

The Impact of Business Intelligence on Green Human Resource Practices in Jordanian Industrial Companies

Abstract:

This study aimed to highlight the impact of business intelligence on green human resource practices in Jordanian industrial companies. The study adopted a descriptive-analytical approach, which is commonly used in this field. The study population consisted of Jordanian industrial companies listed on the Amman Stock Exchange, totaling 46 companies distributed across 9 sub-sectors. The study sample included individuals working at senior management levels (CEOs and their deputies) and middle management levels (department managers and section heads) in human resources, information technology, planning, research, and development within Jordanian industrial companies. The total number of employees in the sample was 230. For data analysis, the Statistical Package for Social Sciences V.20 (SPSS V.20) was used. The study findings revealed several significant results, including statistically significant impact of intellectual business intelligence in its dimensions (technology, individuals, strategic alignment) on green human resource practices in their dimensions (green recruitment, green training and development, green performance evaluation, and green compensation) within Jordanian industrial companies. The significant impact was evident across all dimensions of intellectual business intelligence. The presence of this impact underscores the importance of business intelligence systems in enhancing and developing human resource management and instigating changes in human resource management processes and practices to align with sustainability practices and environmental activities. This is achieved through the collection, storage, utilization, and sharing of information. Among the key recommendations, it is imperative to work on improving and enhancing the capability of business intelligence systems within the company to present information tailored to system users and achieve the highest level of integration with various company-specific information. Additionally, continuous motivation and encouragement of employees to engage in activities and practices supportive of the green environment are essential. This can be accomplished through recognition and providing paid leaves for their environmentally friendly activities.

Keywords:

Business Intelligence, Green Human Resource Practices, Jordanian Industrial Companies.

Introduction:

In today's rapidly changing business environment, business intelligence systems play a vital role in companies by supporting decision-making, improving performance, and organizing operations. These systems assist companies in storing, retrieving, and analyzing large amounts of information about their processes, enabling them to enhance both strategic and tactical decisions. As a result, companies gain a competitive advantage locally and globally. Business intelligence equips decision-makers with data or

information to address decisions related to individual decision-makers' needs, which can be extended to support the decision-making process at the company level and beyond. This leads to improving the quality of decisions and providing timely solutions to potential company challenges.

Undoubtedly, the presence of business intelligence implementation within companies leads to pioneering green human resource practices. Green human resource practices are the cornerstone and backbone of achieving growth, sustainability, and continuity for all activities within flexible industrial companies. This is accomplished by providing information technology, meeting market demands, and organizing relationships between employees, managers, and customers. Therefore, this study focuses on highlighting the impact of business intelligence on green human resource practices in Jordanian industrial companies aspiring for global industrial leadership.

The Problem and Questions of the Study:

The problem of the study arises from the attempt to establish a relationship and impact between business intelligence and green human resource practices. Green human resource practices have become one of the most crucial requirements of the current era. Adhering to these practices reflects the level of progress and scientific and intellectual development that an organization has achieved. It also reflects the level of commitment the organization holds towards achieving its developmental and sustainability goals, along with the methods, procedures, resources, and capabilities it has employed to serve that purpose.

The core problem of the study can be summarized in answering the following question: Does business intelligence with its dimensions (technology, individuals, strategic alignment) have an impact on green human resource practices with their dimensions (green recruitment, green training and development, green performance evaluation, green compensation) in Jordanian industrial companies?

This primary question leads to the following subsidiary questions:

- 1-Is there an impact of technology on green human resource practices in Jordanian industrial companies?
- 2-Is there an impact of individuals on green human resource practices in Jordanian industrial companies?
- 3-Is there an impact of strategic alignment on green human resource practices in Jordanian industrial companies?

Study Objectives:

The main objective of this study is to identify the impact of business intelligence with its dimensions (technology, individuals, strategic alignment) on green human resource practices with their dimensions (green recruitment, green training and development, green performance evaluation, green compensation) in Jordanian industrial companies.

Sub-objectives stem from this main objective as follows:

1-To identify the impact of technology on green human resource practices in Jordanian industrial companies.

2-To identify the impact of individuals on green human resource practices in Jordanian industrial companies.

3-To identify the impact of strategic alignment on green human resource practices in Jordanian industrial companies.

Importance of the Study:

The significance of the study arises from the importance of the topics it addresses. Business intelligence and green human resource practices are among the most crucial and prominent requirements of the current era. They reflect the level of intellectual and cognitive progress and the ethical standing that organizations have achieved. Their role in achieving sustainability goals and their responsibility towards the environment and society positively influence their market position, ability to continue operations, and attain success.

