

ABSTRACT

Analysis of The Green Human Resource Management Implementation in Startup Companies

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Abstract. Expanding concern for the global environment and the importance of going green created a need for business organizations to adopt the latest environmentally friendly strategies and programs. The goal of Green Human Resources Management (Green HRM) is to develop a workforce that understands and supports environmentally friendly behavior in businesses. Despite the fact that Green HRM has drawn a lot of attention from academics, there is still few research about Green HRM, especially in Startup Companies. From the beginning through the stage of their growth, Startups Companies are unavoidably faced with a number of challenges and barriers. As they age, their basic structure changes, forcing the specialization of operations, emphasizing the importance of Green HRM practices can help organizations align their business strategies with the environment. This study aims to identify the variables that affect the implementation of Green HRM in Startup Companies. A survey-based method was adopted and the proposed concept is examined using SmartPLS 3.2.9 software and PLS-SEM (Partial Least Square-Structural Equation Modelling) analysis. This study demonstrates how the factors of individual knowledge, personality, organizational culture, education and training, as well as digital transformation, influence the Implementation of Green HRM in Startup Companies. The Green HRM concept is developed in Startup Companies as part of integrating the management environment with HRM to help maintain a sustainable environment.

Keywords: *Green Human Resource Management, Startup Companies, SmartPLS, PLS-SEM*

INTRODUCTION

Environmental pollution and global warming are becoming serious issues that call for increased environmental ethical awareness from all parties involved, including businesses as business actors [1]. Expanding concern for the global environment and the importance of going green created a need for business organizations to adopt the latest environmentally friendly strategies and programs. Human Resource Management (HRM) is an important part of managing human resources. Organizations can create a positive environment for their employees through effective HRM. Additionally, it is thought that HRM enables organizations to influence their workforces' environmental responsibility. The term "Green Human Resource Management," or "Green HRM," refers to the implementation of the "Green Business" concept in the HRM [2]. The goal of Green Human Resources Management (Green HRM) is to develop a workforce that understands and supports environmentally friendly behavior in businesses [3].

To foresee global economic trends, the presence of startup companies may become new market leaders. According to the Global Startup Ecosystem Report [4], the global startup economy continues to develop, contributing around 3 trillion USD in value for only less than three years (2017 to the first half of 2019). A report from Startup Ranking [5], Indonesia is listed as the 6th biggest growing startup company after the United States, India, United Kingdom, Canada, and Australia. The growing number of companies is followed by the growing number of human resources. From the beginning through the stage of their growth, startup companies are unavoidably faced with a number of challenges and barriers [6] especially human resources. The HRM in startups companies have a variety of roles from strategic to non-strategic. It also relies on different networks in recruiting top talents. Considered as a fast moving environment, HRM in startup companies struggles with retaining qualified employees.

Understanding the characteristics of HRM in startup companies, it is interesting to see how the shifting of HRM towards Green HRM is implemented in startup companies, especially in Indonesia. This study will contribute to the theory and practice of the Green HRM in startups companies in general. Further study may need to be done following the recommendations of this study.

LITERATURE REVIEW

1. Green HRM

According to Opatha and Arulrajah [7], Green HRM is described as the process of creating green employees through the use of the implementation of green human resource policies and practices, for the benefit of the person, society, community, and the entire planet. The shift in the concept of Human Resource Management toward Green HRM is being recognized and implemented in Western nations, but it is being adopted slowly in Eastern countries, particularly Asian ones. In Indonesia, there is still few research study, practice, and performance on Green HRM in Indonesia, thus more research is required to give broader and better insights to accomplish sustainable development [8]. A study from Musofa, et al [8], discuss the factors that influence the success of Green HRM in Information Technology companies, including personality, individual knowledge, organizational culture, digital transformation, and education and training during the pandemic situation that is implemented in Indonesia.

