|  |
| --- |
| **The impact of Green supply chain management on achieving Excellence performance** **Analysis study of opinions of a sample of employees of General Company for Rubber and Tire Industries, Al Diwaniya Tire Factory**  |
|  |  |
| **Enas shahid Halleem 2** | **Hamid Kathem Mutaab Alshibawi 1** |
|  | Hamid.mutaab@qu.edu.iq |
| 1,2 Al-Qadisiya University, College of Administration and Economics, Department of Business Administration |

**Abstract**

The current study aims at verifying the level of impact of the management of the green supply chain in achieving the distinguished performance in the General Company for Rubber and Tire Industries / Al Diwaniya Tire Factory. The resolution was used as a tool for collecting the data prepared by the two researchers based on Research sample consisted of 165 workers in the State Company for Rubber and Tire Industries/ Diwaniya Tire Factory. The two researchers relied on a set of statistical methods (frequencies, mean, standard deviations, Cronbach's alpha coefficient, and confirmatory factor analysis), The most important findings of the study are a statistically positive correlation between the management of the green supply chain and Excellence performance

**Keywords**: Green supply chain management, Excellence performance

**Introduction**

In the light of industrial and technological developments, rapid changes in the business environment and its negative impact on infrastructure and society in various fields in general and in the industrial field in particular, these organizations are searching for ways in which negative impacts on the environment can be reduced or eliminated. GSCM's Green supply Chain Management activities, which include green procurement, green design, green manufacturing, green distribution and green marketing, are among the most effective ways in which contemporary industrial organizations can mitigate these effects, from obtaining raw materials to delivering products to end-customers. Each green activity has a unique nature to implement with different ways to improve performance, and organizations need to focus on their own distinct internal strengths to provide added value to customers and achieve excellence that is directly correlationed to Excellence performance.

 **First Part: Research Methodology**

**First: Problem Of Research**

As a result of the increasing institutional pressures and the increasing visibility of the negative effects of industrial production, which are considered one of the most important challenges facing industrial companies, the problem of studying is reflected in the extent of the company's ability to adopt the management of the green supply chain. As a form of environmental improvement as a production process initiative. Many industrial companies have adopted to address environmental issues, minimize negative impacts and reduce pollution. This study sought to answer a number of questions through which a number of convincing facts and answers can be found that contribute to clarifying the problem of the study, as follows:

1. 1.is there an interest by the company in the field of study on the role and impact of managing the green supply chain in its dimensions (green purchase, green design, green manufacturing, green distribution, green marketing?.
2. 2.is there a correlation between the dimensions of green supply chain management (green purchase, green design, green manufacturing, green distribution, green marketing) in Excellence performance?.

**Second: importance of research**

1. A theoretical framework is presented by its presentation of many literature on green supply chain management and Excellence performance, which is the safest way to preserve the environment.
2. build a clear vision for the activities of green supply chain management among factory workers.
3. The concept of green supply chain management has been adopted to provide environmentally friendly products with Excellence performance and little harm to the customer and staff to meet market needs.

**Third: objectives of research**

This research aims to:

1. Determine the level of application of the plant researched for green supply chain dimensions (green purchase, green design, green manufacturing, green distribution, green marketing).
2. Explain the correlation and impact between green supply chain management and Excellence performance

**Fourth: hypothesis of research**

****

**Figure 1 hypothesis of research**

**Source:** Prepared by two researchers

**Fifth: Research hypotheses**

1. **Correlation hypotheses**

**H1**: There is a statistically positive correlation between the management of the green supply chain and Excellence performance.

The following sub-assumptions emerge:

1. There is a statistically positive correlation between green purchasing and Excellence performance and its dimensions.
2. here is a statistically positive correlation between green design and Excellence performance and its dimensions.
3. It is also a very important step toward the development of a new business.
4. This is a very important step in the direction of the new government.
5. This is a very important step in the development of the future of the future of the future.