Study Hypotheses:

The main hypothesis H_0 : There is no statistically significant impact at a significance level ($\alpha \leq 0.05$) of business intelligence with its dimensions (technology, individuals, strategic alignment) on green human resource practices with their dimensions (green recruitment, green training and development, green performance evaluation, green compensation) in Jordanian industrial companies.

Derived from this main hypothesis are the following sub-hypotheses:

H_{01} : There is no statistically significant impact at a significance level ($\alpha \leq 0.05$) of technology on green human resource practices in Jordanian industrial companies.

H_{02} : There is no statistically significant impact at a significance level ($\alpha \leq 0.05$) of individuals on green human resource practices in Jordanian industrial companies.

Ho3: There is no statistically significant impact at a significance level ($\alpha \leq 0.05$) of strategic alignment on green human resource practices in Jordanian industrial companies.

The Theoretical Aspect of the Study:

Business Intelligence as a Contemporary Concept: There are numerous intellectual opinions among researchers and thinkers regarding the definition of business intelligence. Each viewpoint is shaped by different perspectives when attempting to define business intelligence. For instance, (Nuno & Arnaldo ,2018) suggest that it is a comprehensive term covering various activities, processes, and technologies necessary for gathering, storing, and analyzing information to enhance decision-making processes. It is a broad and intricate initiative that has been defined and discussed differently by various authors, lacking a universally agreed-upon definition. On the other hand, (Rosa et al.2017) consider it as a new approach in organizational structure based on the rapid analysis of information to make accurate and intelligent decisions in the shortest possible time. They indicate that it involves a set of functional and analytical programs, referring to databases and operations. Business intelligence deals with decision-making for intelligent business activities and is considered a framework that includes various processes, tools, and technologies designed to transition from data to information and from information to knowledge, adding value to the organization. Additionally, (Andre et al.2018) suggest that business intelligence refers to the tools used by organizations to gain a better understanding of operations, markets, and competition.

Importance of Business Intelligence:

According to Mehdi & Mohammad (2018:12), the importance of business intelligence is defined by the following:

- Support for the organizational infrastructure: Business intelligence has become a part of the organizational infrastructure as it serves as a source of information.
- Facilitating the expansion of new business practices.
- Contributing to the enhancement of business organizations' intelligence.

This theoretical framework provides insights into the contemporary concept of business intelligence and highlights its significance in modern organizations. It establishes the foundation for understanding the relationship between business intelligence and green human resource practices in Jordanian industrial companies.

Dimensions of Business Intelligence Perspectives:

The dimensions of business intelligence perspectives can be summarized as follows:

A. Data Acquisition Techniques: Data can be obtained from various sources, including both internal sources such as individuals within the organization and external sources such as customers. The methods of data acquisition can differ based on the organizational context (Lankoulova, 2012).

B. Data Warehouses: Data warehouse systems represent computerized information systems that form the core component of the infrastructure for business intelligence systems. They encompass all transactional data retained by the organization, allowing for querying, retrieval, and report generation based on the stored information (Recker, 2012).

C. Data Processing and Analysis: Real-time processing systems constitute essential and critical operations for business intelligence systems.

Green Human Resource Management:

Green human resource management has emerged as an organizational practice aimed at enhancing the environmental impacts of businesses, specifically their performance (Aftab et al., 2022). It has been defined as "the use of human resource management policies to support the sustainable utilization of resources within organizations" (Rani & Mishra, 2014), and as "establishing a framework that links human resource management functions such as selection, recruitment, training, development, rewards and compensation systems, and performance management with organizational environmental strategies. This can create a green workforce working for the benefit of individuals, companies, and the natural environment" (Mohammad et al., 2020).

Importance of Green Human Resource Management:

(Jameel ,2020) highlighted the significance of green human resource management as follows:

- Enhancing the public image, competitive capability, and overall performance of organizations.
- Reducing the environmental impact on the organization.
- Improving the recruitment process for highly skilled, engaged, and retained employees.
- Enhancing productivity and promoting sustainable resource utilization.

Dimensions of Green Human Resource Management:

According to (Freire & Pieta 2022), green human resource management encompasses several dimensions:

- Green Recruitment:

Also known as "hiring green collars," green recruitment aims at achieving green sustainability by hiring individuals interested in environmental protection, who are willing to engage in environmentally-friendly organizational activities (Hassan, 2021).