Green HRM integrates environmentally friendly HR emergence and practices for sustainable resource use, resulting in increased efficiencies, less waste, improved job-related attitudes, improved work/private life, lower costs, improved employee performance and retention, and assisting organizations in reducing employee carbon footprints through Green HRM practices such as flexible work schedules, electronic filing, car-sharing, job-sharing, teleconferencing, and virtual interconnectivity [9].

Green HRM is a complex concept. Musofa [8] determines five factors that influence the success of the implementation of Green HRM. The five factors are personality, individual knowledge, organization culture, digital transformation, and education and training. Figure 1 depicts the factors and the success of Green HRM as a conceptual model.

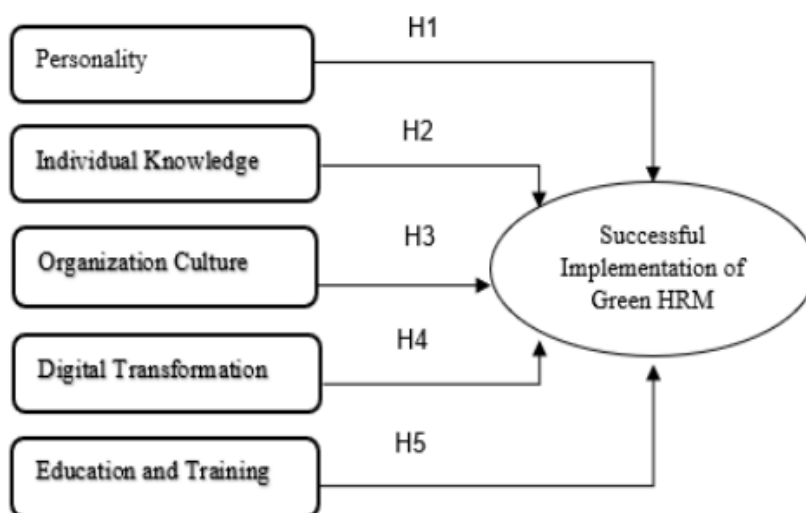


Fig. 1. Conceptual Model

Based on the above concept, the following model and hypotheses are purposed and investigated through empirical analysis.

H1: Personality influences the success of Green HRM.

H2: Individual knowledge influences the success of Green HRM

H3: Organizational culture influences the success of Green HRM

H4: Digital transformation influences the success of Green HRM

H5: Education and training influences the success of Green HRM

1.1 Personality (P)

Environmental behavioral models are quite varied. Considers fundamental personality as the source and foundation of a person's beliefs, ideologies, and attitudes, and highlights the long-term implications of nature's beginning on one's future existence This relates a person's personality, attributes, abilities, values, frame of mind, and environmental behavior, demonstrating how personality influences Green Environment behavior [8]. According to other research, openness is more frequently associated with pro-environmental behavior, and this association is likewise fully mediated by views toward the environment and relationships with nature [10].

1.2 Individual Knowledge (IK)

As the previous research [8], this research refers to an employee who understands environmentally friendly behavior and greening in line with his education and life experience. Individuals will seldom demonstrate pro-environmental behavior or engage in an ecologically beneficial manner if they have limited awareness about the environmental consequences of their actions. It is difficult to be environmentally friendly if an employee is unfamiliar with greening and its consequences on the environment and society [11].

1.3 Organization Culture (OC)

Organizational culture is the collection of shared values, beliefs, and standards that impact how employees think, feel, and behave toward one another and toward individuals outside the organization [12]. According to [13], Organizational culture may be defined as a set of values and features that shape the identity and treatment of an organization. Organizational culture is an important component of a company's strategy for achieving the goals outlined in its vision and mission. A Green Policy and environmentally friendly activities inside the organization can foster a culture in which workers strive to behave and act in accordance with the Green Movement's tenets. Environmentally friendly human resource management

solutions in the workplace may help workers understand and appreciate the green concept in the organization [8].