**Sixth: Method of research**

Analytical descriptive approach

**Seventh: Research Society and sample**:

**Research Society** (Research community - General Company for Rubber and Tire Industries / Al Diwaniya Tire Factory)

**Research sample** (sample of 165 workers at all levels and job-related level)

**Eighth: Limits Of Research**

**Spatial Limits**: Research was carried out at the General Company for Rubber and Tire Industries/ Diwaniya Tire Plant.

**Human Limits**: The boundaries of research included a sample of personnel employed by the General Company for Rubber and Tire Industries/ Diwaniyah Tire Plant.

**Time Limits**: the time period during which the search was conducted is limited from (20/2/2022) to (10/5/2022)

**Ninth: Statistical methods used in research**

 The following statistical methods and methods will be used:

1. Frequencies: to review the answers of the study sample members.

2. Mean: to display the average answers of the study sample members about the study variables.

3. Standard Deviations: to find out the dispersion of the answers of the study sample members received from their arithmetic averages

4. Confirmatory Factor Analysis: To test the validity of the study’s measures

5. Alpha Cronbach Coefficient: to show the reliability and reliability of the questionnaire adopted in this thesis

 **Part Two: Theoretical Framework**

**First: Green Supply Chain Management**

1. **concept of green supply chain management**

In addition to the rapid change in the global manufacturing scenario, environmental and social issues have become important in business management, in addition to the emergence of a green supply chain management portal that improves process and product performance in accordance with environmental legislation, resulting in increased greenhouse emissions and environmental pollution by companies To the increasing need to reorganize their processing chain operations with the aim of preserving scarce resources (Amemba et al., 2013:51) as it is considered a chain management

Green as an integrated processing chain system consisting of suppliers, manufacturers, customers and service management

Reverse logistics. Also, Green supply Chain Management has been identified as a form of operational initiative for environmental improvement adopted by many companies to address environmental issues.(Priyashani&Gunarathne,2021:6) Green supply Chain Management is defined as a wide range of activities within the process chain including green design, green procurement, green manufacturing, green distribution and green transport. noted that (Karlsson&Karlsson, 2020:5) green supply chain management is integrating EMS into the process chain process, including collaborating with customers, suppliers and logistics providers to share information and knowledge with a view to improving environmental performance. (Novitasari &Agutia,2021:393) considers the management of the green bass chain as a processing chain aimed at reducing waste and improving ecosystem quality, environmental efficiency, and recycling of materials. GSCM aims to improve corporate performance in terms of economic, environmental, operational and social performance.

1. **Objectives Of Green Supply Chain Management**

There are a set of objectives that characterize managing the green supply chain

(Amemba et al., 2013:51), Kaddam et al., 2017:39) (Ganeshan, 2015:1490),

The objectives of the Green supply Chain Management are:

1. Management of the green supply chain aims to achieve profit and efficiency and increase market share by reducing environmental risks and impacts.
2. the management of the green supply chain aims to continuously improve industrial processes and products to reduce or prevent environmental pollution.
3. The main focus of green supply chain management is to make business oriented environmentally friendly.
4. achieve competitive advantage and high performance through green supply chain management practices
5. The Green supply Chain Management aims to show how important it is to preserve the environment and conserve natural resources and to show how environmentally dependent commercial activities are.

**3. Dimensions of Green supply Chain Management**

**A. Green Purchase**

Green purchasing refers to a set of procurement policies that include environmental concerns related to raw materials, supplier selection, distribution, packaging, recycling, and Reuse, resource reduction, and finally product identification, green purchasing practices play an important role in helping organizations reduce pollution and waste through strategies such as recycling, demolition or sorting using dedegradable packaging.(assumpcãoa et al. 2019:9 )

**B. Green design**

Green design is an important topic of green supply chain management related to the design of a product or service that promotes environmental awareness, i.e. organizations have proven potential to become environmentally friendly toward product recycling (Tanwer et al., 2014:137) Green design aims to reduce environmental impacts at all stages of product development and the entire product lifecycle from sourcing to disposing of raw materials from suppliers (Silva, 2020:2657)