Tang et al. (2018) further elaborated that green recruitment represents the "attraction of skilled, qualified, trained workforce with an environmental inclination."

- Green Training:

Green training contributes to developing awareness and skills among employees within organizations, with the aim of achieving sustainability through continuous improvement in training. Green training also aims to motivate employees to participate in environmentally-friendly initiatives, leading to better performance and enabling the organization to face challenges and changes (Naseer et al., 2022). Srivastava and Shree (2018) affirmed that green training refers to "a set of training programs conducted by organizations for their employees about green practices. It involves identifying the training needs of employees, transferring knowledge through workshops, seminars, and training programs within the organization. These training programs are expected to have a clear positive impact on behavioral outcomes at work."

- Green Compensation:

Green compensation involve a strategic approach used by human resource management to attract, retain, and motivate employees to participate in achieving the environmental goals of the organization. Rewards can be either financial or non-financial in nature (Saputro & Nawangsari, 2021). The goal of these rewards is to attract, motivate, and retain employees who perform well and contribute to the desired objectives of the organization. They serve as a form of appreciation for employees' efforts in accomplishing their tasks and duties (Andriani et al., 2018).

- Green performance evaluation:

Green performance evaluation involves human resource management practices that encourage employees to engage in environmentally-friendly activities through promotion, evaluation, and rewards (Ercantan & Eyupoglu, 2022). Additionally, (Jirawuttinunt & Limsuwan 2019) emphasize that green performance appraisal is a practice that enhances employees' capabilities by promoting their professional skills and green performance. It also enhances their behavioral competencies and teamwork, enabling them to tackle environmental issues, thereby contributing to the achievement of organizational goals.

Researchers agree with (Ojan et al., 2019) that business intelligence is considered one of the latest tools adopted by businesses in the era of acceleration and development in the knowledge economy. It enables decision-makers to interpret important information through its diverse analytical capabilities, efficiency in unifying data sources, and a combination of various techniques and tools for presenting information. Achieving strategic goals and transitioning into green organizations is of utmost importance, as organizations have become efficient and dynamic through the management of green human resources that seek to achieve the goals and strategies of any organization.

The management of green human resources is connected with management characterized by innovative business intelligence, which undoubtedly contributes to increasing the utilization of resources by engaging in practices characterized as green, such as training, performance evaluation, recruitment, and green compensation, in addition to fostering green relationships. This contributes to the development of green behavior for employees and leaders to enhance both organizational and environmental performance, thus achieving a competitive advantage for any organization or company aspiring to green leadership on both local and global levels.

The Practical Aspect of the Study:

Methodology of the Study:

In order to achieve the study's objectives and answer its questions, the study followed a descriptive-analytical methodology, which is commonly used in this field. This methodology involves processing data collected from individuals within the study's community, analyzing it using appropriate statistical methods to describe and interpret relationships and test hypotheses.

Study Population and Sample:

The study population consisted of Jordanian industrial companies listed on the Amman Stock Exchange, totaling 46 companies distributed across 9 subsectors, as per the official website of the Amman Stock Exchange (www.ase.com.jo) and the Securities Depository Center for the year 2022 (www.sdc.com.jo).

The study sample included individuals working in top-level managerial positions (CEOs and their deputies) and middle-level managerial positions (department managers and section heads) in human resources, information technology, planning, research, and development in Jordanian industrial companies. The total number of employees in the sample was 230.

The study employed a survey method to collect data from the individuals within the study population. A questionnaire was designed and distributed to the study sample. A total of 230 questionnaires were distributed, and 195 were retrieved. After careful inspection, 11 questionnaires were found to be incomplete and thus not suitable for analysis. This left 184 valid questionnaires for statistical analysis, representing 80.0% of the total distributed questionnaires.

The following table illustrates the distribution of individuals within the study sample according to their personal and job-related characteristics:

Table (1) Distribution of Study Sample Individuals According to Personal and Job-Related Characteristics

Variable	Category	Frequency	Percentage
Gender	Male	102	60.9
	Female	72	39.1
Age	Less than 30 years old	11	6.0
	30 - less than 40 years old	45	24.5
	40 - less than 50 years old	88	47.8
	50 years and over	40	21.7
Qualification	Diploma	4	2.2
	Bachelor's	124	67.4
	Master's	47	25.5
	PhD	9	4.9
Years of Experience	Less than 5 years	6	3.3
	5- Less than 10 years old	31	16.8
	10 - less than 15 years old	44	23.9
	15 - less than 20 years old	64	34.8
	20 years and over	39	21.2
Job title	CEO / Deputy CEO	4	2.2
	Department Manager	58	31.5
	Section Head	122	66.3
Total		184	%100