1.4 Digital Transformation (DT)

In terms of technology advancements, companies are establishing a digital divide in every company. More specifically, the digital divide refers to the greater use of information and communication technology (ICT) by various countries ranging from developed to developing, as well as a disparity in the number of ICT experts or specialists trained in developed countries instead of those trained in developing countries. This gap can emerge for a variety of reasons—the definition of digital transformation as applying technology to improve a company's overall performance or range. Digital transformation stimulates substantial changes in the professional or intellectual sector and facilitates innovation and creativity. Definition, another type of digital transformation that is rather widespread is the change induced or affected by the employment of digital technology in all aspects of human existence [14]. As a result, digital transformation in terms of ICT access can result in behaviors and actions that are incompatible with environmentally friendly behavior and environmental management; conversely, those with greater access to ICTs and a better understanding of their use were more likely to exhibit environmentally friendly behavior [8].

1.5 Education and Training (ET)

One of the variables influencing the effective implementation of Green HRM is the organization's success in training and teaching workers to behave in an environmentally friendly and pro-environmental manner [8]. Education and training programs must include a wide variety of subjects, including social and environmental challenges, at all levels, from the most basic to the most advanced. The Orientation Green Program should be implemented as part of all worker training processes. Employees must be informed about ecologically friendly policies and practices, among other things. It is critical to think environmentally and act environmentally friendly. Organizations with more environmentally friendly levels of performance and conduct can improve employee morale and attract the attention of new workers who are interested in working for the firm. Furthermore, it is vital to improve the environment in leading the company in order to extend employee competence to create items that are compliant with environmental requirements [15].

2. Startup Company

A Startup Company is an organization in its early stages. From [6] Based on the research [16][17][18] [19], they classify startup characteristics into four dimensions: Organization (the personality of the start-up organization), Ownership (the personality of the owner, decision making, and supervision), Strategy and Innovation, and Financial. These lists are compiled from previous literature, and comparable features are combined together as one. This type of organization has the following characteristics. Table. 1. contains a list of such characteristics.

Table. 1. Characteristics of Startup Company

Dimension	Characteristics
Organization	Centralized
	Small scale organization
	Young age
	Few differentiation
	Homogeny environment

	Owner-manager
Ownership	Direct supervision
	Intuitive decision making
Strategy and Innovation	First mover or second mover
	Fast innovation
	Niche marketing strategy
	Risky decision
Financial	Funding from personal savings or from relative

The majority of startups have a basic organizational structure [20]. A basic organizational structure has numerous characteristics, including low departmentalization, a broad range of control, centralized authority, and low formalization [21].

Startups are classified into six categories based on the company's valuation. The first category is called Cockroach, which is an early start-up with a small but durable valuation slam. The second category is called Ponies, with a valuation of over US\$10 million. The third category is called Centaurs, namely Startup company that has a valuation US\$100 Million. Startups with a valuation of more than US\$1 billion are called Unicorns. Decacorn status pinned for Startup company with a valuation of more than US\$10 Billion and for startups which has a valuation of more than US\$100 Billion is called Hectocorn. In Indonesia, Unicorn startup status has been achieved by several startup companies, namely Tokopedia, Traveloka, and Bukalapak. One of the Startups in Indonesia that has successfully entered Decacorn or has a valuation of more than US\$ 10 Billion or approximately Rp. 141Trillion, namely Go-Jek [22].

In contrast to established companies, Startup Companies have certain characteristics, such as the approach of decision-making. In Startup Companies, the decision-making process is typically intuitive and centralized [20]. From the beginning through the stage of their growth, Startup Companies are unavoidably faced with a number of challenges and barriers [6]. From human resources aspect, Startups are often founded by one founder and/or a group of cofounders. As time passes, the founder will require additional professionals to construct the prototype, MVP, and so forth. Then he or she must negotiate with others, form a team, and eventually hire staff. This procedure is important to the firm's success, and if the founder lacks sufficient expertise of the industry, the Startups may fail due to human resource management concerns [23] [24]. As they age, their basic structure changes, forcing the specialization of operations, emphasizing the importance of Green HRM practices can help organizations align their business strategies with the environment.

