Analysis of Optimizing Human Resource Management in the Era of Digital Transformation at Marshal Suryadarma Aerospace University

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Abstract: This research aims to analyze the optimization of human resource management (HRM) in facing the Digital Transformation Era at Marshal Suryadarma Aerospace University (UNSURYA). UNSURYA, as a higher education institution with a focus on aerospace and technology, possesses specific characteristics that influence HRM strategies in the digital era. Writer describes the profile of UNSURYA, HRM practices before the digital era, and the impacts and changes brought about by digital transformation. writer identifies several challenges, including unequal access and digital skills, organizational culture change, and regulatory barriers. Furthermore, the writer relates HRM theories, such as Maslow's and Herzberg's Motivation Theory, to HRM efforts at UNSURYA. writer suggests the application of Performance Management Theory as an approach to optimize HRM, emphasizing clear goal setting, feedback system development, training, and recognition. In this overall context, UNSURYA has a significant opportunity to prepare adaptable and competitive HRM in the connected and digital age. The research findings provide valuable insights for universities and other organizations facing similar digital transformations in their efforts to optimize HRM.

Keywords:Dirgantara University Marshal Suryadarma, Human Resource Management, Digital Transformation Era, Motivation Theory, Performance Management Theory.

INTRODUCTION

Human resource management in the context of higher education has experienced significant developments in the last few decades. The conventional model of HR management which focuses more on personnel administration feels increasingly irrelevant in facing the challenges and opportunities that arise in the digital era. Digital technology impacts various aspects of higher education, including recruitment, employee development, technology-based learning, data analytics, and performance measurement.

The problem that will be faced in this research is how optimal HR management can help Marshal Suryadarma Dirgantara University to respond to the challenges and opportunities that exist in the era of digital transformation. The initial hypothesis is that effective HR management and a focus on digitalization can improve the quality of education and operational efficiency of universities.

RESEARCH METHODS

In this research, the author applies a descriptive and analytical research approach. This approach allows the author to explore relevant literature and analyze it carefully to understand the concepts, theories and practices of HR management in the era of digital transformation.

According to writerbster and Watson (2002), literature study is a research method that allows researchers to investigate existing literature, evaluate previous findings, and combine results from various sources to build a comprehensive understanding of the research topic.

The data analysis process in this literature study will involve the following steps:

1. Literature Search: the author will conduct a literature search with relevant keywords, such as "HR management", "digital transformation era", "higher education", and so on.
2. Literature Selection: After collecting literature, the author will carry out a strict selection to select the sources most relevant to the author's research topic.
3. Literature Evaluation: the author will evaluate the selected literature to understand the research methodology, main findings, and relevance to the author's research topic.
4. Literature Synthesis: the author will compile a synthesis of the literature that the author has found to identify the main findings, conceptual framework, and effective HR management practices in the era of digital transformation in higher education.

Based on the explanation above, the author has chosen the literature study method as an appropriate approach to deepen understanding of human resource management practices and strategies in the era of digital transformation at Dirgantara Marshal Suryadarma University. With this approach, the author can combine the latest findings from relevant scientific literature, thereby enabling the author to develop a comprehensive basis for understanding the research topic.

RESULTS AND DISCUSSION

Results

Profile of Marshal Suryadama Aerospace University

Marshal Suryadarma Dirgantara University (UNSURYA) is a private university under the leadership of the Indonesian Air Force which is organized by the Adi Usaha Foundation (YASAU). UNSURYA is the only university in Jakarta

that focuses on aerospace science. Founded in 1988 with the name Suryadarma Aerospace Technology Institute (ITD) then in 1989 it changed to Suryadarma Aerospace Technology College (STTD), as the campus developed, in 1999 STTD changed to Suryadarma University. In 2016, the words "Dirgantara" and "Marshal" were added so that it became "Marshal Suryadarma Aerospace University" to show its identity as a university that has specialties in the field of aerospace in accordance with its vision.