Table (1) shows that in terms of gender, it became evident that (60.9%) of the study sample were males, while (39.1%) were females. This indicates a higher proportion of males compared to females. This could

be attributed to the nature of administrative work in industrial companies, which often requires a greater commitment to working hours and performing tasks outside official working hours, which might be more demanding for females. Regarding age, individuals aged between (40 - under 50 years) constituted the largest proportion of the study sample at (47.8%). This might suggest that industrial companies are interested in retaining their human resources, and the higher proportion of this age range could be due to the study's focus on upper and middle managerial levels, which generally require relatively longer periods to attain.

In terms of educational qualifications, the study revealed a high level of education and knowledge among the sample individuals. The majority of them held a bachelor's degree, accounting for (67.4%). Moreover, the largest proportion of the study sample had work experience ranging from (15 years - under 20 years), constituting (34.8%). This indicates that the study participants possessed the necessary practical skills and experiences to carry out their assigned tasks effectively. Regarding job titles, individuals holding the position of "Section Head" represented the highest percentage of the study sample at (66.3%). This distribution aligns with the hierarchical structure of modern organizations.

Validity of the Study Tool:

The study tool's validity was ensured based on the study variables and the responses of the surveyed individuals related to those variables, specifically regarding intellectual business intelligence and green human resource practices. This was done by calculating the Cronbach's Alpha Coefficient, which measures the internal consistency of the study's items and indicates the quality of the items, reflecting the strength of the relationship between them. Table (2) illustrates the reliability coefficient for the study dimensions. The alpha values ranged from (0.797), representing the lowest value for strategic alignment as a dimension of intellectual business intelligence, to (0.896), representing the highest value for green performance assessment as a dimension of green human resource practices. It's noteworthy that all alpha values exceeded the minimal and acceptable threshold for statistical analysis, as an alpha value greater than or equal to (0.70) is generally acceptable for research in management and social sciences.

Table (2) - Reliability Coefficients for the Dimensions of Study Variables

Variable	Dimension	Number of items	Alpha value
Intellectual business intelligence	Technology	4	0.834
	Individuals	4	0.856

	Strategic alignment	4	0.797
	Intellectual business intelligence	12	0.913
Green HR practices	Green recruitment	4	0.830
	Green training and development	4	0.831
	Green Performance Evaluation	4	0.896
	Green compensation	4	0.870
	Green HR practices	16	0.950

Model Fit:

Firstly, the study examined the issue of multicollinearity through the Variance Inflation Factor (VIF) test. Table (3) displays the VIF values for the independent variable dimensions to ensure the absence of high correlations and linear overlap between these dimensions.

Table (3) - Results of Variance Inflation Factor Test and Permissible Variance

Variable	VIF	Tolerance- permissible variance
Technology	2.003	0.499
Individuals	2.150	0.465
Strategic alignment	2.148	0.466

Table (3) indicates that all Variance Inflation Factor (VIF) values were less than (10), and the test for permissible variance revealed that all values were greater than (0.10), suggesting the absence of linear correlations between the dimensions of the independent variable (Pevalin & Robson, 2009, p. 302).

Secondly, the study conducted the One-Sample Kolmogorov-Smirnov Test to assess the normal distribution of the data for the study variables. Table (4) presents the results of this test. The Kolmogorov-Smirnov Z values were (0.081) for intellectual business intelligence at a significance level of (0.005), and (0.957) for green human resource practices at a significance level of (0.000). It's worth noting that the values for these variables were at a significance level less than (0.05), indicating that the data for these variables do not follow a normal distribution. However, this result can be overlooked due to the study's large sample size from a statistical perspective (n=184), which is larger than (30 observations), making it possible to consider

all variables to follow a normal distribution based on the Central Limit Theory (CLT) (Bohm & Zech, 2010, p. 263).

Table (4) - One-Sample Kolmogorov-Smirnov Test for Study Variables Distribution

	Intellectual business intelligence	Green HR practices
Kolmogorov-Smirnov Z	0.081	0.957
Asymp. Sig. (2-tailed)	0.005	0.000

Descriptive Analysis of Study Data:

Firstly: Intellectual Business Intelligence:

Table (5) provides a summary of the arithmetic means and relative importance for intellectual business intelligence and its dimensions. The table illustrates that Jordanian industrial companies show a high level of interest in intellectual business intelligence with an average mean of (3.947). As for the dimensions, all of them exhibit high relative importance. The highest mean score was attributed to the Technology dimension, reaching (4.088), while the lowest mean score was for the Strategic Alignment dimension, at (3.697).