**C. Green manufacturing**

 It is production processes that use environmentally friendly inputs that reduce waste generation and reduce pollution, first resulting in any waste or pollution, and aim to lower raw material costs and improve the company's image. (Ninlawan et al,2010:2)

**D. green distribution**

Green distribution is an important activity that affects the performance of the green supply chain. Green distribution includes all activities to reduce environmental damage and waste during shipment; fuel used by the vehicle transporting the product, frequency of transportation, distance to customers, and packing and packaging characteristics affect the performance of the green distribution. ( SEzen&Cankay,2019:101)

**H. Green marketing**

Green marketing is the process of selling products based on their environmental benefits as they are produced and packaged in an environmentally friendly way, eco-friendly products are products that do not harm the environment either in their production, use or disposal (vijail&anirhu,2020:4138)

 **Second: Excellence Performance**

1. **Concept Of Excellence Performance**

Performance is a concept commonly used in many areas, Organization performance means how well the organization is and what value the organization offers to the client and other stakeholders and performance is related to achieving the interests of stakeholders (Wu, 2009:8) (Performance is the measure of achievement achieved by the individual or team and the organization 2002:4), Eriksson) (Parra,2019:42) Excellence performance represents an integrated approach to management of organizational performance, resulting in lasting value for clients and stakeholders, contributing to continued organizational success and improving the overall effectiveness of the organization.(Mohamed et al., 2018:6200) Excellence performance is an ongoing effort to create an internal framework of standards and processes that engage and motivate employees to deliver performance-driven services. Alhalboosi,2016:4)) Excellence performance is an ongoing process of providing scientific quality of life to demonstrate and maintain the potential, competence or Excellence that leads to continuous quality outcomes and long-term competitive advantage.

**2. IMPORTANCE OF EXCELLENCE PERFORMANCE**

* 1. Excellence performance helps manage the organization's dominant processes, as well as the organization's ability to change these processes in accordance with the changing future.
	2. Excellence performance contributes to individuals having the organization's high intellectual and cognitive abilities, behaviors, and skills, and being able to employ those cognitive skills in their work in a way that makes them do so, do business and offer new and authentic ideas and services (Kadhim et al.,2020:9718))
	3. Excellence performance is a long-term process that addresses strategic issues such as developing national processes to be the best, improving people's performance, developing a quality framework to provide excellent service to customers, and developing comprehensive quality management because it is based on the same values.
	4. Excellence performance contributes to stakeholder value creation by strengthening operations systems while considering a wide range of issues such as the company's social and environmental outcomes (Marinescu, 2018:967 Toma&).

**Fourth: Dimensions of Excellence performance**

1. **Customer focus**

Customer focus a group that studies how the organization can engage its clients to achieve long-term market success. This partnership strategy includes how the organization listens to the voice of its customers, uses customer information to improve and identify opportunities for creativity, customer voice: How to get information from customers - customer interaction: How to engage the customer to serve their needs and build relationships Yazdani,2013:1626)

1. **Leadership**

Leadership is an important driver that has a great impact on performance and a successful leader is who can develop the mission and vision of the company. Leadership is said to be successful when it can produce an environmental good to support different entities, learn and innovate, and leaders are considered to be among the most important factors in bringing success or failure to an organization, business, or even the entire country (Pirot,2016:45)

1. **Focus on human resources**

In Clinton's view, 1998:27), the Human Resources focus is the norm directed toward creating a high-performance workplace and toward developing employees who enable the company to adapt to change, and developing and managing resources in an integrated manner consistent with the company's strategy.

