

Analysis of Employee Self-Development Need in the Era of Digitization

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KEYWORD

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A B S T R A C T

This research aimed to analyze employees' self-development needs during information digitization, specifically in the Faculty of Teacher Training and Education (FKIP) Riau University. Data were collected using Google Form questionnaire, obtaining a 79.03% response rate. The data collected were analyzed using descriptive statistics and regression analysis. The result showed that (1) Most employees had a strong understanding of primary duties and functions, suggesting a "high" proficiency level; (2) Technical knowledge and skills had low scores for the majority, while work attitude mostly fell in the "medium" range; (3) Work motivation was largely classified as "medium", with employees showing interest in self-development opportunities, such as job training through mentoring and peer groups. Regression analysis showed that work ability and role clarity had a joint significant influence on employees' work motivation. However, each factor did not show a significant effect individually. This result showed the importance of ensuring all employees have both adequate work ability and role clarity. Based on this result, it was recommended that the management of FKIP Riau University devise employees' development model. This model should prioritize enhancing work ability and clarifying roles to foster motivation and organizational effectiveness.



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INTRODUCTION

Human resource (HR) is important in the efficient functioning of any organization. Despite the sophistication of facilities and infrastructure, optimal utilization is based on the dedication and competence of HR. Organizational objectives may remain elusive without motivated and capable individuals, regardless of the available resources. Research conducted by Agusta & Sutanto (2013) showed the significant role of motivation, ability, and training in enhancing employees' performance. This implied that increasing workforce performance necessitated initiatives aimed at increasing motivation, refining skill sets, and providing adequate training to bridge any gaps in executing daily tasks effectively.

In practice, HR development still receives insufficient attention leading to a mismatch between desired demands and resource capabilities (Li et al., 2023). HR requires continuous development or upgrades to ensure that company and institution have work attitude and professionalism (Danquah et al., 2023). Faculty of Teacher Training and Education (FKIP) Riau University is an organization with the vision of "Excellent research faculty and prospects in the field of teaching and education in Southeast Asia in 2035". To achieve this excellence, the university needs support from various resources, including HR. According to previous research, HR has a more important role than other resources because of the ability to determine success or failure in competition (Atmaja & Ratnawati, 2018); (Andrayani et al., 2022). (Usmaedi, 2021) explained that Society 5.0 positioned humans at the center, using technological advances to improve the quality of life, social responsibility, and sustainable development. Therefore, the presence of superior HR at FKIP Riau University is hoped to improve service performance at the Southeast Asian level.

FKIP Riau University used the support of 62 employees (more than 35% non-PNS, civil servants) tasked with assisting the dean in achieving the faculty's vision. However, the results of interviews with the leaders showed that work motivation of employees was not optimal because more than 25% were below expectations. This condition will have an impact on the performance of FKIP Riau University when not resolved immediately. Meanwhile, the era of industrialization 4.0 has caused a change in society's culture towards information digitization, namely the process of transferring media from printed to electronic form. The events of the last few years have made HR well-prepared with assistance from adequate technology (Timming & Macneil, 2023). This description was consistent with the report of Stancioiu that many observers were currently at the initial phase of the fourth industrial revolution, also known as "Industry 4.0". Currently, many products are connected to the internet, the presence of sensors, the expansion of wireless communications, robots, and the development of intelligent machines have the potential to change the ways of production. Industry 4.0 has caused many professions to change as employees are now required to learn new tasks and compelled to use high-tech gadgets (Tay et al., 2018). Therefore, this research aimed to (1) analyze employees' development need at FKIP Riau University, which include role clarity, work ability, and motivation, as well as the desired form of employees' development in the era of information digitization (2) designing a model of employees' development at FKIP Riau University.

RESEARCH METHODS

Development research was carried out in Thiagarajan's Four D (4D) model with 4 stages, namely Define, Design, Develop, and Disseminate (Winaryati, 2021). In Stage 1 (Define), a need analysis was conducted for employees' development. This was carried out on the variables of role clarity, work ability, and motivation, as well as the desired form of employees' development. Stage 2 (Design) designed a model of employees' development in the era of information digitization. This research method was used to obtain an appropriate model of employees' development at FKIP Riau University.