Table (5) - Arithmetic Means and Relative Importance for Dimensions of Intellectual Business Intelligence

Dimensions of Intellectual Business Intelligence	Arithmetic Means	Rank	Relative Importance
Technology	4.088	1	High
Individuals	4.060	2	High
Strategic alignment	3.697	3	High
Intellectual Business Intelligence	3.947		High

Secondly: Green Human Resource Practices:

Table (6) presents a summary of the arithmetic means and relative importance for green human resource practices and its dimensions. The table shows that Jordanian industrial companies exhibit a high level of interest in green human resource practices with an average mean of (3.945). As for the dimensions, all of them demonstrate high relative importance. The highest mean score was attributed to the Green Training and Development dimension, reaching (4.026), while the lowest mean score was for the Green Recruitment dimension, at (3.738).

Table (6) - Arithmetic Means and Relative Importance for Dimensions of Green Human Resource Practices

Dimensions of Green Human Resource Practices	Arithmetic Means	Rank	Relative Importance
Green recruitment	3.738	4	High
Green training and development	4.026	1	High
Green Performance Evaluation	3.959	3	High
Green compensation	4.058	2	High
Green HR practices	3.945		High

Hypothesis Testing:

Main Hypothesis:

Ho: There is no statistically significant impact at a significance level ($\alpha \leq 0.05$) of intellectual business intelligence with its dimensions (Technology, Individuals, Strategic Alignment) on green human resource practices with its dimensions (Green Recruitment, Green Training and Development, Green Performance Evaluation, Green Compensation) in Jordanian industrial companies.

Table (7) - impact of Intellectual Business Intelligence on Green Human Resource Practices

Dependent Variable	Independent Variable	Unstandardized Coefficients		Standardized Coefficients		
		B Coefficient	Standard error	Coefficient β	Calculated T	Sig. T
Green HR practices	Technology	0.117	0.054	0.133	2.174	0.031
	Individuals	0.358	0.059	0.386	6.086	0.000

	Strategic alignment	0.334	0.054	0.395	6.232	0.000
Correlation coefficient (R)			Coefficient of determination (R²)	Calculated F	Sig. F	
0.815			0.664	118.359	0.000	

Table (7) presents the results of multiple regression analysis for the effect of intellectual business intelligence in its dimensions (technology, individuals, strategic alignment) on green human resource practices in their dimensions (green recruitment, green training and development, green performance evaluation, green compensation) in Jordanian industrial companies. The value of the correlation coefficient ($0.815 = R$) indicates the presence of a relationship between intellectual business intelligence and green human resource practices. The value of the coefficient of determination ($0.664 = R^2$) means that intellectual business intelligence explains 66.4% of the variance in green human resource practices. The F value (118.359) at a significance level (Sig. = 0.000) confirms the regression's significance at a significance level ($\alpha \leq 0.05$), indicating a statistically significant impact of intellectual business intelligence on green human resource practices.

The coefficients table indicates an effect of the dimensions of intellectual business intelligence. The value of B for the technology dimension (0.117) with a standard error of (0.054), Beta value ($\beta = 0.133$), and T value (2.174) at a significance level (Sig. = 0.013), signifies a significant impact. Similarly, the B value for the individuals dimension (0.358) with a standard error of (0.059), Beta value ($\beta = 0.386$), and T value (6.086) at a significance level (Sig. = 0.000), indicates a significant impact. Moreover, the B value for the strategic alignment dimension (0.334) with a standard error of (0.054), Beta value ($\beta = 0.395$), and T value (6.232) at a significance level (Sig. = 0.000), also demonstrates a significant impact. Based on the results of the multiple regression analysis, the main null hypothesis cannot be accepted, and the alternative hypothesis is accepted, which states:

There is a statistically significant impact at a significance level ($\alpha \leq 0.05$) of intellectual business intelligence in its dimensions (technology, individuals, strategic alignment) on green human resource practices in their dimensions (green recruitment, green training and development, green performance evaluation, green compensation) in Jordanian industrial companies.

Sub-hypothesis 1:

H₀₁: There is no statistically significant impact at a significance level ($\alpha \leq 0.05$) of technology on green human resource practices in Jordanian industrial companies.

Table (8) Effect of Technology on Green Human Resource Practices.

