 1.
In general, the management and development of human resources in higher education includes the academic field, namely lecturers, and the non-academic field, namely employees. Therefore, universities that deal with human resources must manage and develop lecturers and educational staff. Even though they are part of supporting activities, the presence of educational staff is very important considering that the continuity of the teaching, research and community service processes cannot run without them. The department that oversees HR in higher education is usually under the second vice chancellor, where all the supporting fields are located. So, the second vice chancellor must place staff in each section, namely finance, human resources, infrastructure and organization. Usually student affairs are handled by the vice chancellor 3.

Meanwhile, the competency standards for determining the appropriate model are taken from the SKKNI which contains competency units (UK). The competency standards in effect at the time this research was conducted were SKKNI No. 149 of 2020 concerning Determination of Indonesian National Work Competency Standards for Basic Categories of Professional, Scientific and Technical Services, Head Office Activities and Management Consulting in Human Resources Management. SKKNI continues to increase compared to the previous SKKNI in 2015, namely from 104 competency units to 61 competency units. According to research by Mahdani et al. (2018), the role of SKKNI in the industrial world does not have much influence on practical HR competencies. However, this is due to a lack of socialization regarding the contents, roles and functions of SKKNI. Meanwhile, in this research we only took competency unit points formulated by experts and practitioners in their field.

SKKNI Number 149 of 2020 contains 61 UK, each UK has 2-3 UK, and each UK has 2-4 KUK. UK is obtained through 9 critical functions of HRM practices, namely:

1. Create HR management strategies and plans to realize the organization's vision and mission
2. Building an organization that is effective and efficient in achieving its vision and mission

3. Plan, search for, select quality human resources to meet current needs and organizational sustainability

4. Manage awards that are attractive, competitive and fair

5. Manage employee performance so that it is in line with the organization's vision, mission, strategy, values and goals

6. Manage the learning and HR development process for the effectiveness of HR Learning and Development

7. Manage talent in an integrated manner to maintain organizational sustainability

8. Develop and maintain harmonious employee relations and industrial relations to achieve organizational goals

9. Maintain HRM data and information and implement HRM policies effectively.

The main function of SKKNI is the same as the HR development model proposed by experts and practitioners. One development model in the industrial world is PT Astra International Tbk which has Astra Human Capital Management (AHCM) with the following basic framework as in Figure 2.

![Figure 2. Basic Framework (Pillars) of Astra Human Capital Management](source: Amstrong & Taylor, 2023)

The higher education human resource development model as intended in the objectives of this research is taken from the articles studied. 11 models have been identified that can be applied
to human resource development in higher education. From this model, five models applied in the banking industry will be specifically analyzed, namely (1) the Harvard model, (2) Michigan model, (3) Guest model, (4) Warwick model and (5) Junaidah Islamic HRM model.

The explanation of this model as proposed by Masrom (2014) is as follows:

**Harvard Model**

![Harvard Model Diagram]

*Figure 3. Harvard model based on Beer et al.*

*Resource: Marom, 2014*

The Harvard model in Figure 3 shows the model developed by Beer et al. (1984). This model functions as a guide to direct all leaders in the organization in their relationships with employees. This model focuses on the human relations aspect of HRM. This model is usually called a soft model and not a hard model which emphasizes processes, not people. This model also focuses on team member commitment to increase team member loyalty.

**Michigan Model**

![Michigan Model Diagram]

*Figure 4. Armstrong's Michigan model*

*Source: Researcher, 2023*

As in Figure 4, the Michigan model shows a model designed by Armstrong (2000) that focuses on the HRM process. This model is also called a complex model. This gives confidence to organizational management that people must be managed like other resources: acquired efficiently, used sparingly, and exploited to the maximum. It also emphasizes the relationship be-
Between HRM activities and organizational performance. This model focuses on selection, assessment, development and rewards directed at organizational performance.