1. **4.focus on financial and market outcomes**

According to Himmer,2013:48)) the financial and market measures include revenue, ROI, ROI operational profit and quality cost.Ballard,2013:41)) the finance and market category focuses on regulatory and operational performance in relation to key financial metrics and market share, and this is broken down by the organization's operational focus and compared against competitors and related comparisons. Understand critical sectors of the market to identify the distinct needs of stakeholders and customers side by side to meet needs and expectations

**Part Three: The practical aspect**

**First: Coding and characterization of study variables**

The study consists of two variables: The independent variable, the management of the green processing chain, measured in five sub-dimensions, and the certified variable, the distinct performance, measured in four sub-dimensions; it is necessary to encode these variables and their sub-dimensions in order to be easily manipulated in data analysis and results interpretation Description of the study variables involved in the statistical analysis

**Table (1) Coding and characterization of variables**

|  |  |  |
| --- | --- | --- |
| Key variables  | Sub-dimensions  | cod |
| **Green supply chain management** GSCM | Green purchase  | GP |
| Green design  | GD |
| Green Manufacturing  | GM |
| Green distribution  | GDI |
| Green marketing  | GMA |
| **Excellence performance****EXPE**  | Customer focus  | CF |
| Leadership  | LE |
| Focus on human resources  | HRF |
| Focus on financial results  | FRF |

**Second: Descriptive statistics of study variables**

* **Green supply chain management**
1. **Green purchase**

The results Lowest show that the mean for the first item GP1was 4.18 with a standard deviation value of 1, a variance factor of 24, and a relative significance of 84. The mean for the second paragraph GP2 was 4.12 with a standard deviation value of 1.052, a variance factor of 26, and a relative significance of 82. The mean of the GP dimension was generally 4.12 with a standard deviation value of 0.926, a variance factor of 22, and a relative significance of 82.

Table (2)

Occurrences and percentage of green purchase part (GP) answers

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **mean** | **Standard deviation** | **C.V** | **Relative importance** |
| **GP1** | 4.18 | 1.000 | 24 | 84 |
| **GP2** | 4.12 | 1.052 | 26 | 82 |
| **GP3** | 4.07 | 1.105 | 27 | 81 |
| **GP4** | 4.10 | 1.016 | 25 | 82 |
| **GP5** | 4.13 | 1.051 | 25 | 83 |
| **GP** | 4.12 | 0.926 | 22 | 82 |

1. **Green design**

The results Lowest show that **the mean for first paragraph GD1** was 4.38 with a standard deviation value of 0.792, a variance factor of 18, and a relative significance of 0.88, and that the mean for second paragraph GD2 was 4.08 with a standard deviation value of 0.927, a variance factor of 23, and a relative significance of 82. **The mean of the GD dimension** was generally 4.20 with a standard deviation value of 0.773, a variance factor of 18, and a relative significance of 84.

Table (3)

Occurrences and percentage of responses to green design items GD)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **mean** | **Standard deviation** | **C.V** | **Relative importance** |
| **GD1** | 4.38 | 0.792 | 18 | 88 |
| **GD2** | 4.08 | 0.927 | 23 | 82 |
| **GD3** | 4.33 | 0.878 | 20 | 87 |
| **GD4** | 4.04 | 1.005 | 25 | 81 |
| **GD5** | 4.16 | 0.958 | 23 | 83 |
| **GD** | 4.20 | 0.773 | 18 | 84 |

1. **Green Manufacturing**

The results Lowest show that **the mean for the first paragraph GM1** was 4.25 with a standard deviation value of 0.902, a variance factor of 21, and a relative significance of 0.85, and that the mean for the second paragraph GM1was 4.19 with a standard deviation value of 0.833, a variance factor of 20, and a significance of 84. **The mean of the GM dimension** was generally 4.22 with a standard deviation value of 0.724, a variance factor of 17, and a rational significance of 84.

Table (4)

Iterations and percentage of answers to green manufacturing parts(GM)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **mean** | **Standard deviation** | **C.V** | **Relative importance** |
| **GM1** | 4.25 | 0.902 | 21 | 85 |
| **GM2** | 4.19 | 0.833 | 20 | 84 |
| **GM3** | 4.16 | 0.913 | 22 | 83 |
| **GM4** | 4.27 | 0.820 | 19 | 85 |
| **GM5** | 4.24 | 0.896 | 21 | 85 |
| **GM** | 4.22 | 0.724 | 17 | 84 |

1. **Green distribution**

The results Lowest show that **the mean for the first paragraph of GDI1** was 4.44 with a standard deviation value of 0.760, a variance factor of 17, and a relative significance of 0.89, and that the mean for the second paragraph of GDI2 was 4.20 with a standard deviation value of 0.864, a variance factor of 21, and a significance of 84. **The mean of the dimension GDI** was generally 4.32 with a standard deviation value of 0.639, a variance factor of 15, and a rational significance of 86.

