Original Research **Open Access**

Green Human Resource Management Practices in Manufacturing Industry: Cases of Firms in the Southern Part of Malaysia

Ameer Farhane Bin Mohd Arzaman*
Faculty of Technology Management and Business Universiti Tun Hussein Onn, Malaysia

Siti Sarah Binti Omar
Faculty of Technology Management and Business Universiti Tun Hussein Onn, Malaysia

Siti Badariah Binti Khalid
Faculty of Technology Management and Business Universiti Tun Hussein Onn, Malaysia

Abstract
Green Human Resource Management (Green HRM) is vital in improving the management and productivity of organization. Green HRM is a new approach which is implemented in the organizations in order to improve the environmental management. There are several studies about green HRM and they are not adequate to provide guidelines to the organization. This paper focuses on the awareness of HR Manager about Green Human Resource Management in Manufacturing Industry. There are three objectives of study. The first objective is to determine to what extent HR managers in Manufacturing Industry aware about green HRM and second, to identify perceived challenges of adopting green HRM in manufacturing industry. The third objective is to identify perceived benefits of adopting green HRM in manufacturing industry. This study was conducted in Manufacturing Companies in the Southern Part of Malaysia. The methodology employed is qualitative inquiry as it able to generate deeper understanding of underexplored social phenomenon of the context under study. The data collection technique adopted is in-depth interview with the managers of HR department in manufacturing companies in Johore. The data analysis adopted for this study is thematic analysis. The result had shown that most HR managers were not aware about what the meaning of the term of green HRM but surprisingly their companies have already implement and adopt several elements of green HRM. The study has articulated the benefits of adopting green HRM but also attentive to the challenges in adopting the green HRM in their firms. In conclusion, this study provides a deeper understanding to the managerial perspectives on the benefits and challenges of green HRM.
Keywords: Green HRM; Manufacturing industry; Awareness.

1. Introduction
Green Human Resource Management is defining as the motivations for the employees to promote the sustainable practices and ensure that employee aware and commit on the issue of sustainability (Vij *et al.*, 2013); (Mandip, 2012); (Marhatta and Adhikari, 2013). According to Kumari (2012) and Ahmad (2015), they summarize two essential elements in green HR which are: environmentally friendly HR practices and the preservation of knowledge capital. Basically, the functions of HR ranging from acquisition of human resource, induction, placement, training, learning and development, talent management, career growth and reward strategies. Other than that, understand, appreciates, practices green initiative and maintain its green objective is also a way to create green workforce in green HRM in organization (Ahmad, 2015). It means that all employees in HR department must have to understand the "green" practices on their task in human resource department.

1.1. Research Background
Manufacturing is the process of converting raw materials, components, or parts into finished goods that meet customer's expectations or specifications (Business Dictionary, 2016). It means that the process to create the finishing goods based on user requirements. The manufacturing sales recorded was RM52.3 billion in July 2016 and the productivity decreased by 3.5% which is recorded RM51, 001 as compared with the same month of the previous year (Department of Statistics, Malaysia, 2016). The manufacturing industry is the sector which also contributes to the national economy. Green Human Resource Management is a new approach which is implemented in the organizations in order to improve the environmental management. It has been practiced in most of the manufacturing industry.

1.2. Problem Statement
Professionals and academics of human resource management (HRM) realize and started to think more actively about their work that could contribute to the effectiveness (success) of their organizations in the late 1970s and early 1980s. Osman *et al.* (2011) state that there are nearly 50 percent of the changes in organizational performance is

*Corresponding Author

caused by the effectiveness of implementation of human resources practices in organizations and it also is a key source of competitive advantage in organization. In other word, the effectiveness of implementing HR practices in an organization has a major impact towards an organization performance. The organizations now realize that they need to think about global competition and the current economic are now forcing the organization to re-plan the importance of HRM to help them to guide through these challenging times. Professionals of HR need to aware of environmental issues and how these issues integrate with HR activities in order to successfully implement sustainability (Langwell and Heaton, 2015).

The researchers have done a short preliminary interview to know the problem occur in HR department in manufacturing industry. The researcher discovered several issues in the HR department related to green environment. Firstly, the organization requires a huge amount of papers to print the pay slip of employees with a very high cost. Due to that, they require 6 boxes of paper in a month for the printing purposes. Secondly, the HR department needs many employees initially to do tasks in HR department so many are required to be recruited. For example, the organization that uses punch card, the HR department needs to collect and key-in manually. In contrast to that, we have new approach that involves undertaking environment-friendly HR initiatives resulting in greater efficiencies, lower costs and better employee engagement in environmental management. According to Kapil (2015), it is a good time for the organization to start practice HR process based on "green oriented" and being more eco-sensitive. It can conclude that this study is imperative to know the awareness of HR managers in manufacturing industry.