This research was carried out on 62 employees, consisting of 18 PNS, 30 Non-PNS, and 14 Security personnel. Data including role clarity (task details), work ability (technical work knowledge, skills, and attitudes), motivation, and expectations regarding employees' development models were collected using a questionnaire. The data collection process was also facilitated with the help of Google form, distributed using WhatsApp Group. In this case, 49 respondents (79.03%) filled out the questionnaire on Google Forms. The collected data was analyzed using descriptive statistics, regression analysis, and FGD (Focus Group Discussion) with the leadership of FKIP Riau University. First, descriptive analysis was used to answer research objective 1 which was needed for employees' development. Second, regression analysis was used to determine the effect of role clarity and work ability variables on motivation. The results of analyses 1 and 2 were used as a basis for designing a model for employees' development. Third, FGD was carried out to perfect the design of employees' development model.

RESULTS AND DISCUSSION

This section discusses three aspects, namely general description of respondents, employees' development needs, and model design. Each aspect was analyzed and represented in figures and tabular forms.

General Description of Respondents

Judging from employment status, the research sample shows that the majority are honorary employees. This category represents a percentage of 47%, as shown in Figure 1.

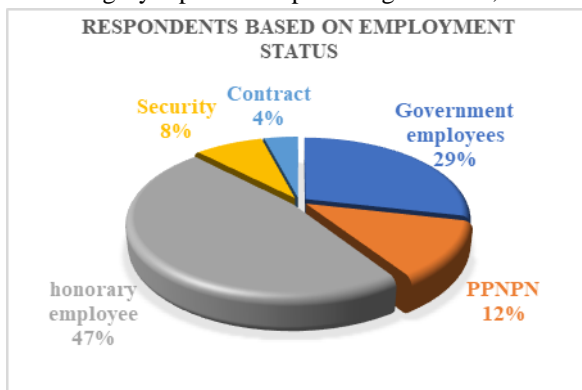


Figure 1. Distribution of Respondents Based on Employment Status

Source: Data processed 2023

Figure 1 shows that activities at FKIP Riau University are mostly supported by non-PNS employees, as shown in the low percentage of PNS, accounting for only 29%. Meanwhile, the majority of respondents have a Bachelor's degree, accounting for 53%, as shown in Figure 2.

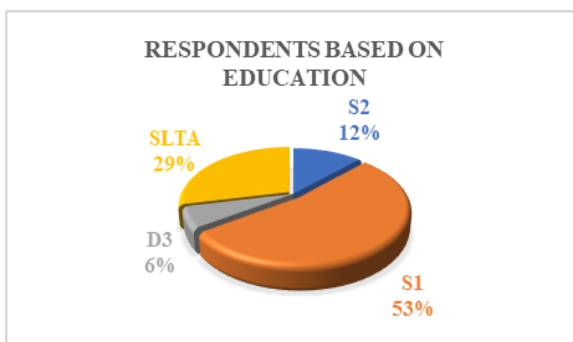


Figure 2. Distribution of Respondents Based on Education

Source: Data processed 2023

Figure 2 shows that 35% of the respondents have less than a Bachelor's degree, with only 12% Master's degree holders. Therefore, further research is required to improve the mindset and creativity of FKIP Riau University employees in carrying out main duties and functions.

Employees' Development Need

This section discusses the results of descriptive analysis of 4 research variables, namely role clarity, work ability, work motivation, and the desired form of employees' development in the era of information digitization.