Table (5)

Iterations and ratio of responses to GDI segments

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **mean** | **Standard deviation** | **C.V** | **Relative importance** |
| **GDI1** | 4.44 | 0.760 | 17 | 89 |
| **GDI2** | 4.20 | 0.864 | 21 | 84 |
| **GDI3** | 4.38 | 0.784 | 18 | 88 |
| **GDI4** | 4.29 | 0.749 | 17 | 86 |
| **GDI5** | 4.28 | 0.825 | 19 | 86 |
| **GDI** | 4.32 | 0.639 | 15 | 86 |

1. **Green marketing**

The results Lowest show that **the mean for the first paragraph GMA1 was** 4.47 with a standard deviation value of 0.677, a variance factor of 15, and a relative significance of 0.89, and that the mean for the second paragraph GMA1 was 4.28 with a standard deviation value of 0.739, a variance factor of 17, and a significance of 86. **The mean of the dimension GMAs was** generally 4.33 with a standard deviation value of 0.640, a variance factor of 15, and a rational significance of 87.

Table (6)

Iterations and ratio of GMA responses

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **mean** | **Standard deviation** | **C.V** | **Relative importance** |
| **GMA1** | 4.47 | 0.677 | 15 | 89 |
| **GMA2** | 4.28 | 0.739 | 17 | 86 |
| **GMA3** | 4.36 | 0.811 | 19 | 87 |
| **GMA4** | 4.24 | 0.813 | 19 | 85 |
| **GMA5** | 4.28 | 0.825 | 19 | 86 |
| **GMA** | 4.33 | 0.640 | 15 | 87 |

* **Excellence performance**
1. **Customer focus**

The results Lowest show that **the mean for the first item CF1was** 4.64 with a standard deviation value of 0.540, a variance factor of 12, and a relative significance of 0.93, and that the mean for the second paragraph CF2 was 4.64 with a standard deviation value of 0.635, a variance factor of 14, and a significance of 93. The mean of the dimension cf was generally 4.59 with a standard deviation value of 0.473, a variance factor of 10, and a rational significance of 92.

Table (7)

Reps and percentage of CF responses)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **mean** | **Standard deviation** | **C.V** | **Relative importance** |
| **CF1** | 4.64 | 0.540 | 12 | 93 |
| **CF2** | 4.64 | 0.635 | 14 | 93 |
| **CF3** | 4.43 | 0.665 | 15 | 89 |
| **CF4** | 4.65 | 0.581 | 12 | 93 |
| **CF** | 4.59 | 0.473 | 10 | 92 |

1. **Leadership**

The results Lowest show that **the mean for LE1 was** 4.71 with a standard deviation value of 0.506, a variance factor of 11, and a relative significance of 0.94, and that the mean for LE2 was 4.46 with a standard deviation value of 0.590, a variance factor of 13, and a significance of 89. **The mean of the Le dimension** was generally 4.61 with a standard deviation value of 0.429, a variance factor of 9, and a relative significance of 92.

Table (8)

Reps and % of responses to leadership items (Le)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **mean** | **Standard deviation** | **C.V** | **Relative importance** |
| **LE1** | 4.71 | 0.506 | 11 | 94 |
| **LE2** | 4.46 | 0.590 | 13 | 89 |
| **LE3** | 4.64 | 0.635 | 14 | 93 |
| **LE4** | 4.63 | 0.544 | 12 | 93 |
| **LE** | 4.61 | 0.429 | 9 | 92 |

1. **Focus on human resources**

The results Lowest show that **the mean for the first paragraph HRF1was** 4.47 with a standard deviation value of 0.677, a variance factor of 15, and a relative significance of 0.89, and that the mean for the second paragraph HRF228 was 4.28 with a standard deviation value of 0.739, a variance factor of 17, and a significance of 86. **The mean of the dimension HRF was** generally 4.34 with a standard deviation value of 0.656, a variance factor of 15, and a rational significance of 87.