Dependent Variable	Independent Variable	Unstandardized Coefficients		Standardized Coefficients		
		B Coefficient	Standard error	Coefficient β	Calculated T	Sig. T
Green HR practices	Technology	0.560	0.050	0.639	11.205	0.000
Correlation coefficient (R)			Coefficient of determination (R^2)	Calculated F	Sig. F	
0.639			0.408	125.561	0.000	

Table (8) illustrates the results of simple regression analysis for the effect of technology on green human resource practices in Jordanian industrial companies. The correlation coefficient value is ($0.639 = R$), indicating a relationship between technology and green human resource practices. The coefficient of determination value is ($0.408 = R^2$), meaning that technology explains 40.8% of the variance in green human resource practices. The F value (125.561) at a significance level (Sig. = 0.000) confirms the regression's significance at a significance level ($\alpha \leq 0.05$), indicating a statistically significant impact of technology on green human resource practices.

The coefficients table indicates an effect of the technology dimension. The value of B for the technology dimension is (0.560) with a standard error of (0.050), Beta value ($\beta = 0.639$), and T value (11.205) at a significance level (Sig. = 0.000), signifying a significant impact. Based on the results of the simple regression analysis, the first sub-hypothesis cannot be accepted, and the alternative hypothesis is accepted, which states:

There is a statistically significant impact at a significance level ($\alpha \leq 0.05$) of technology on green human resource practices in Jordanian industrial companies.

Sub-hypothesis 2:

Ho2: There is no statistically significant impact at a significance level ($\alpha \leq 0.05$) of individuals on green human resource practices in Jordanian industrial companies.

Table (9) impact of Individuals on Green Human Resource Practices.

Dependent Variable	Independent Variable	Unstandardized Coefficients		Standardized Coefficients		
		B Coefficient	Standard error	Coefficient β	Calculated T	Sig. T
Green HR practices	Individuals	0.686	0.046	0.740	14.830	0.000
Correlation coefficient (R)			Coefficient of determination (R^2)	Calculated F	Sig. F	
0.740			0.547	219.929	0.000	

Table (9) illustrates the results of simple regression analysis for the effect of individuals on green human resource practices in Jordanian industrial companies. The correlation coefficient value is ($0.740 = R$), indicating a relationship between individuals and green human resource practices. The coefficient of determination value is ($0.547 = R^2$), meaning that individuals dimension explains 54.7% of the variance in green human resource practices. The F value (219.929) at a significance level (Sig. = 0.000) confirms the regression's significance at a significance level ($\alpha \leq 0.05$), indicating a statistically significant impact of individuals on green human resource practices.

The coefficients table indicates an effect of the individuals dimension. The value of B for the individuals dimension is (0.686) with a standard error of (0.046), Beta value ($\beta = 0.740$), and T value (14.830) at a significance level (Sig. = 0.000), signifying a significant impact. Based on the results of the simple regression analysis, the second sub-hypothesis cannot be accepted, and the alternative hypothesis is accepted, which states:

There is a statistically significant impact at a significance level ($\alpha \leq 0.05$) of individuals on green human resource practices in Jordanian industrial companies.

Sub-hypothesis 3:

Ho3: There is no statistically significant impact at a significance level ($\alpha \leq 0.05$) of strategic alignment on green human resource practices in Jordanian industrial companies.

Table (10) impact of Strategic Alignment on Green Human Resource Practices.

Dependent Variable	Independent Variable	Unstandardized Coefficients		Standardized Coefficients		
		B Coefficient	Standard error	Coefficient β	Calculated T	Sig. T
Green HR practices	Strategic Alignment	0.628	0.042	0.743	14.958	0.000
Correlation coefficient (R)			Coefficient of determination (R^2)	Calculated F	Sig. F	
0.743			0.551	223.733	0.000	

Table (10) illustrates the results of simple regression analysis for the impact of strategic alignment on green human resource practices in Jordanian industrial companies. The correlation coefficient value is ($0.743 = R$), indicating a relationship between strategic alignment and green human resource practices. The coefficient of determination value is ($0.551 = R^2$), meaning that strategic alignment explains 55.1% of the variance in green human resource practices. The F value (223.733) at a significance level (Sig. = 0.000) confirms the regression's significance at a significance level ($\alpha \leq 0.05$), indicating a statistically significant impact of strategic alignment on green human resource practices.