Role Clarity (Understanding of Main Functions)

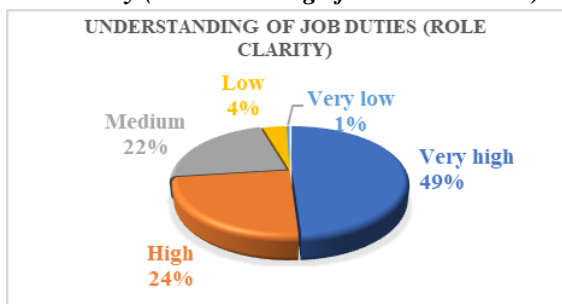


Figure 3. Level of Understanding of Job Duties (Role Clarity)

Source: Data processed 2023

Research data shows that the majority of employees have an understanding of the "very high" (49%) and "high" (24%) categories of the main duties and functions, as evidenced in Figure 3. Above. The condition in Figure 3 is a very positive aspect for institution in moving towards faculty activity programs. However, this must be supported by the necessary competencies because employees with a high understanding of duties without being supported by competencies will experience work-related problems. This level of understanding is measured from 4 indicators, as shown in Table 1.

Table 1. Level of Understanding of Job Duties (Role Clarity) Based on Indicators

| Aspects of Understanding | Very Low | Low | Medium | High | Very High |
|--|----------|------|--------|-------|-----------|
| ▪ Understanding of detailed job duties | 0.0% | 6.1% | 18.4% | 24.5% | 51.0 |
| ▪ Understanding work processes | 0.0% | 2.0% | 28.6% | 20.4% | 49.0 |
| ▪ Understanding working time | 0.0% | 0.0% | 20.4% | 24.5% | 55.1 |
| ▪ Understanding of quality standards | 2.0% | 8.2% | 22.4% | 26.5% | 40.8 |
| Mean | 0.5 | 4.1 | 22.5 | 24.0 | 49.0 |

Source: Data processed 2023 (Coghlan, 2019)

The result in Table 1 shows that several aspects still need more development attention, namely (a) understanding work processes, and (b) understanding quality standards because 30.6% and 32.6% of employees are in the "medium" and "low" category, respectively. This result is consistent with the report of (Goleman et al., 2013) and (Harms et al., 2017) that the understanding aspect needs further development to facilitate the work process.

Work Ability

Work ability was measured from 3 aspects, namely (a) technical work knowledge, (b) work skills, and (c) work attitude.

Technical Work Knowledge

In this research, technical work knowledge was examined in terms of employees' self-development needs. The results showed that 41% of employees required development of technical work, categorized as "high" and 20% were "very high". Figure 4 shows that the level of "work technical knowledge" of employees is still lacking. In this context, 61% of employees need to develop work technical knowledge.

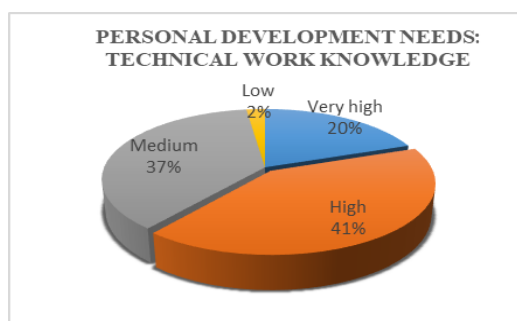


Figure 4. Personal Development Need: Technical Work Knowledge

Source: Data processed 2023

Work Skills

Work skills of employees were examined in terms of the need for self-development. The results showed that 46% of employees needed to develop work skills, categorized as "high", while 22% were "very high".



Figure 5. Personal Development Need: Work skills
Source: Data processed 2023

Figure 5 shows that 68% of employees need self-development in terms of work skills. The need for work skills was measured from 7 indicators, as shown in Table 2.