Table (9)

Occurrences and percentage of responses to HRF items

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **mean** | **Standard deviation** | **C.V** | **Relative importance** |
| **HRF1** | 4.47 | 0.677 | 15 | 89 |
| **HRF2** | 4.28 | 0.739 | 17 | 86 |
| **HRF3** | 4.36 | 0.811 | 19 | 87 |
| **HRF4** | 4.24 | 0.813 | 19 | 85 |
| **HRF** | 4.34 | 0.656 | 15 | 87 |

1. **Focus on financial results**

The results Lowest show that **the mean for the first paragraph FRF1was 4.65** with a standard deviation value of 0.603, a variance factor of 13, and a relative significance of 0.93, and that the mean for the second paragraph FRF260 was 4.60 with a standard deviation value of 0.572, a variance factor of 12, and a significance of 92. The mean of the FRF dimension was generally 4.58 with a standard deviation value of 0.504, a variance factor of 11, and a rational significance of 92.

Table (10)

Reps and percentage of responses to FRF items

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **mean** | **Standard deviation** | **C.V** | **Relative importance** |
| **FRF1** | 4.65 | 0.603 | 13 | 93 |
| **FRF2** | 4.60 | 0.572 | 12 | 92 |
| **FRF3** | 4.55 | 0.619 | 14 | 91 |
| **FRF4** | 4.50 | 0.677 | 15 | 90 |
| **FRF** | 4.58 | 0.504 | 11 | 92 |

**Third: Test hypotheses**

1. **Correlation hypothesis**

The values of the correlations between GSCM and EXPE have been created by using SPSS VR. 24 the results are summarized in the following table:

**Table (11)**

**The correlations between the two variables and their dimensions**

|  |
| --- |
| **Correlations** |
|  | GP | GD | GM | GDI | GMA | GSCM |
| CF | Pearson Correlation | .555\*\* | .715\*\* | .738\*\* | .773\*\* | .699\*\* | .756\*\* |
| Sig. (2-tailed) | .000 | .000 | .000 | .000 | .000 | .000 |
| N | 165 | 165 | 165 | 165 | 165 | 165 |
| LE | Pearson Correlation | .577\*\* | .665\*\* | .689\*\* | .743\*\* | .692\*\* | .733\*\* |
| Sig. (2-tailed) | .000 | .000 | .000 | .000 | .000 | .000 |
| N | 165 | 165 | 165 | 165 | 165 | 165 |
| HRF | Pearson Correlation | .494\*\* | .653\*\* | .697\*\* | .717\*\* | .979\*\* | .759\*\* |
| Sig. (2-tailed) | .000 | .000 | .000 | .000 | .000 | .000 |
| N | 165 | 165 | 165 | 165 | 165 | 165 |
| FRF | Pearson Correlation | .469\*\* | .628\*\* | .669\*\* | .745\*\* | .699\*\* | .692\*\* |
| Sig. (2-tailed) | .000 | .000 | .000 | .000 | .000 | .000 |
| N | 165 | 165 | 165 | 165 | 165 | 165 |
| EXPE | Pearson Correlation | .584\*\* | .746\*\* | .785\*\* | .834\*\* | .884\*\* | .828\*\* |
| Sig. (2-tailed) | .000 | .000 | .000 | .000 | .000 | .000 |
| N | 165 | 165 | 165 | 165 | 165 | 165 |
| \*\*. Correlation is significant at the 0.01 level (2-tailed). |

The statistical hypotheses to be tested are set on two types, a main hypothesis between the two axes in general, and a sub-hypothesis between the dimensions of the GSCM axis on the one hand and the EXPE axis on the other. The main zero hypothesis is formulated as follows:

**H0: No statistical function correlation between GSCM and EXPE**

Vs. the following alternative hypothesis:

**H1: Statistically significant correlation between GSCM and Excellence performance**

The results show that the value of the association between the GSCM and EXPE axes is 0.828, which is a moral direct value at a 5% intangible level, thus rejecting the zero hypothesis and accepting the alternative hypothesis, and infer that there is a moral direct correlation between GSCM and EXPE.