Opatha1 and Arulrajah (2014) suggested that there are gaps to be filled in respect to green HRM, theoretical and empirical studies are needed to enhance the body of knowledge of green HRM. For example, several empirical research have been done such as (Jing and Yusoff, 2016), (Yusoff *et al.,* 2015), (Marhatta and Adhikari, 2013) and (Jabbour, 2011). There is a need for more study about green HRM to achieve greater efficacies, lower costs and create an atmosphere of better employee engagement. The information about green HRM is limited and very scant studies done in the Malaysian context. However, the key role in adopting green HRM is the HR professional's competencies based on the suggested past literature. Although Green HRM had been carried studied in many countries such as India (Vij *et al.*, 2013); (Kapil, 2015); (Mandip, 2012); (Verma, 2015) Brzil (Jabbour, 2011) and Saudi Arabia (Ahmad, 2015), nevertheless there is only a few study about Green HRM in Malaysia (Yusoff *et al.*, 2015) and (Jing and Yusoff, 2016). This study is a brilliant opportunity to discover the benefits and challenges on the adopting of green HRM. Besides, this study will identify the awareness of HR manager about green HRM in manufacturing industry.

1.3. Research Objectives
In this research, three objectives have been proposed, which are:
1) To determine what extent HR managers in Manufacturing Industry aware about green HRM.
2) To identify perceived challenges of adopting green HRM in manufacturing industry.
3) To identify perceived benefits of adopting green HRM in manufacturing industry.

2. Literature Review
Kapil (2015) define that green HRM is a process that have the element environmental management into management of organization. In addition, it is a technique that has been practiced in the environmental management in organization. There are two important elements in green HRM that are the environmental friendly HR practices and the preservation of knowledge capital (Kumari, 2012). Green HRM will increase the positive environmental-impact and decrease the negative environmental impact in organization (Arulrajah *et al.*, 2015). Other than that, Vij *et al.* (2013) define that green HRM is to monitor every employee to promote sustainable practices and increase the awareness among employees and committee on issue of sustainability.

2.1. Theories & Framework of Green HRM
2.1.1. The concept and Definition of Green HRM
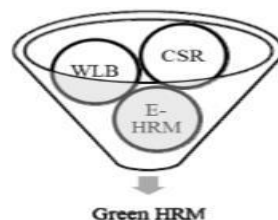
Source: (Yusoff et al., 2015)

Figure 2.1.1 is the theoretical framework of the concept and definition of Green Human Resource Management by Yusoff *et al.* (2015). There are 3 main elements in green HRM which are Corporate Social Responsibility (CSR), Electronic HRM (E-HRM) and Work-life Balance (WLB).

2.2. Challenges of Adopting Green HRM
2.2.1. Employees Behavior

According to Harris and Tregidga (2012), many employees were unable to clearly identify what that position was beyond several initiatives involved. Furthermore, employee was not actively involved in the construction or redefining of their organization's position and policies. Because of that issue, organization needs to give more training to their employees before the implementation of green HRM. After the employees join the training, they need time to practice green HRM. It is difficult to change their behaviors in a short time.

2.2.2 Developing the Culture of Green HRM

Another challenge is to change the traditional environment to new environment of green HRM. The employees need to practice all green HRM and it takes time to change all of the practices. It is important that the role of a manager at this time to monitor and support their employees to change the employee's practice. Other that than, employees need to be aware about green HRM before practicing them. The organization also having difficulties to measure the effectiveness of green HR practices in employees' behaviour (Deshwal, 2015).

2.3. Benefits of Implementing Green HRM
2.3.1. Improve Organization Performance

According to Kumari (2012) green HRM can improve the productivity of organization. Vij *et al.* (2013) mentioned that, to improve the organizational environmental performance, the managers can create the usefulness linking between employee's involvement and participation in environmental management programme. It creates good relationship between the employees and this would improve their communication skill.

2.3.2. Improve the Quality of the External organization

According to Yusoff *et al.* (2015) green HRM are related to Work-life balance (WLB) and corporate social responsibility (CSR). WLB is the practice whereby employees can manage their time with work and non-work. Opatha1 and Arulrajah (2014) state that people will appreciate the organization that is performing CSR activities, thus improve the organization image as a good corporate.

2.3.3. Increasing the Quality of Employees

According to (Deshwal, 2015), the managers need to lead and monitor the employees to practice based on green HRM thus increase employee morale. Green HRM provide opportunities to employees to improve their quality human talent. The organization can develop green learning environment in the organization and its new knowledge for their employees.