Table 2. Personal Development Need for Work Skills Based on Indicators

| Aspects of Need for Self-Development of Skills: | Very Low | Low | Medium | High | Very High |
|---|----------|-------|--------|--------|-----------|
| ▪ Development need in work analysis skills | 2.00% | 6.10% | 28.60% | 42.90% | 20.40% |
| ▪ Development need in interpersonal relationship skills | 2.00% | 4.10% | 24.50% | 53.10% | 16.30% |
| ▪ Development need for decision-making skills | 4.10% | 4.10% | 26.50% | 49.00% | 16.30% |
| ▪ Development need in communication skills | 2.00% | 4.10% | 22.40% | 51.10% | 20.40% |
| ▪ Development need in skills to manage work results | 4.10% | 2.00% | 26.50% | 55.10% | 12.30% |
| ▪ Development need in skills to respond to change | 2.00% | 4.10% | 32.70% | 46.90% | 14.30% |
| ▪ Development need in customer service skills | 4.10% | 6.10% | 14.30% | 20.40% | 55.10% |
| Mean | 2.90% | 4.37% | 25% | 45.50% | 22.16% |

Source: Data processed 2023 (Greenberger, D & Padesky, 2004)

Table 2 shows that employees need self-development in all aspects of work skills, with categories of "high" and "very high". This result is consistent with the report of (Nasution & Utara, 2015) that work skills are needed to facilitate work activities, thereby necessitating self-development.

Work Attitude

Work attitude is equally important as the previously mentioned variables in supporting the rapid achievement of an institution work program. Without a positive work attitude, employees' knowledge and skills become ineffective. According to previous research, employees with a negative attitude will avoid responsibility, even when there is high work knowledge and skills (Fook & Gardner, 2016); (Goleman, 2011). In this case, attitude was measured with 6 indicators using semantic differential measurements 1 to 7. The data collected shows that the majority of employees have a work attitude in the "medium" category. Work attitude of each indicator is shown in Table 3.

Table 3. Work Attitude of Employees

| Aspects of Work Attitude | Mean Score | Score (%) | Category |
|----------------------------------|------------|-----------|----------|
| ▪ Accept suggestions | 4.55 | 65.0% | High |
| ▪ Enjoying his job | 4.59 | 65.6% | High |
| ▪ Don't want to change jobs | 3.73 | 53.4% | Medium |
| ▪ Nice rotation for refreshments | 3.53 | 50.4% | Medium |
| ▪ Doesn't like delaying work | 3.49 | 49.9% | Medium |
| ▪ Pay attention to customer need | 4.31 | 61.5% | High |
| Mean | 4.03 | 57.63% | Medium |

Source: Data processed 2023 (Greenberger, D & Padesky, 2004)

Table 3 shows that three aspects of work attitude were in the "high" category, while the remaining three were "medium". Developing a work attitude requires attention from the leadership to support the institution work program. According to (Info, 2019) and (Lorinkova et al., 2020), work attitude is a factor that determines self-development.

Work Motivation

Work motivation is an important aspect of achieving a successful institution work program. This is because high work motivation promotes employees to work hard as well as be diligent and tenacious in completing every work (Antonacopoulou, 2017). The result showed that 63% of employees had work motivation in the "medium" category, as shown in Figure 6.

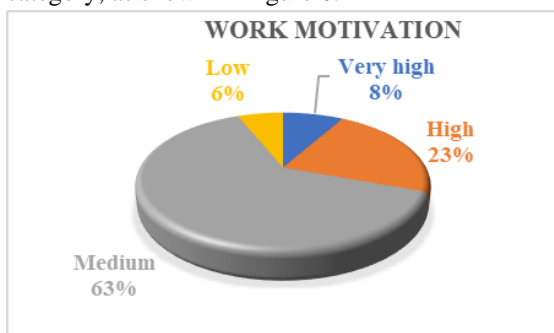


Figure 6. Work Motivation
Source: Data processed 2023

Figure 6 shows that there is still a small number of employees with "high" and "very high" motivation (31%). The remaining 69% have work motivation in the medium to low category. This result shows the need for leaders to focus on increasing motivation, thereby promoting employees to enhance work processes in support of faculty performance. Consistent with (Spreitzer, 2018), leadership attention is an important factor due to Its ability to provide great motivation and work enthusiasm for employees.