1. **Effect hypothesis**

One benefit of having an intermediate variable is to improve the modeling structure and increase the predictive power of the model used and thus to identify the relationships that the variables relate to each other. This is done by formulating the appropriate main and sub-claims, and we will start from the following key hypothesis:

**H0: No significant GSCM effect on EXPE**

Vs. the following alternative hypothesis:

**H1: Significant GSCM effect on EXPE)**

The following structural model has been constructed and its results tested by AMOS VR.24 and shows the morale or demoralization of the direct impact relationship:



**Figure (2) Sample equation for structural modeling proposed by the investigator**

**Table (12) Results** **Sample equation for structural modeling proposed by the investigator**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  |  |  | **Estimate** | **S.E.** | **C.R.** | **P** |
| EXPE | <--- | GSCM | .828 | .030 | 18.900 | \*\*\*  |

The results Lowest show a 5% significant direct moral and direct effect of GSCM in EXPE where the effect value was 0.828 at a critical value of 18.900, indicating that a 1-unit GSCM value rise results in an EXPE rise of 0.828. There is also a 5% intangible direct effect of EXPE, with a value of 0.837 at a critical value of 19.558, indicating that a 1-unit increase in EXPE leads to a cuem rise of 0.837.

**Part Four: Conclusions and recommendations**

**First: Conclusions**

1. The green marketing dimension ranked first in terms of the strength of its connection to the variable with Excellence performance, second after the green distribution, third after the green design, fourth after the green manufacturing, and finally after the green purchase
2. There is a moral, direct correlation between managing the green supply chain and its dimensions and Excellence performance
3. The green marketing dimension ranked first in terms of the strength of its connection to the distinguished performance variable, second after the green distribution, third after the green manufacturing, fourth after the green design, and finally the green purchasing dimension
4. The Human Resources dimension ranked first in terms of its strong association with the variable of Excellence performance, second is the focus on the customer, third is the leadership dimension, and finally the focus on financial results

**Second: Recommendations**

1. Working on establishing a workshop for replacing the tires belonging to the factory in locations close to the customers to ensure transportation in large quantities and at low cost as well as for the proper disposal of old tires, in addition to reducing the environmental impact resulting from the use of trucks, which reduces the financial costs, especially as the factory has distribution outlets in several governorates.
2. The factory management should work as required by putting forward new ideas to improve and develop products and develop their work according to environmental requirements and in a way that meets the needs of customers on a continuous basis.
3. The management of the plant must ensure that it is able to communicate and interact with customers, to identify and fulfill their preferred products, in order to gain their loyalty to the plant.
4. The management of the plant concerned should take into account the design of a green processing chain with advanced standards to achieve excellence in performance and to build partnerships and interrelationships with suppliers with a view to achieving excellence.
5. The need to continuously provide a suitable environment for the development of the factory personnel as the factory capital, an effective supplier and source of Excellence performance, and to provide material and moral incentives for the distinguished employees of the factory.