2.3.4. Reduces the Overall Cost of the Organization

According to (Deshwal, 2015), the cost is depending by the size of the company. For large organization, they must need huge cost to manage their organization. The organization that practice green HRM will save cost because there are steps taken to make it environment friendly. According to Verma (2015), a company with 1000 employees may reduce its toner consumption by around 350 cartridges per year. It shows that, implementing green HRM will give more impact to organization's cost.

2.3.5 Reduce the Use of Paper in Organization

According to Kumari (2012) paperless in office is one of the activities in green HRM implementation. Nowadays, organization uses technology to manage their organization and the paper has been reduced by using electronic system. Today, technologies have changed the methods and procedures at offices converting them into paperless offices (Ahmad, 2015). The costs of the paper-related actions including copying, printing, storing, and save the toner waste and carbon dioxide emission. The employees can use the electronic mailing to share the information or submit jobs (Kumari, 2012).

2.3.6 Saving the Energy of Organization

Kumari (2012) has suggested that organization can conduct an energy audit to implement green HRM. The organization can install timers to automatically turn off lights. Besides that by improving insulation, use energy efficient light bulbs, and keep temperatures at comfortable ranges that are not excessively cool in the summer and warm in the winter especially in the western countries.

3. Methodology
3.1. Qualitative Methodology

This study employs qualitative inquiry. According to Ritchie and Lewis (2003) the function of qualitative method is to consider the particular role of qualitative methods in providing the kinds of information and an in-depth understanding that needed in social research. Qualitative method may help for obtaining insight the awareness of HR manager about green HRM and problems concerning which may have little knowledge. Besides that, qualitative method consists of an investigation that seeks answers to a research question, to collects evidence and to produces findings that are applicable beyond the immediate boundaries of this study. Additionally, Qualitative method is

especially effective in obtaining culturally information about the values, opinions, behaviours, and social contexts about green HRM.

3.2. Sampling for Qualitative Research

Sampling design is part of the basic business research proses. The appropriate sampling design can achieve the research objective. This study used the non-probability sampling. There are four manufacturing companies that were selected based on certain criteria. The sampling method for this study is purposive sampling. Purposive sampling is the sampling that selected for a specific purpose (Hair et al., 2007). The respondent that have been selected has a specific characteristic as manufacturing company to answer the interview question. The respondent that selected also has an experience in HRM (Collis and Hussey, 2009).

3.3 Method of Data Collection

Two types of data collection used in this study are primary and secondary data. According to Neuman (2012) primary data are those which are collected for the first time and are always given in the form of raw materials and originals in character. Primary data of this study is from the interview session with the respondents who are the HR managers of the companies. The structured interview and unstructured interview were used in this study. Researcher has used audio tape recorder to record the conversation with the respondents while at the same time jotting down the important points in a notebook. According to Hair et al. (2007) secondary data are those data have already been collected by someone for some other purpose at different time in the past. These may be available in written, typed or in electronic form and collected from the sources that have be published. The secondary data for this study is from the report HR department and memo of manufacturing companies.

3.4 Data Analysis

The data analysis of study is using thematic analysis. It is one of the most common form of analysis in qualitative research. It emphasizes pinpointing, examining, and recording patterns (or "themes") within data collected. Themes are patterns across data sets that are important to the description the awareness of a phenomenon green HRM and are associated to a research question. The themes become the categories for analysis will be performed through the process of coding in six phases. The method of data analysis by Braun and Clarke (2006) were used in this paper.

4. Data Analysis and Result

4.1. Description of Respondent

There are 4 selected manufacturing companies as respondent of study. The detailed description as below:

4.1.1. Company 1

Company 1 is a glove manufacturing company. This company was established since 1984. The main company's activity is producing gloves. This company has 3 branches. There are more than 900 employees in this company. Johan Arif Shahadan is the respondent of the study. He is Male and 38 years old. He has Bachelor's Degree. He is a manager Human Resource in this company. He has started working since 1997 and it is approximately 20 years.

4.1.2. Company 2

Company 2 was established in September 1981. In 2010, it started produce LED TV and 2015 CCTV. The total of employees in this company is more than 900. The name of respondent is Zulkifli bin Yatim. He is a male and 47 years old. He has Master Degree in Science in Human Resource in UTM. He has 20 years working experience in this company.

4.1.3. Company 3

The company is established in October 1980. Today, they are focusing on two key areas of electromechanical components (Relays and Keyboards, and their parts thereof). The total of employees in this company is more than 1000. The name of the respondent is Asif Azwan bin Amdan. He is 32 years old. Her position is HR manager in the company. He has graduated from Bachelor Degree of management social work in Human Resources. He has worked here for approximately 8 years.