Desired Form of Employees' Development

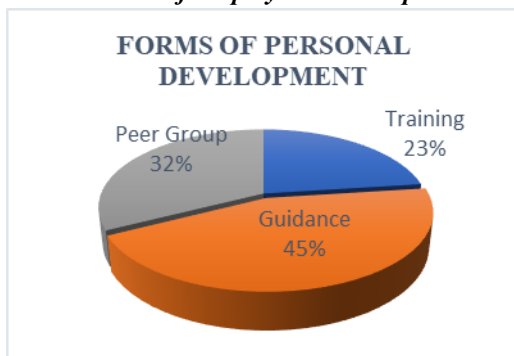


Figure 7. Personal Development Model Desired by Employees
Source: Data processed 2023

The preference for on-the-job training model among the majority of employees showed that self-development activities were carried out in workplace. Furthermore, on-the-job training model is generally expected to be conducted in the form of mentoring (45%) and peer groups with more knowledgeable colleagues (32%), as shown in Figure 8.

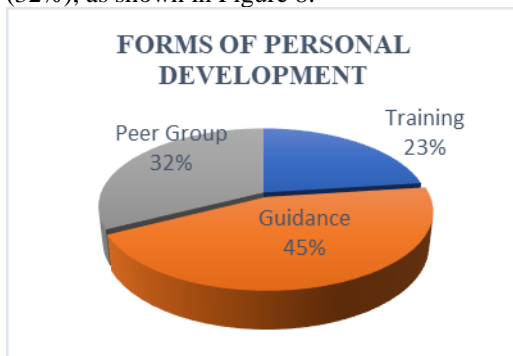


Figure 8. Forms of Personal Development Desired by Employees
Source: Data processed 2023

Designing Model of Employees' Development

The design model was carried out based on the results of regression, need analysis of employees' development, and FGD as follows:

Results of Regression Analysis

The multiple regression analysis showed that simultaneously work ability and role clarity had a positive and significant influence on motivation (Putri et al., 2023); (Pedler and Boydell, 2000); (Noe, R. A., & Kodwani, 2018), as shown in Table 4.

Table 4. The Influence of Work Ability and Role Clarity on Work Motivation

| | | ANOVA ^a | | | | |
|-------|------------|--------------------|----|-------------|-------|-------------------|
| Model | | Sum of Squares | df | Mean Square | F | Sig. |
| 1 | Regression | 141.869 | 2 | 70.935 | 5.130 | .010 ^b |
| | Residual | 636.049 | 46 | 13.827 | | |
| | Total | 777.918 | 48 | | | |

a. Dependent Variable: Motivasi Kerja

b. Predictors: (Constant), Kejelasan Peran, Kemampuan Kerja

Source: Data processed 2023

The result in Table 4 is consistent with the report of (Rinawati et al., 2016) that there is an influence of knowledge on the implementation of APD as an effort to achieve zero accidents in the spinning section of PT. Partially, each variable (Role Clarity, Work Ability) has an insignificant influence on work motivation, as shown in Table 5.

Table 5. Regression Coefficients that determines Work Motivation

| | | Coefficients ^a | | | | |
|-------|-----------------|-----------------------------|------------|---------------------------|-------|------|
| | | Unstandardized Coefficients | | Standardized Coefficients | | |
| Model | | B | Std. Error | Beta | T | Sig. |
| 1 | (Constant) | 5.709 | 3.911 | | 1.460 | .151 |
| | Kemampuan Kerja | .120 | .066 | .254 | 1.808 | .077 |
| | Kejelasan Peran | .345 | .177 | .274 | 1.953 | .057 |

a. Dependent Variable: Motivasi Kerja

Source: Data processed 2023

The regression equation is $Y=5.709+0.120X_1+0.345X_2$ where Y, X₁, and X₂, represent motivation, work ability, and role clarity, respectively. Each independent variable has an insignificant influence on work

motivation, with p-values of 0.077 and 0.057, respectively. This result shows that the two independent variables cannot be separated from each other in increasing work motivation of employees. According to (Abeba et al., 2019), employees possessing extensive technical knowledge but lacking a clear understanding of the primary duties and functions do not exhibit increased work motivation. This is because employees are unaware of specific tasks and responsibilities. In this case, employees only work when given an order.