**References**

1. Alhalboosi, F.H.A.M.,(2016),Excellence Performance from Quality of Working Life by Moderator Role of ERP System
2. Amemba, Cyrus Saul, et al. "Elements of green supply chain management." European Journal of Business and Management 5.12 (2013): 51-61
3. Baldrige, 2020, An Executive's Gide To The Criteria for performance Excellence , , Programs U.S.A
4. Assumpção, J. J., Campos, L. M. D. S., Jabbour, A. B. L. D. S., Jabbour, C. J. C., & Vazquez-Brust, D. A. (2019). Green Supply Chain Practices: a comprehensive and theoretically multidimensional framework for categorization. Production,
5. Ballard,p.J.,(2013),Measuring P Measuring Performance Ex formance Excellence: K cellence: Key Performance Indicat formance Indicators For Institutions Accepted into the Academic Quality Improvement Program (AQIP),A dissertation submitted to the Graduate College In partial fulfillment
6. Criteria for performance Excellence , 1998 , The Malcolm Baldrige National Quality Awards , U.S.A .
7. Eriksson, H. (2002). Benefits from TQM for organisational performance (Doctoral dissertation, Luleå tekniska universitet)
8. Ganeshan,H.,(2015),Implementation Of Green Supply Chain In Small Scale Industries,PSG College of Arts and Science.International Journal of Applied Engineering Research.
9. Gray,E.R.,2019,the Design and integration of green supply chain management for organizational performance.Master of Science in Integrated Supply Chain Management.University of Wisconsin.
10. Himmer, N. S. (2013). How does organizational culture influence the performance of luxury hotels based on the example of the Ritz-‐Carlton Hotel Company LLC. Bachelor Thesis, Bachelor of Business Administration Tourism dan Hospitality Management, Vienna University, Wina, Austria). Didapat dari https://www. modul. ac. at/uploads/files/Theses/Bachelor/Thesis-2013- Himmer\_Thesis.
11. Kadhim,N.J., Kadhim,S.M.,Dawood,F.S.,(2020),Excellent performance of banking service according to e-management Applied research in a sample of private banks.
12. Karlsson, E., & Karlsson, A. (2020). Green Supply Chain Practices for a Consumer Health business in the UK market-The implications of implementing Green Packaging
13. Ninlawan C., Seksan P., Tossapol K., and Pilada W.,(2010),The Implementation of Green Supply Chain Management Practices in Electronics Industry,proceedings of international Mulitconference ofEngineer and computer scientists2010 vol 3 Imecs2010,march 17-19 ,2010,hong kong
14. Novitasari, M., & Agustia, D. (2021). Green supply chain management and firm performance: The mediating effect of green innovation. Journal of Industrial Engineering and Management, 14(2), 391- 403.
15. of the requirements For the degree of Doctor of Philosophy Educational Leadership, Research, and Technology Western Michigan University
16. Pirot, B. M. (2016). Conceptual Framework of Performance Management for Northern Iraq Construction Industry (Master's thesis, Eastern Mediterranean University (EMU)-Doğu Akdeniz Üniversitesi (DAÜ).
17. Priyashani, L. N., & Gunarathne, G. C. I. (2021). Impact of green supply chain management practices on organizational performance of the manufacturing sector in Sri Lanka.
18. Sezen,B.,Çankaya, S.Y.(2019).Effects of green supply chain management practices on sustainability Performance.Journal of Manufacturing Technology Management
19. Silva, C.(2020).The Impact of Green Supply Chain Management Practices on Operational .Performance and Customer Satisfaction.University of Sri Jayewardenepura.
20. Tanwer, A. K., Prajapati, D. R., & Singh, P. J. (2014). Green Supply Chain Management: An Environmental Approach For Manufacturing Industry. In Proceedings of National Conference on Advancements and Futuristic Trends in Mechanical Engineering. Retrieved from http://www. supply-chain. com/info/faq. html.
21. Toma, S. G., & Marinescu, P. (2018, May).Business excellence models: a comparison. In Proceedings of the international conference on business excellence (Vol. 12, No. 1, pp. 966-974
22. Vijai, C., & Anitha, P. (2020). The importance of green marketing. International Journal of Future Generation Communication and Networking, 13(3), 4137-4142.
23. Wu, D. (2009). Measuring performance in small and medium enterprises in the information and communication technology industries (Doctoral dissertation, RMIT University).
24. Yazdan,A., Soukhakian,M.A.,Mozaffari,M.R.,(2013),Evaluation of Critical Success Factors in Total Quality Management Implementation and Prioritization with AHP – Case Study: Pars Oil And Gas Company, Islamic Azad University,Iran.vol.2, No