4.1.4. Company 4

The company was founded in 1994. The total of employees in this company is 220. The name of respondent is Mohd Aidil bin Abu Bakar. He is 53 years old. He is HR manager of the company. The level education is Degree in building and Bachelor Business Administrator (BBA) in UITM Shah Alam. He started working in company since the company start its operation.

4.2. Analysis of Objective 1: To what extent HR Managers in Manufacturing Industry Aware About the Green HRM

This section summarizes and discuss about the elements of the awareness of HR manager in manufacturing industry about green HRM. Table 4.2 shows the theme and sub-theme of Objective 1.

Table-4.2.1. The summary of the awareness of HR managers in manufacturing industry about Green HRM

THEME	SUB-THEME	COMPANY			
		1	2	3	4
Knowledge of Green HRM	Knowing	/	x	x	x
	Awareness	/	x	x	x
Activities or practices using electronic system	E-Recruitment	/	/	/	/
	E-Letter	/	/	/	x
	E-Training	/	x	/	/
	Others	x	x	/	/
Corporate Social Responsibility (CSR)		/	/	/	/
Work life balance (WLB)		x	x	x	/

(**Source**: Researcher, 2017)
*Knowing: When the respondent knows about green HRM.
*Awareness: Opinion of respondent about green HRM.

From table 4.2.1 respondent 1 (Company 1) know and aware about green HRM, respondent 2,3,4 (Company 2,3,4) are not aware yet about the term and definition of green HRM. Next, all respondents already use electronic system in their management. Electronic system gives more positive impact to the manufacturing industry. Different companies used different concept of electronic system. Company 3 has already used all the electronic system but company 2, 3 and 4 still use manual in certain tasks. The only company 2 does not use e-training in their organization and Company 1 is in planning to use other electronic system in its management. Company 4 is still using manually for the letter management in their organization and in planning to use e-letter.

Corporate Social Responsibility (CSR) programs have been practiced by all respondents. They claimed that this program will help to improve the relationship among employees and others. Company 2, 3, 4 mention that they have been doing CSR with other organizations such as school and Government agencies. Work life balance (WLB) is not been apply in Company 1, 2 and 3. Company 4 uses flexible time for their employees. All manufacturing activities is 24 hours non-stop in their production line. Nevertheless Company 2 mentions that their company has the interest to adopt WLB in their company.

4.3. Analysis of Objective 2: The Perceived Challenges of Adopting Green HRM in Manufacturing Industry

Next, this section discusses about the summary of perceived challenges of adopting green HRM in manufacturing industry.

Table-4.3.1. The summary of the perceived challenges of adopting green HRM in Manufacturing Industry

THEME	SUB-THEME	COMPANY			
		1	2	3	4
Perceived challenges of adopting green HRM	Environment	/	/	/	/
	Problem Occur	/	/	/	/

(**Source**: Researcher, 2017)

Table 4.3.1 shows that all companies have their own challenges while adopting green HRM. Respondent 2, 3 and 4 have problem with their employees that they do not know how to use the technology. They are providing training module to their employees. Besides that, some of the respondents mentioned that they have issue with the budget to use the technology. Respondent 2 mentioned that they had to write a report before implementing green HRM thus perceive it as burdensome on top of their routine tasks. All respondents have their own strategies to solve the problem.

4.4. Analysis of Objective 3: The Perceived Benefits of Adopting Green HRM in Manufacturing Industry

Table-4.4.1. The summary of the perceived benefits of adopting green HRM in Manufacturing Industry

THEME	SUB-THEME	COMPANY			
		1	2	3	4
Perceive benefit of adopting green HRM	Organization	/	/	/	/
	Employees	/	/	/	/
	Stakeholders	/	/	/	x

(**Source:** Researcher, 2017)

The organization that decides to practice green HRM acquire benefits to the organization itself, to their employees and also to stakeholders. It improves the performance and productivity of the manufacturing industry. All respondents have emphasized about the benefits by adopting green HRM to organization, employees and all

stakeholders while respondent 4 deny its usefulness to the stakeholders. All of them mentioned that they may reduce the cost, time and energy after adopting green HRM. Other than that, respondent 3 says that they would be able to control their inventory in their organization.

4.5. The Exploration of Themes for Objective 1: The Awareness of HR Manager in Manufacturing Industry about Green HRM
4.5.1. Knowledge of green HRM
Green HRM is considered as a new term in Human Resource practices in most of the case studies in this research. This is shown by table 4.2, respondent 1 is aware about the term green HRM but others have just heard. Respondent 2 have claimed that he has done a little research about green HRM before interview session.