This university has a strong vision and mission in supporting education and research in the field of aviation. The determination of UNSURYA's Vision, Mission, Goals and Targets was studied from various inputs involving a number of parties such as university leaders, faculties, alumni, alumni users, experts and competent and relevant stakeholders. The following is its vision, namely "To become a Center of Excellence in aerospace higher education and a field of knowledge developed in Indonesia with outcomes ready for use in the world of work". The missions to achieve this vision include:

1. Providing superior higher education in the field of aerospace and related sciences with outcomes that are independent, characterized, professional and ready to be used in the world of work.
2. Carrying out the role of Higher Education as agents of change in the field of aerospace technology and related knowledge groups developed at UNSURYA.
3. Organizing superior, fair and sustainable governance and administration of higher education.

The curriculum at Unsurya refers to the Chancellor's Decree Number: 01 of 2011. The curriculum that applies to the study program is called the operational curriculum which describes the competencies of graduates that will be produced and is always adapted to developments in science and the needs of the world of work. Curriculum reviews are carried out at least two years from the time the curriculum is implemented.

Human Resources Management (HR)

Human Resource Management (HR) is a strategic approach to managing the most valuable assets in an organization, namely human resources. It includes planning, recruitment, selection, training, development, performance evaluation, compensation, and employee relations management. This definition reflects the important role of HR in creating added value for the organization and in supporting the achievement of strategic goals. HR focuses not only on administrative aspects, but also on managing and developing the individuals who form the core of the organization.

According to Gary Dessler (2017), HR management is "the process of planning, organizing, directing and controlling functions involving recruitment, selection, development, payroll, termination and development of employees in an organization." This definition emphasizes the comprehensive HR approach in managing the employee life cycle in the organization.

Michael Armstrong (2017) in his book entitled "Armstrong's Handbook of Human Resource Management Practice" defines HR management as "practices involving recruitment, selection, training and development, payroll, performance management, employee relations, and change management." This definition

covers various key functions in HR management and highlights the close relationship between HR practices and change management

In the HR management concept, an understanding of the theories related to the concept is required. The following are several HR management theories, including:

1. Theory X and Y by Douglas McGregor: Theory X and Y are two concepts initiated by Douglas McGregor in his book entitled "The Human Side of Enterprise" (1960). Theory X describes the traditional view of employees, which sees them as individuals who tend to be lazy, lack enthusiasm, and need to be managed closely. On the other hand, Theory Y assumes that employees have potential, can be independent, and have internal motivation to work well. In the context of HR management, understanding this theory refers to the approach towards employees. If an organization bases HR management on Theory

2. Abraham Maslow's Theory of Motivation: This theory is known as the "Hierarchy of Needs" and was proposed by Abraham Maslow in his paper entitled "A Theory of Human Motivation" (1943). This theory states that individuals have a series of needs arranged in a hierarchy, starting from physical and safety needs to social needs, esteem and self-actualization. In the context of HR management, understanding this theory helps organizations to identify and understand employee needs. When organizations can meet these needs, employees tend to be more motivated and perform better (Maslow, 1943).

3. Frederick Herzberg's Theory of Motivation: Herzberg's theory of motivation, also known as the "K Factor (We) and H Factor (Hygiene)," is a framework proposed by Frederick Herzberg in his article entitled "One More Time: How Do You Motivate Employees ?" (1968). This theory identifies two types of factors in the work environment: factors that motivate (Factor K) and factors that prevent dissatisfaction (Factor H). K factors include things like recognition, responsibility, and achievement, which can motivate employees. Factor H includes basic elements such as salary, working conditions, and interpersonal relationships. Herzberg's theory highlights the importance of understanding and fulfilling employee motivation factors to create a satisfying work environment (Herzberg, 1968).

4. Balanced Scorecard Performance Management Theory: Balanced Scorecard Theory, developed by Robert S. Kaplan and David P. Norton, is an approach that emphasizes balanced performance measurement from multiple perspectives. This includes finance, customers, internal processes, and learning and growth. This theory invites organizations to not only focus on financial aspects, but also measure things such as customer satisfaction, process efficiency, and innovation. In the context of HR management, the Balanced Scorecard helps organizations to measure employee performance from various points of view that are relevant to organizational goals (Kaplan & Norton, 1991).

5. Performance Management Theory Management by Objectives (MBO): MBO theory is an approach that links individual goals with organizational goals. In an MBO framework, employees together with their managers set specific, measurable, agreed-upon, relevant, and time-bound (SMART) goals. This theory provides a clear focus and transparency in measuring employee performance. With well-defined goals, employees have a clear understanding

of what is expected of them and how their performance will be assessed (Drucker, 1954).