**Guest Model**

![Guess Model](image)

*Figure 5. Guess Model Based on Guests*

*Source: Researcher, 2023*

The Guest Model can be seen in Figure 5 which shows the model and its function which prioritizes management's ability to integrate HRM practices. The hope is that this practice will produce superior individual and organizational performance. This model of HRM is completely different from performance management because HRM is more about changing people in the face of innovation occurring in the organization with better training, fairness assessment, selection, rewards, job design, engagement, and security, leading to higher quality results, such as commitment and flexibility (Guest, 2002).
Warwick Model

Warwick's model can be seen in Figure 6 which shows the model developed by Hendry and Pettigrew (1990). This model became central to Warwick University's strategy and change in the early 1990s. It emphasizes an analytical approach to HRM. Warwick's model also identifies the impact of the role of the personnel function on the content of human resource strategy. Many researchers use this model to focus on context mapping, identifying internal (organizational) and external (environmental) contexts.

**Islamic Human Resource Management Model.** Figure 7 depicts the Islamic Human Resources Management (HR) model proposed by Junaidah (2009). This model emphasizes fairness and justice by providing Islamic values in every HRM process. This shows the positive and significant influence of empowerment, organizational communication and reasonable procedures as determinants of team members' trust in their organization.
Tree HR Model. According to Ramly & Tanjung (2021), the tree structure, the root of the model, can be called the principle of success. A tree trunk that is good and continues to grow can be analogous to a competent trunk, and fruit/leaves that are dense and useful can be called fruit/leaves of successful action. Based on this structure, the spirituality variable can be said to be the root of human success. Competency variables are the pillars of success that continue to develop in human work. Personality variables are fruit/leaves that continue to move and produce work.

The author develops the tree model as a concept for learning, self-development, profession and career which is called the pumping model. For human resource development, the author then calls it the Pumping-HR model. The structure of the Pumping-HR Model follows the analogy of a tree model. The strong roots in HR management are called Success Principles. The stem that grows in HR management is called Pumping Competency. Useful fruit/leaves that are produced continuously in human resource management are called Pumping Action (Ramly, 2019).

This research has produced a 'human resources' model based on tree components (roots, stems, and fruit/leaves). The complete Tree HR model is as shown in Figure 8 below.
Figure 8 explains that the HR model tree has three important components, namely (1) personal and professional roots, (2) competency stems, and (3) fruit/leaves of skills/actions. The results of the research variables which are at the root of personal and professions are (1) Trust as an educator, (2) Intellectual Intelligence, (3) Integrity, (4) Commitment, love and devotion, (5) Spirituality, (6) Supportive environment, (7) Grit for success, and (8) Emotional intelligence. The main competency variables are (1) Development of competencies into specifications, (2) Mapping to achieve suitability of job characteristics and personal characteristics: intelligence, work potential, way of working, and personality, (3) Environment, (4) Competency and knowledge management, (5) Lecturer professionalism, (6) Inclusive talent development. Meanwhile, the fruits of action skills are (1) the ability to produce work and transfer knowledge to students, (2) the ability to educate students to develop soft skills and hard skills, (3) good work ethics and lecturer behavior, (4) culture and organizational development, (5) Academic service productivity, (6) Knowledge management and social responsibility to create organizational change, and (7) Institutional image.

4. CONCLUSION & SUGGESTION

The conclusion of this research shows that to manage and develop human resources in higher education effectively. Organizations must implement an integrated HR development model,
which includes HR development business processes, a personal humanitarian approach, fostering a conducive work atmosphere and incorporating spiritual values into the process, to create a sense of fairness and justice.

The results of this research, a model was designed which was named the Tree HR Model. It is a tree model of human resource development which consists of 3 important components, namely (1) personal and professional roots, (2) competency stems, and (3) fruit/leaves of skills/actions.

The results of his research also mapped out that personal and professional roots are (1) Trust as an educator, (2) Intellectual Intelligence, (3) Integrity, (4) Commitment, love and devotion, (5) Spirituality, (6) Supportive environment, (7) Grit for success, and (8) Emotional intelligence. The main competency variables are (1) Development of competencies into specific actions, (2) Mapping to achieve suitability of job characteristics and personal characteristics: intelligence, work potential, way of working, and personality, (3) Environment, (4) Competency and knowledge management, (5) Lecturer professionalism, (6) Inclusive talent development. Meanwhile, the fruits of action skills are (1) the ability to produce work and transfer knowledge to students, (2) the ability to educate students to develop soft skills and hard skills, (3) good work ethics and lecturer behavior, (4) culture and organizational development, (5) Academic service productivity, (6) Knowledge management and social responsibility to create organizational change, and (7) Institutional image.

It is recommended for further research to apply and test the influence of variables from the three important components of the Tree HR model.

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