METHOD, DATA, AND ANALYSIS

1. Research Instrument Development

The main purpose of this research is to describe the implementation of Green HRM in startup companies. Following the result, this study tries to identify the factors that influence most on the

implementation of Green HRM in Startup Companies, such as personality, individual expertise, organizational culture, digital transformation, and education and training. This instrument of this study is a close questionnaire and it is adopted from Musofa, et al [8]. The closed questionnaire consists of 14 core questions covering 5 aspects, namely personality, individual knowledge, organizational culture, digital transformation, and education and training. The questionnaire is developed in a Likert scale in which responses are scored of 5 = highly agree, 4 = agree, 3 = neutral, 2 = disagree, and 1 = strongly disagree. In addition to the core questions, the instrument covers individual profiles and company profiles of the respondents. The individual profile questions ask for gender, age, length of working experience, and their views on Green HRM. Whilst, the company profiles consists of questions on the name of the company, industrial type, valuation, age of the company, and number of employees.

2. Data Collection and Sample

Primary data for this study was collected from employees of Indonesian Startup Company by sending the questionnaire using the Google Forms link. A total of 35 Startup Companies in Indonesia were collected. Table 2 shows a demographic profile of the companies being investigated in this study.

Table 2. Profile of Startup Companies in this study

Variable	Frequency	Percent (%)
Industry		
Finance	4	11
Agriculture	1	3
Transportation	1	3
Education	7	20
E-commerce	6	17
Health	3	9
Others	13	37
TOTAL	35	100
Valuation		
Cockroach (< US\$10 Billion)	9	26
Ponies (> US\$10 Billion)	4	11
Centaur (> US\$100 Billion)	8	23
Unicorn (> US\$1 Million)	3	9
Unknown	11	31
TOTAL	35	100
Company Age		
1 - 3 years	18	51
4 - 6 years	9	26
7 - 9 years	5	14

> 10 years	3	9
TOTAL	35	100
Number of Employee		
1 – 20 people	8	23
21 – 40 people	6	19
> 50 people	21	68
TOTAL	35	100

3. Data Analysis

PLS-SEM (Partial Least Squares-Structural Equation Modelling) was used to examine our model. According to [25] PLS is a soft modeling method to SEM that makes no assumptions about data distribution. Based on [26][27][28], PLS-SEM becomes a viable option to Covariance-based SEM (CB-SEM) when the sample size is small, the theory available for application is little, the predictive accuracy is critical, and the correct model specification cannot be guaranteed. SmartPLS 3.2.9 was utilized as the main tool for data analysis in this investigation.

3.1 Measurement Model Analysis

The outer model depicts the manifestation or the latent variable to be measured as represented by the observed variable. This model defines the link between latent variables and their indicators for the analysis. The validity test evaluates whether each question included in a questionnaire can accurately reflect the variable being examined. Convergent validity and discriminant validity were used to measure the validity [8].

3.2 Structural Model Analysis

By examining the r-square, path coefficient, T-statistic (bootstrapping), predictive relevance, and model fit, the inner model can be evaluated.

3.2.1 Coefficient of Determination (R2)

The determination coefficient (R2) is calculated to measure the predictive capability of the model. Therefore, the suggested model has a modest level of forecasting capability to account for successful Green Implementing HRM.

3.2.2 Hypothesis Testing

The strength of the independent (exogenous) variable's impact over the dependent (endogenous) variable is displayed using the path coefficient evaluation. The significance between the constructs, t-statistics, and p-values are observed, and these findings are used to decide whether a hypothesis is accepted or rejected. The hypothesis testing results are listed in Table 4.