By understanding these theories, organizations can develop effective HR management strategies, focus on holistic performance measurement, appropriate change management, increase employee satisfaction and engagement, and encourage innovation in a dynamic work environment.

Era of Digital Transformation

Forrester Research (2019) defines digital transformation as the use of digital technology to create better experiences for customers, advance innovation, and achieve competitive advantage. This transformation includes changes in various aspects of the business, from business models to processes, to achieve better results and create added value.

The complexity and significance of the Digital Transformation Era in influencing businesses and organizations globally. Digital transformation involves holistic and comprehensive changes that drive companies to innovate and adapt quickly in a technology-driven era.

In its development, the Digital Transformation Era creates various opportunities that enable individuals and groups to increase their respective achievements. The following are some of the advantages of the existence of the Digital Transformation Era, including:

1. Improved Operational Efficiency: The Digital Transformation Era enables organizations to increase operational efficiency by automating business processes. This reduces the potential for human error and speeds response times. McKinsey & Company (2019) highlights the importance of digital transformation in creating more efficient operations.
2. Faster and Easier Access to Information: Digital technology, especially the internet and mobile devices, provides instant access to data and information. This allows individuals and organizations to access information quickly, supporting better decision making. Deloitte (2019) describes how digital technology is changing the way we interact with data.
3. New Product and Service Development: Digital transformation creates opportunities for organizations to create new, more innovative products and services. This enables business growth and development. Gartner (2018) highlights the role of technology in creating product and service innovation.
4. Improved Quality of Customer Service: Digital technology enables organizations to improve their customer service. This includes data-driven customer service, more responsive customer support, and better customer experiences. Capgemini (2017) emphasizes the importance of digital transformation in improving relationships with customers.
5. Reduced Operational Costs: Automation, mobile devices, and cloud technology help organizations reduce operational costs. This includes reducing physical infrastructure costs, travel costs, and administrative costs. The World Economic Forum (2016) highlights the economic benefits of digital transformation.

Even though there are varied benefits in people's lives, it cannot be denied that the Era of Digital Transformation also raises several obstacles. These obstacles include:

1. Technology Access Inequities: Advanced technology resources may be unequally available, creating inequities in access to digital benefits. Underrepresented groups can be left behind. According to the World Economic Forum (2016), digital inequality is a serious problem.
2. Security and Privacy Concerns: Digital transformation creates security and privacy risks. Cyber threats and data breaches are becoming a deep problem. Organizations and individuals must invest in cybersecurity. Gartner (2018) highlights the role of security in the digital era.
3. Regulatory Challenges: The growth of digital technologies is often faster than the development of relevant regulations. This creates challenges in maintaining compliance with evolving laws and regulations. According to McKinsey & Company (2019), regulation is one of the main obstacles to digital transformation.
4. Technological Uncertainty: Digital technology continues to develop rapidly, creating uncertainty about which technologies will become industry standards. Organizations must be careful in choosing the technology to adopt. Deloitte (2019) describes uncertainty in digital technology.
5. Skills Shortage: In the digital era, the demand for advanced technological skills is increasing. However, there is a shortage of human resources who have these skills. Organizations need to invest in workforce training and development. Capgemini (2017) highlights the skills challenges in digital transformation.

DISCUSSION

Analysis of UNSURYA Characteristics

Marshal Suryadarma Dirgantara University (UNSURYA) is a higher education institution that has special characteristics that have a big influence on human resource management (HR) strategies in facing the Digital Transformation Era. As a university with a long history and reputation for excellence, UNSURYA has established a strong commitment to academic excellence and the development of high-quality human resources. This is reflected in its focus on education and training in the aerospace sector, where technology and digital innovation play a central role.

UNSURYA is also known for its collaborative efforts with the aerospace industry. Located in a strategic area, UNSURYA has succeeded in building partnerships with leading aerospace companies. This collaboration opens the door for UNSURYA students to access resources, training and industry knowledge relevant to digital technology. In the process, UNSURYA has better access to the latest developments in the industry, enabling it to prepare graduates with skills that match the demands of an increasingly digitalized industry.