"Yes, i have already heard about that, it somewhere around the third quarter of 2015"- Respondent 1

"I don't know about green HRM, but for our company know the EMS (Environmental Management System). Besides that, before interview session i have search for information about GHRM". – Respondent 2

The HR practice in company 1, 2 and 3 had concern about environmental issues in managing the organization. Besides that, company 4 in planning stage but the HR department is looking for lower cost in management. Respondent 4 mentions that:

"The item of green product I've ever heard before. We are now in the process of implementing, but the specific term HRM green I just found out today." - Respondent 4

Green HRM need deeper understanding and require technical skill to officially implement these methods in organization. Respondent 1 pointed out that:

"In my opinion, Green HRM is an approach which promotes the reduction of greenhouse effect hence to ensure environmental sustainability."- Respondent 1

Surprisingly, respondent 2 and 3 have applied this concept but not aware of its name.

"Our company already has the concept and same as GHRM but we just translate in different systems." – Respondent 2

"I am not very familiar with term but all elements that you mentioned there apply here". _ Respondent 3

4.5.2. Activities or Practices in HR Department Electronic System
The organization need to re-plan the importance of HRM to help them to sustain in global competition in the current economic. Respondent 2 explained about the practice of HR using the electronic system. They have a special system that is compulsory to be used in their company. He said:

"Our company used the EMS (Environmental Management System). This system is SIRIM standard for all companies. This is a requirement to make international activities in organization. EMS is characterized by Super Green Factory (SGF). To be SGF, they have certain conditions." - Respondent 2

From the text above, the electronic system is compulsory to their company because the company use international transaction in their management. Respondent 3 also have explained to researcher how their company started using the electronic system. Respondent 3 says:

"Our companies have conducted innovation plan and we created a competition for every department. Whoever makes the most cost-effective and energy saving, the most brilliant ideas we will compete in competition." - Respondent 3

All companies already use the technology in their organization, but they are not fully used the electronic system in management. They put their own effort to use the electronic system in organization. It helps to improve the productivity in organization and at the same time to reduce the problems that occur.

4.5.3. E-Recruitment
There are several types of electronic system. All of the systems help the organization to manage their organization smoothly. The first electronic system is E-Recruitment. All respondents used E-Recruitment for application or vacancy advertisement, as they emphasized that:

"Currently, physical interview session is still being conducted for the final candidates, nevertheless, HR department conducted the preliminary selection via questionnaire through emails, e-resume, and tele-conversation or tele-conference." - Respondent 1

"Yes, we use existing electronic systems in recruitment such as job stick and job Malaysia to advertise job vacancies. Our company still use manual for interview. This is because we want to see the applicant of all aspects of the position applied for. Thus, to see their physical, sometimes using video we cannot see the whole. "- Respondent 3

4.5.4. E-Letter
Nowadays, e-letter is a commonly used by organization to share information. This system is effective for which the employees can share information anytime and anywhere. All respondents already used e-letter in their company by using email, but company 2 and 4 still also used manually such as fax or letters. Respondent 2 pointed that:

"We used email and fax machine but the company under government still uses a mailing. Now we are in the midst to reduce common letter. Besides that, we use intranet to share information in some of the access to this system. All information is in there. The system is divided into sections and each section will display all the information in the system. Examples of the HR department, our forms related are uploaded in this system. "- Respondent 2

Company 2 is in planning to reduce the paper in management. Other than that, they already create a portal that used to spread all the information in their company. It is same to the company 3 whereby, they have a portal to all employees use to get all the information.

4.5.5. E-Training

E-training is a training that used electronic system as a link to teach the employees in organization. Company 1 uses e-training in their company via video. The employees need to access the video to undergo the training process enywhere and anytime. Respondent 1 says that:

"Currently, we only provide a few numbers of E-training. This method includes either via real-time video conferencing training or uploaded training course / lecture into our intranet system and workers may view or download the training course / lecture into their pc / laptop." - Respondent 1

Respondent 3 and 4 doing the training for their employees manually, but they use electronic system for training in other way. Company 3 use electronic systems to check the list of training that have done by employees. Company 4 mentions that their employees need to sit for an exam in electronic system after the training session. They mention that:

"We have e-record of training where, we will see a list of training which has been done by the employees. The employee only key in the employee number and we will see a list all of training that done by employee. The function we want to know what training has been followed and usually after a lot of training that we follow to increase employment and to help in assessing the future." - Respondent 3

"For training, we have created the questions for the employees and they will be answered using the company's web site. All employees have to android, so the employee's only need to access and answer questions before and after the training. After that, we will evaluate their performance" - Respondent 4