Table. 4. Path Coefficient Result

Hypotheses	Original Sample (O)	Sample Mean (M)	Standar Deviation (STDEV)	T Statistic (O/STDEV)	P Values
Personality -> Successfully GHRM	0,590	0,529	0,313	1,886	0,059

Individual Knowledge -> Successfully GHRM	0,161	0,151	0,133	1,209	0,227
Organization Culture -> Successfully GHRM	-0,442	-0,357	0,304	1,389	0,165
Digital Transformation -> Successfully GHRM	-0,039	-0,054	0,224	0,176	0,861
Education Training -> Successfully GHRM	0,519	0,527	0,151	3,439	0,001

RESULT AND DISCUSSION

Table 3's findings reveal that the five variables used in this study on Green HRM were personality, individual knowledge, organizational culture, digital transformation, and training education. Each variable had internal consistency reliability (Cronbach's Alpha > 0.6 and composite reliability CR > 0.7), indicator reliability (≥ 0.7), convergent validity (average variance extracted (AVE) > 0.5), and discriminant validity (Fornell-Lacker) for each question. Additionally, the reliability assessment demonstrates the correctness and consistency of the respondent's responses in the variables used to assess if the respondent is reliable in responding to each research question.

Table. 3. Results of Cronbach’s Alpha, Composite Reliability, and AVE Analysis

Construct	Chronbach’s Alpha	Rho_A	Composite Reability	AVE
Education Training	0,846	0,864	0,907	0,776
Individual Knowledge	0,896	0,896	0,950	0,905
Digital Transformation	0,712	0,715	0,874	0,776
Organization Culture	0,892	0,924	0,932	0,821
Personality	0,638	0,644	0,846	0,733
Successfully of Green HRM	0,944	0,950	0,973	0,947

The study showed the outcomes of the observation are appropriately classified, yet the NFI value for the model is around 0.657. The research model fit a degree of 65.7%. Findings from this Table 5 displays research using hypothesis testing.

Table. 5. Path Coefficient Result

	Saturated Model	Estimated Model
SRMR	0,094	0,094
d_ ULS	0,936	0,936
d_ G	0,761	0,761
Chi-Square	134,263	134,263
NFI	0,657	0,657

Even though the model is fit, from the results of hypothesis testing only hypothesis 5 (H5) is accepted. The study's findings indicate that Education and Training have an effect on Green HRM's success. The t statistical value of $3.439 > t_{table} 1.96$, or $p\text{-value } 0.001 < 0.05$, provides support for this claim. This demonstrates how employee education and training inside the organization affect the employee's knowledge of environmental issues and promotes the implementation of Green HRM. In line with the research from Bangwal, et al [29], managers may act as a facilitator once they are convinced of the significance of environmental concerns. The organization needs the employees' active participation and involvement in order to achieve better environmental performance. The management must inspire this by implementing GHRM practices, such as offering green training to increase employee awareness, GPR for taking green initiative and providing a green workplace for healthy and satisfactory results.

CONCLUSION

The main purpose of this research is to describe the implementation of Green HRM in startup companies. Following the result, this study tries to identify the factors that influence most on the implementation of Green HRM in startup companies. The survey approach was employed, and SmartPLS 3.2.9 software was used for statistical analysis to fulfill the research goal. According to the data, among the five factors influencing Green HRM, a factor of education and training has the most significant influence. This result suggests that startup companies need to consider the other four factors in order to successfully implement Green HRM. Further research is needed in order to determine how startup companies develop programs that lead to the successful implementation of Green HRM.

IMPLICATION/LIMITATION AND SUGGESTIONS

While this study has resulted in determining the significant factor influencing Green HRM in startup companies, the sample of the study is relatively small considering the current number of startup companies in Indonesia that reaches more than two thousands. Further study needs to be conducted with a bigger sample and to see whether the same result will be determined. Regardless of this limitation, this study has contributed to the initiation of research on the Green HRM in startup companies. Therefore, the result of this study potentially contributes to the theory and practice of Green HRM particularly in the startup companies in Indonesia.

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