The Era of Digital Transformation has also changed the teaching and learning paradigm at UNSURYA. The use of technology, online platforms and digital resources is growing, enabling students to gain access to learning materials relevant to digital technology. UNSURYA continues to invest in infrastructure and training to ensure that its students and academic staff can harness the potential of digital technology in teaching, research and human resource development.

Analysis of UNSURYA's Obstacles in Facing the Era of Digital Transformation

In an effort to optimize human resource (HR) management at Marshal Suryadarma Dirgantara University (UNSURYA) in facing the Digital Transformation Era, several specific obstacles need to be considered in more depth. One significant obstacle is the inequality of access and mastery of digital skills among UNSURYA academic and administrative staff. The digital era requires a strong mastery of technology, including an understanding of data analysis, use of digital devices and platforms, and a strong understanding of cyber security. The success of optimizing human resources in the digital era will greatly depend on efforts to equip employees with these skills.

Additionally, changing organizational culture is a significant obstacle. UNSURYA, like many other educational institutions, may face challenges in changing the existing culture. Digital transformation requires adopting a culture that supports innovation, flexibility and responsiveness to change. This involves changes in the way of thinking and operating across the institution, which may require time and strong commitment.

Regulatory and security barriers must also be carefully addressed. The digital era brings changes in regulations related to student data protection, privacy and cyber security. UNSURYA must ensure compliance with constantly changing regulations and improve cybersecurity systems to protect sensitive data. This may require additional investment in cybersecurity infrastructure and training.

Analysis of the Relationship between HR Management Theory and UNSURYA Characteristics

The relationship between Motivation Theory, especially the theory developed by Maslow and Herzberg, with human resource management (HR) efforts at Marshal Suryadarma Dirgantara University (UNSURYA) in facing the Era of Digital Transformation can be seen from various deeper points of view.

Maslow's Motivation Theory understands that individuals have levels of needs that must be met to achieve higher levels of motivation. At the base of Maslow's hierarchy of needs are physical and safety needs. In the context of UNSURYA, this means ensuring academic and administrative staff have adequate economic prosperity and job security. This creates a stable foundation to motivate them to perform high. By understanding this, UNSURYA can design HR management programs that ensure staff welfare as a prerequisite for achieving academic excellence.

Herzberg's Motivation Theory highlights the importance of intrinsic factors that motivate individuals in the workplace, such as achievement, recognition, and responsibility. UNSURYA, in an effort to optimize HR management, can use this theory to create an environment where staff feel valued, have significant responsibilities, and have the opportunity to achieve. In the digital era, these opportunities can be realized through the use of cutting-edge technology in teaching, research and campus administration.

Optimizing Human Resource Management in the Era of Digital Transformation at Marshal Suryadarma Aerospace University

To optimize human resource (HR) management at Dirgantara Marshal Suryadarma University (UNSURYA) in the Digital Transformation Era, an approach based on Performance Management Theory can be used. This theory leads to efforts to achieve high individual and organizational performance through measuring, managing and developing employee performance. In the context of UNSURYA, the application of Performance Management Theory can be an effective solution for optimizing HR management in the digital era.

First, UNSURYA can start by setting clear and measurable goals for its academic and administrative staff. This involves identifying strategic goals relevant to the university's mission, which may include academic achievement, improving the quality of teaching, productive research, and positive contributions to technological developments in the digital era. Individual and team performance measurements can be made based on the achievement of these goals.

Furthermore, UNSURYA can develop an effective feedback system and a structured performance assessment process. This allows staff to receive regular feedback on their performance, identify areas requiring improvement, and develop personal development plans. In the digital era, this also includes the use of data and performance analysis supported by technology.

CONCLUSION

UNSURYA, with its special characteristics in academic focus, industrial partnerships and digital technology, has a great opportunity to be successful in facing the Digital Transformation Era. However, barriers such as inequalities in digital access and skills, changes in organizational culture, and regulatory barriers need to be addressed. Motivation Theories (including Maslow and Herzberg) can help understand staff motivation, while the application of Performance Management Theory is an effective approach to optimizing HR management in the digital era. In this overall context, UNSURYA can prepare human resources who are responsive to change, ready to compete, and support the university's mission in a connected and digital era.

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