4.5.7. Corporate Social Responsibility (CSR)

All of respondents already conduct CSR project in their organization. It helps to tighten relationship among the employees and others. From the interview session, respondent 2 have mentioned that, it is compulsory to their company. They need to do CSR activities and need to write a report to submit to the centre. Therefore, it is also for evaluating for audit on their company. Respondent 2 says:

"The company's CSR activity is mandatory and also the need for the EMS system. Every 6 months we will submit report about our activities run together. Examples of last year we have made activities to go to school and the nearby army camp. There was once, we have collaboration with the health ministry to plan activities at a housing estate. We have budget allocations for the CSR activities. "- Respondent 2

Company 3 is also having doing CSR in their company. They are not focusing the external parties but just doing inside their company. Usually, only HR department have a program with outside. Respondent 3 mentioned:

"We will do collaboration with all employees to clean certain areas in the company and we will do once a year, annual dinner and others. Usually, for HR department we held career fair, to talk about career and writing resume. Every year once we have made a trip to Sabah. This program is a program of replanting trees. The program's goal is to return the favour back in the trees, because with the advancement of technology today, we have a lot to cut down trees." - Respondent 3

4.5.8. Work Life Balance (WLB)

For the element Work Life Balance, majority of the respondents mention that they don't apply this element in their organization. Respondent 2 and 3 mentioned that:

"Here we cannot do that, for operations to run concurrently. Examples of our production line we use complier system for operating time. "- Respondent 2

"We don't have flexible working hour, but we have several time breaks. The production department will be given schedule breaks in rotation to employees. This is because we want to ensure there is always the workers who monitor the production line." - Respondent 3

In essence, company 1, 2 and 3 did not practice WLB in their company as for the manufacturing company, their operation is 24 hours non-stop. Nevertheless, respondent 4 mentioned that, WLB is partly applied on his company as he said that:

"We have also adopted it. We will work within the period time. Usually, the employee must record first the time that available and get permission before doing that. Example, for employees who live far away, they will come late. "- Respondent 4

4.6. The Exploration of Themes for Objective 2: The Perceived Challenges of Adopting Green HRM in Manufacturing Industry
4.6.1. Change the Environment

The organization need to change the environment in organization to adopt GHRM. Therefore, it is important to ensure that all employees understand about the new plan. The organization need to give knowledge to their employees. There are challenges face by respondent 3 when practice the element of green HRM. Their company provides 3 kiosks that have a computer to be used by their employees for using electronic system of the HRM. Unfortunately, their employees don't know how to use computer. As the respondents mentioned that:

"We just made a short training for a briefing on how to use the computers in the kiosks of its own production department. We want to feel that everyone can use technology together rather than just people who work in offices." – *Respondent 3*

4.6.2. Problems Occur

Respondent 2 mentions that their problem is within the trade union as he says that:

"Union trade does not agree to implement this system because of the workers. If we provide computer facilities, it will increase the cost of organization." – *Respondent 2*

Respondent 3 mentioned that:

"Apart from the employees do not know how to use technology, employees easy to forget the password and the problem maintenance also often occur. Normally when computer at the kiosk is damaged or have a problem, the IT department will fix it." – *Respondent 3*

Company 3 has the Information Technology (IT) department in their company. All the problems occur will be handled by IT department. Respondent 1 has a problem with time and professional in system. Their company doesn't have a professional person to create a system. Respondent 1 noticed that:

"Our company has a problem with time and man power to develop the system. It is take time to create new system." – *Respondent 1*

4.7. The Exploration of Themes for Objective 3: The Perceived Benefits of Adopting Green HRM in Manufacturing Industry
4.7.1. To Organization

All respondents have mentioned similar benefits to their company. Respondent 1 mentions about cost reduction and performance improvement. He mentioned that *"The benefit to company is that we can control the cost saving, increase efficiency and reduce wastage."* – *Respondent 1*

Besides that, respondent 3 also says:

"Costs can be reduced in the management of the company, performance is also increased. Employees know how to use technology. Working hours will also be reduced." – *Respondent 3*

4.7.2. To Employees

The employees are very important in organization. Talented employees will affect the organization productivity and performance. Respondent 1 and 2 mention similar point by saying that:

"It is more transparent management; employees can access to training faster and easier." – *Respondent 1*

"The tasks will become easier because of using specific system. We also have our back up and also for improving efficacies." – *Respondent 2*

4.7.3. To Stakeholders

Stakeholders are also important in organizations. All respondents admit that their stakeholders would obtain benefits adopting green HRM except company 4 as they are not fully used electronic system. The benefits that have been highlighted to stakeholders:

"It will increase profit by reducing cost and wastages." – *Respondent 1*

"This system is for employees only. For purchasing departments that use JIT (Just in Time) system. The system is a link with third parties with dealing purchase and sales. Each department uses different system where the modules according to the department." – *Respondent 2*

5. Discussions
5.1. Objective 1: To Determine to What Extent HR Managers in Manufacturing Industry Aware About the Green HRM

This study adopted Yusoff *et al.* (2015), as a guide. The elements of green HRM are electronic system, Corporate Responsibilities (CSR) and Work Life Balance (Yusoff *et al.*, 2015). The human resource department is the ones who tend to institute "green" practices at the office (Kumari, 2012). One of the ways for an organization can improve their performance is through changing the management in HR department.