Employees who understand the main duties and functions well (role clarity) cannot increase work motivation without having technical knowledge. This is because these employees are unaware of how to carry out each task and function. In this context, guidance and direction from superiors is very necessary. The results of the analysis showed the need for appropriate HR development strategies to enable positive relationships and improve performance for both individuals and groups (Pahos et al., 2023); (Toraldó et al., 2018).

Need Analysis of Employees’ Development and FGD

The result of employees’ development needs showed that "work motivation" fell in the "medium" category, necessitating improvement. Regression analysis showed that high "work motivation" was influenced by "role clarity" and "work ability." Descriptively, the majority of employees possess a "high" to "very high" understanding of roles. However, there is a need for improvement in work ability, measured by three sub-variables, such as (a) technical work knowledge, (b) work skills need development in the "high" category, and (c) work attitude requires development in the "medium" category.

To improve work motivation at FKIP Riau University, efforts should focus on improving three aspects, namely technical work knowledge, skills, and attitude. Meanwhile, the descriptive analysis shows that most employees prefer implementing on-the-job training model, particularly through mentoring and peer groups with more knowledgeable colleagues

Based on the results of this research, a design for a "training model in the era of global information" was prepared and continued with FGD activities with relevant leaders. After FGD activity, a prototype of the model stages was developed as follows:

1. The institution develops a social media group for employees, such as WhatsApp Group (WAG), Telegram, or other media.
2. The institution identifies the need for employees’ development through social media groups (results of step 1).
3. The institution sends one or several competent employees to take part in job training according to employees’ need;
4. Assign employees who have attended job training outside the institution (results of Step 3) as mentors in social media groups (results of Step 1).
5. Through social media groups, employees should carry out job training by mentoring colleagues (peer groups) who have been trained outside the institution (results of step 3).
6. The institution carries out evaluations and provides rewards to mentors and participants, whose performance increases according to institution expectations.

In summary, the model of on-the-job training in the form of a peer group can be described as follows.

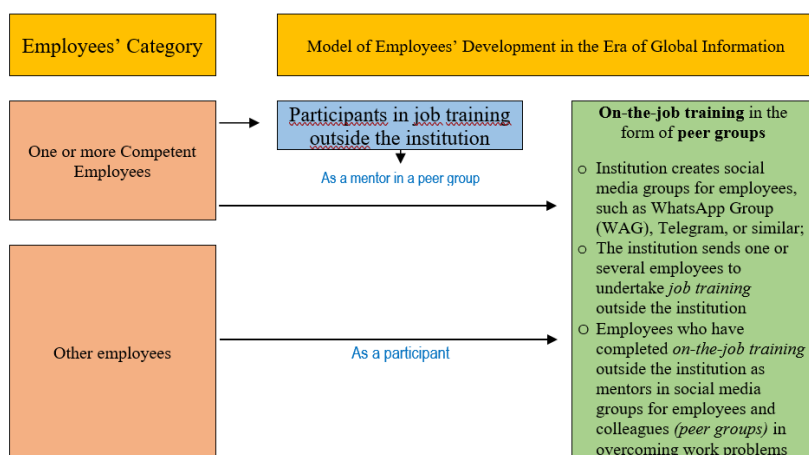


Figure 9. Prototype Model of Employees’ Development in the Era of Global Information

CONCLUSION

In conclusion, the majority of employees at FKIP University of Riau understood main duties (role clarity) in the "very high" category but lacked technical work knowledge and skills. Work attitude and motivation were in the medium category. The majority of employees desired self-development in aspects of technical work knowledge and skills, categorized as "high". Furthermore, the majority of employees desired an on-the-job training model in the form of mentoring and peer groups. Based on these results and conclusions, to maximize the potential of employees, FKIP Riau University needed to design a self-development model in the form of on-the-job training and peer groups.

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