The coefficients table indicates an effect of the strategic alignment dimension. The value of B for the strategic alignment dimension is (0.628) with a standard error of (0.042), Beta value ($\beta = 0.743$), and T value (14.958) at a significance level (Sig. = 0.000), signifying a significant impact. Based on the results of the simple regression analysis, the third sub-hypothesis cannot be accepted, and the alternative hypothesis is accepted, which states:

There is a statistically significant impact at a significance level ($\alpha \leq 0.05$) of strategic alignment on green human resource practices in Jordanian industrial companies.

Results and Recommendations:

Results:

Based on the outcomes of the data analysis and hypothesis testing, the following results have been obtained:

1-The results of the analysis revealed an elevated level of interest among Jordanian industrial companies in intellectual business intelligence. The companies exhibited a high level of interest in each of the dimensions: technology, individuals, and strategic alignment. This signifies the companies' interest in adopting methods,

technologies, tools, and applications that facilitate the collection, integration, analysis, and presentation of information supporting decision-making processes. This interest is reflected through a focus on technology, individuals, and achieving strategic alignment.

2-The analysis results also demonstrated a high level of interest among Jordanian industrial companies in green human resource practices. The companies displayed significant interest in dimensions such as green recruitment, green training and development, green performance assessment, and green compensation. This indicates the companies' dedication to adopting human resource management policies that support sustainability practices and environmental initiatives. It also highlights their commitment to increasing employees' awareness and engagement regarding sustainability and environmental issues through recruitment, training, development, performance evaluation, and compensation practices.

3-The results of the main hypothesis testing revealed a statistically significant effect of intellectual business intelligence in its dimensions (technology, individuals, strategic alignment) on green human resource practices in their dimensions (green recruitment, green training and development, green performance evaluation, green compensation) in Jordanian industrial companies. The significant impact was evident across all dimensions of intellectual business intelligence. This presence of impact underscores the importance of business intelligence systems in enhancing and developing human resource management and bringing about changes in human resource management processes and practices to align with sustainability practices and environmental activities. This is achieved by gathering, storing, utilizing, and sharing information effectively.

4-The results of the first sub-hypothesis testing demonstrated a statistically significant impact of technology on green human resource practices in Jordanian industrial companies. This impact emphasizes the significance of technology and related information technology systems in data analysis, information presentation, integration with other systems, and generating reports that support decision-making processes related to green human resource practices.

5-The results of the second sub-hypothesis testing demonstrated a statistically significant impact of individuals on green human resource practices in Jordanian industrial companies. This impact can be attributed to the fact that implementing green human resource practices requires companies to extensively use various information technology systems, including business intelligence, at different managerial levels. This involves having a workforce with the necessary skills to handle these systems, develop appropriate technical solutions for problems, and subject employees to training programs to enhance their usage. This, in turn, enhances the company's orientation towards implementing green human resource practices.

6-The results of the third sub-hypothesis testing showed a statistically significant impact of strategic alignment on green human resource practices in Jordanian industrial companies. This impact could be due to the fact that implementing green human resource practices necessitates companies to restructure their operations to align with available opportunities and meet the needs and operational objectives of their management.

Recommendations:

Based on the obtained results, the study recommends the following:

- Improve and develop the capability of business intelligence systems within the company to present information tailored to system users and achieve the highest level of integration with various company-related information.
- Create an encouraging environment for the use of business intelligence systems at different managerial levels and enhance the technical skills of the team responsible for these systems through appropriate training programs.
- Provide all the requirements that support the implementation and utilization of business intelligence in achieving the goals and aspirations of various departments in the company. Restructure operations to align with available opportunities.
- Place greater emphasis on highlighting the importance of environmental factors during the employee recruitment process and selecting individuals who have the tendency to follow green environmental practices.
- Increase focus on training programs that contribute to enhancing employees' environmental awareness and familiarize them with the most important methods for environmental conservation.
- Implement effective evaluation mechanisms that ensure the preservation of environmental performance within the company, relying on clear and defined rules related to employee behavior towards environmental protection during performance evaluations.
- Provide continuous motivation and encouragement to employees to engage in activities and practices that support the green environment. This can be achieved through recognition and offering paid leave for their environmentally friendly activities.

Reference:

Aftab, J., Abid, N., Cucari, N., & Savastano, M. (2022). Green human resource management and environmental performance: The role of green innovation and environmental strategy in a developing country. *Business Strategy and the Environment*.1-17.