From the analysis, there are only 1 out of 4 HR managers that exactly know and aware green HRM. Respondent 2 mentions that green HRM is quite similar with the practice that they used now. All companies under study have already adopted the element of green HRM but they are not fully used all elements. All of the respondents already used electronic system in their HR department. This is in line with Kumari (2012) who argues that, it is the best practice when the organization decides to use human resources information system for greening practice in the organization. Respondent 3 have already implemented the electronic system in their company. They use e-recruitment, e-letter, e-training and other (e-locker and e-discipline). From the system, the other employees from other department use the same electronic system in order to do the dealing with HR department. Previous research, Popli (2014) state that approximately 60 percent of training and appraisal activities are carried out online. It means that all the employees in organization are using to electronic system.

In addition, respondent 2 have been using EMS (Environmental Management System) in their organization which has supported (Sudin, 2011) that asserts the organization that requires of implementation of EMS is the

effectively implement green management initiatives fit with organization's culture to long-term goals. Besides that, to gain competitive advantage many corporations are implementing a proactive, strategic tool knows, as an EMS. There are companies in planning to adopt other system in their HR department.

All respondents conduct CSR activities in organization. The organization may establish the usefulness of linking employee involvement in environment management programmers to improve organizational environmental performance (Vij et al., 2013). For the element of Work Life Balance, there are only 1 of 4 manufacturing company adopt it. The respondents have said that the manufacturing industry doing the production 24 hours non-stops, so it quite difficult to adopt.

In conclusion, all respondents have practice the element of green HRM. The HR manager the only one must be given the power to think and comprehend the management in HR department (Kapil, 2015). In addition, it is the time for the organization start implements the proper HR process and makes it more "green oriented". With a proper implementation of green HRM the companies are able to reduce their cost and increase their profit (Marhatta and Adhikari, 2013).

5.2. Objective 2: To Identify Perceived Challenges of Adopting Green HRM in Manufacturing Industry

In the current situation in manufacturing company, the challenges of adopting green HRM is to change the environment. Most of the respondents have mention that they have problem with their employees whereby their employees don't know how to use the computer.

According to, Marhatta and Adhikari (2013) HR manager will have to learn to manage the whole of issues ranging from employee's wellness, healthy, and safely workplace diversity. The company has their own strategic to solve the problem. Company 3 decides to give a short training to their employees and provide the opportunities to their employees to access the electronic system. After that, the HR manager will lead from time to time.

In sum, the organization must provide opportunities to their employees to learn green skills and team activities in training (Kapil, 2015). Besides that, the HR manager need to guide in term of gaining full employees co-operation towards implementing new practices in organization (Vij et al., 2013).

5.3. Objective 3: To Identify Perceived Benefits of Adopting Green HRM in Manufacturing Industry

The analysis from chapter 4 found that, there are benefits when organizations implement green HRM. Firstly, all respondents mention that after adopting the element of green HRM, they can reduce the cost in their organization. According to Deshwal (2015) the cost is depending by the size of the company. Respondent 3 have mention that they can save the cost of purchasing paper of pay slip and cartridge after using electronic system, which is similar with Verma (2015) who state that a company with 1000 employees may reduce its toner consumption by around 350 cartridges per year.

In addition, the organizations' performance has an improvement after adopting green HRM. Respondent 3 also says that they may improve 38% of their productivity in company which is similar with Kumari (2012). The quality of employee's performance also can be improved. According to Deshwal (2015), the managers need to lead and monitor the employees to practices based on green and it can increase employee morale. There are a lot of benefits adopting of green HRM in organization. The organization must plan carefully with great planning and budget to implement green HRM.

6. Recommendations and Conclusion

The manufacturing industry should use the electronic system in their organization to improve the performance. In addition, the era of technology is advancing, and times are changing, all the industries may use technology to improve and easily doing the transaction in global. Besides that, they need to maintain good relations with outsiders. The manufacturing companies that want to remain and ensure their sustainability in the industry, they have to re-plan to improve for the betterment and gain a competitive against competitors by adopting green HRM.

Government plays a significant role in order to improve the manufacturing performance. The manufacturing industry has been contributing to the economic growth in Malaysia. Hence, government should take action to ensure success of manufacturing industry. The government may provide international seminar and courses to gain more knowledge on green HRM. Besides that, the government should promote the greening practices in manufacturing industry to ensure that they may stay viable.

In the future, the researcher suggests that this particular refine of study being conducted to other type of industry such as services and other in order to get different results of finding. Besides that, the research has done by using qualitative method, so it may be approached quantitatively to get more information and/or the combination of both to provide more information on the themes established.

In conclusion, this study had successfully achieved the research objective which is to study the awareness of HR manager about green HRM its perceived benefits and challenges in manufacturing industry. The result had shown that only one HR manager that aware about exactly the term of green HRM. The manufacturing company have already implement element in green HRM. They should study and detail understanding about the green HRM to fully implement in the company.

Acknowledgement

References

Ahmad, S. (2015). *Green human resource management, Policies and practices. Department of management & information system.* University of Ha'il: Saudi Arabia. 2: 1-13.

Arulrajah, A. A., Opatha, H. H. D. N. P. and Nawaratne, N. N. J. (2015). Green human resource management practices. *A Review, Sri Lankan Journal of Human Resource Management,* 5(1): 1-16.

Braun, V. and Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology,* 3(2): 77-101.

Collis, J. and Hussey, R. (2009). Business Research. *Palgrave macmillan*:

Deshwal, P. (2015). Green hrm, An organizational strategy of greening people. *International Journal of Applied Research,* 1(13): 176-81.

Hair, J. F., Jr, M. A. H., Samouel, P. and Page, M. (2007). *Research methods for business.* John Wiley & Sons, Ltd.:

Harris, C. and Tregidga, H. (2012). HR managers and environmental sustainability, strategic leaders or passive observers? *The International Journal of Human Resource Management,* 23(2): 236–54.

Jabbour, C. J. C. (2011). How green are hrm practices, organizational culture, learning and teamwork? A brazilian study. *Industrial and Commercial Training,* 43(2): 98 – 105.

Jing, Y. Y. and Yusoff, Y. M. (2016). Studying the influence of strategic human resource competencies on the adoption of green human resource management practices. *Industrial and Commercial Training,* 48(8):

Kapil, P. (2015). Green hrm- engaging human resource in reducing carbon footprint and enhancing environment sustainability, A case study based approach. *International Journal of Engineering Technology Science and Research,* 2: 5-14.

Kumari, P. (2012). Green hrm-issues and challenges. *Research Paper Human Resource Manageme,* 1(5): 80-83.

Langwell, C. and Heaton, D. (2015). Using human resource activities to implement sustainability in SMEs. *Journal of Small Business and Enterprise Development,* 23(3): 652-70.

Mandip, G. (2012). Green hrm, People management commitment to environmental sustainability. *Research Journal of Recent Sciences,* 1: 244-52.

Marhatta, S. and Adhikari, S. (2013). Green hrm and sustainability. *ASM's International E-journal of Ongoing Research in management and IT*: 1-11.

Neuman, W. L. (2012). *Understanding research.* Pearson Education.

Opatha1, H. H. D. N. P. and Arulrajah, A. A. (2014). Green human resource management, Simplified general reflections. *International Business Research,Canadian Center of Science and Education,* 7(8): 101-12.

Osman, I., Ho, T. C. F. and Galang, M. C. (2011). The relationship between human resource practices and firm performance, An empirical assessment of firms in Malaysia. *Business Strategy Series,* 12(1): 41-48.

Popli, P. (2014). A study of green hr practices, its awareness and implementation in the industries in Nasik. *Global Journal of Commerce & Management Perpective,* 3(1): 114-16.

Ritchie, J. and Lewis, J. (2003). Qualitative research practice, a guide for social science students and researchers. *British Library Cataloguing In Publication Data*:

Sudin, S. (2011). Strategic green hrm, A proposed model that supports corporate environmental citizenship. *International Conference on Sociality and Economics Development,* 10: 79-83.

Verma, R. (2015). Green HRM requirement of 21st century. *International Journal of Recent Research in Commerce Economics and Management (IJRRCEM),* 2(2): 39-44.

Vij, P., Suri, S. and Singh, S. (2013). Green hrm- delivering high performance hr systems. *International Journal of Marketing and Human Resource Management (IJMHRM),* 4(2): 19-25.

Yusoff, Y. M., Othman, N. Z., Fernando, Y., Amran, A., Surienty, L. and Ramayah, T. (2015). Conceptualization of green human resource management, An exploratory study from malaysian-based multinational companies. *International Journal of Business Management and Economic Research (IJBMER),* 6(3): 158-66.