Andrade Nelson A -Valbuena, Jose M. Merigo, (2018) "Outlining new product development research through bibliometrics: Analyzing journals, articles and researchers", *Journal of Strategy and Management*, Vol. 11 Issue: 3, pp.328-

Andriani, S., Kesumawati, N., & Kristiawan, M. (2018). The influence of the transformational leadership and work motivation on teachers performance. *International Journal of Scientific & Technology Research*, 7(7), 19-29

Bohm, C., & Zech, G. (2010). Introduction to statistics and data analysis for physicists. Herausgeber, Hamburg: Deutsches Elektronen- Synchrotron.

Ercantan, O., & Eyupoglu, S. (2022). How Do Green Human Resource Management Practices Encourage Employees to Engage in Green Behavior? Perceptions of University Students as Prospective Employees. *Sustainability*, 14(3), 1718

Freire, C., & Pieta, P. (2022). The Impact of Green Human Resource Management on Organizational Citizenship Behaviors: The Mediating Role of Organizational Identification and Job Satisfaction. *Sustainability*, 14(13), 7557.

Hassan, Fatimah Mohammed Mahdi (2021). The Mediating Role of Organizational Citizenship Behavior in the Relationship between Green Human Resource Management Practices and Enhancing Organizational Reputation During the COVID-19 Pandemic: An Analytical Study. *Scientific Journal of Environmental and Commercial Studies*, 12(3), 273-339.

Jameel, Omar Qais (2020). Green Human Resource Management Practices: An Introduction to Support E-Learning Process: A Survey Study of Faculty Members' Opinions at Anbar University. *Al-Anbar University Journal of Economic and Administrative Sciences*, 12(29), 273-290.

Jirawuttinunt, S., & Limsuwan, K. (2019). The effect of green human resource management on performance of certified ISO 14000 businesses in Thailand. *UTCC International Journal of Business and Economics*, 11(1), 168-185.

Lankoulova, LLiana, (2012), Business Intelligence for Horizontal cooperation :
Measuring the performance of A Transportation Network sharing cooperation between Logistics companies

Mehdi Dadkhah, Mohammad Lagzian, (2018) "A research on the use of business intelligence for academic research", *Library Hi Tech News*, Vol. 35 Issue: 3, pp.10-12y

Mohammad, N., Bibi, Z., Karim, J., & Durrani, D. (2020). Green human resource management practices and organizational citizenship behaviour for environment: The Interactive Effects of Green Passion. *International Transaction Journal of Engineering, Management, & Applied Sciences & Technologies*, 11(6), 1-10.

N.Kabuoh, (2019). Effect of Sustainable Marketing on Corporate Image of selected Deposit Many Banks in Ogun State, Nigeria. *International Journal of Economic, commerce and Management*, vii(4),

Naseer, Ruham Arshid, Naseer, Tariq Arshid, Naseer, Khaldoun Arshid (2022). Reflections of Green Human Resource Management Implementation on Jordanian Public Sector Institutions. *African Journal of Advanced Studies in Humanities and Social Sciences*, 1(1), 44-54.

Nuno Caseiro, Arnaldo Coelho, (2018) "Business intelligence and competitiveness: the mediating role of entrepreneurial orientation", *Competitiveness Review: An International Business Journal*, Vol. 28 Issue: 2, pp.213-226

Olawale, L.Adetunji., Olalekan, U.Asikhia., Adesoga, D.Adefulu. & Margaret, Rani, S and Mishra, K. (2014). Green HRM: Practices and strategic implementation in the organizations. *Int.J. Recent Innov. Trends Comput. Commun*, 2(1): 2633-2639519-544.

Recker J., (2013), *Scientific Research in Information Systems: A Beginner's Gaid*. Springer Berlin Heidelberg

Rosell David T, Nicolette Lakemond, Lisa Melander, (2017) "Integrating supplier knowledge in new product development projects: decoupled and coupled approaches", *Journal of Knowledge Management*, Vol. 21 Issue: 5, pp.1035-1052

Saputro, A., & Nawangsari, L. C. (2021). The effect of green human resource management on organization citizenship behaviour for environment (OCBE) and its implications on employee performance at Pt Andalan Bakti Niaga. *European Journal of Business and Management Research*, 6(1), 174-181

Srivastava, A. P., & Shree, S. (2018). Examining the effect of employee green involvement on perception of corporate social responsibility: Moderating role of green training. *Management of Environmental Quality: An International Journal*, 10(16).

Tang, G., Chen, Y., Jiang, Y., Paillé, P., & Jia, J. (2018). Green human resource management practices: scale development and validity. *Asia Pacific Journal of Human Resources*, 56(1), 31-55.