

Use Green Supply Chain Technology to Support Competitive Feature (Applied Study in the State Company for Textile and Leather Industry / Leather Factory / Factory No. (7))

Ayat Adnan Jassim¹, Prof.Assist. Dr.Alaa Mohamed Obaid Al-Zubaidi²

^{1,2}CollegeofAdministration andEconomics, AlMustansiriya University

Email ¹: ayat.92adnan@gmail.com, Email ²: Jaafer78@uomustansiriyah.edu.iq

Abstract

Operations management faces many challenges at the present time, the most important of which are business globalization, technological development and intense competition that necessitated the diligent and continuous search for the best practices in the production process, starting from supply, through production, and ending with distribution and sale... Therefore, most economic units today tended to apply concepts and techniques Modern, such as: Green Supply Chain Management, where the term is a modern terminology in the field of business management, due to its attention to environmental issues.

Keywords: green supply chain

The first topic / research methodology

1-1 research problem

The problem of our research came, which can be formulated in the following question: - (What is the role of green supply chain activities in supporting the competitive performance of economic units)

1-2 research objectives

(The main objective of the green supply chain is to eliminate or reduce the waste of resources (energy and materials) and negative impacts during all stages of the product life, starting from the acquisition of raw materials, then the use of the product by customers and finally disposal of the product at the end of its life cycle)

1-3 Research Hypothesis

Green supply chain activities take a positive role in raising the competitive performance of industrial economic units.

The second topic / green supply chain technology

2.1 Defining the green supply chain

It is an extension and restructuring of the traditional supply chain, the aim of which is to employ supply chain activities to reduce environmental damage to products throughout the entire product life cycle, ie the process of integrating environmental concerns into supply chain activities, such as green designs (green design), saving resources, reducing harmful materials, Product reuse or recycling (Diabat et al, 2013: 951)) and defined as green purchasing, green manufacturing, green marketing, and green recycling, and its idea is to get rid or eliminate and reduce waste and emissions such as (consumption of resources, energy, toxic or chemical emissions and materials risk and along the supply chain) and emerged as a contemporary approach to economic units that contribute to achieving efficiency, development and market share. Achieving objectives by reducing environmental impacts and risks, and its strategy includes analyzing environmental regulations, analyzing customer surveys of the economic unit, discussing relevant environmental issues between procurement, quality and engineering departments, developing green approach policies and managing programs to ensure compliance and compliance with policies (Nawire et al, 2014: 2) .

2-2 Advantages of green supply chain application

The application of the green supply chain achieves many advantages for the economic unit: (Ibrahim, 2021:21).

1) Preserving the environment 2) Gaining competitive advantage 3) Improving the quality of products 4) Developing the cooperative relationship between the producer and supplier 5) Economic and moral benefits 6) Incentive benefits

2-3 green supply chain activities

The green supply chain includes a group of activities where there is a difference in the opinions of researchers about its activities. Some have agreed that there are four basic activities (Ali and Mohsen, 2019: 226).

1) Green research and development activity: It is a set of tests, ideas, suggestions, principles and foundations necessary to assist engineers in designing green products and technologies, represented by testing and developing products according to the length of their life cycle (Kung et al, 2012: 114) and the aim is to create green products in addition to finding new technologies necessary to reduce industry emissions (Lee and Min, 2015:3).

2) Green design activity: Studies indicate that the performance of the product is determined at the design stage by about 70% to 80%. As for re-design, it costs only 10% of the total cost. Here, full attention should be paid to the environmental effects in the green design stage of products. Wang and Luo, 2010 :11)).

3) Green purchasing activity: It is an activity that goes towards searching for suppliers who provide clean materials that are free from environmental influences. Green purchasing is defined as focusing on environmentally conscious practices such as reducing the use of resources, through the purchase of raw materials free from harmful environmental influences, and the economic unit that can be implemented Green Procurement Activity Setting environmental standards in its procurement policies for the supplier, which includes selecting and evaluating suppliers and developing relationships with them. There are three important factors for choosing the supplier: efficiency, management, and a green image. (Anoop and Kumar, 2013:402).

4) Green manufacturing activity: it is environmental manufacturing, an activity that works to reduce pollution and waste and takes into account all the toxic effects that affect the environment at all stages of production processes. Manufacture, use and disposal (Demirci,2014:20)).

5) Green Marketing Activity: The American Society defined the term green marketing for the first time as marketing products that are supposed to be environmentally friendly, and regulating different activities, for example, modification of production processes, product modification, environmental branding, packaging, and advertising strategies. As well as creating an impact Positive customer behavior towards green products, the aim of which is to remove the negative impact of other products that do not take into account environmental requirements. Green marketing is a promotion of green products that are beneficial and environmentally safe (Fuyeng and Yazdanifard, 2015: 17)).

6) Green packaging activity: The packaging activity aims to use clean materials for packaging (green) in order to enhance recycling programs, as well as cooperation and participation with vendors to standardize packaging, and use systems and programs to arrange and provide spaces within warehouses (warehouses). Chin et al ,2015:687-697))

7) Green recycling activity: It is also called by reverse supply and means the green recycling of products after the end of their life, and if the product is not recycled, this causes environmental

pollution and waste of resources. Through the materials that make up the product used, recycling is done, taking into account the costs and value of the process through analysis and evaluation for the purpose of achieving the highest value at the lowest cost, including Ying and Li-jun, 2012: 1685).

The third topic / competitive advantage

3.1 Define competitive advantage

Economic units are looking for a competitive advantage that is compatible with their capabilities and consistent with their activities, then they seek to set dynamic standards and controls to measure the level of compatibility achieved and to identify the framework and limits set by them until the desired results are achieved (Aisha and Boukhmakhm, 2019: 32). The economic competitive advantage means its ability to face changes in the industry environment and as a result its ability to confront others and the possibility of its survival and continuity because some view it through the efficiency and effectiveness of its performance and activities compared to competitors. By considering the cost as the economic unit achieves the competitive advantage by reducing total costs and achieving profits that exceed the costs (Al-Sharif, 38: 2015).

3.2 Competitive Strategies

The competitive strategic types, as classified by them (Al-Ammari, 22:2017), are:

- a) Cost strategy: leadership through cost and price competition.
- b) Excellence strategy: leadership through the adoption of the economic unit specifications that are unique to it.
- C) Focus strategy: This is done through leadership in privatization.

3.3 The role of the green supply chain in achieving competitive advantage

The role of the green supply chain is manifested through its policy and practices, specifically the green marketing activity because of its importance as it is the main activity in linking the product and the customer by promoting products and trying to make them better than competitors' products (Khaled and Hamza, 2018: 12. It supports green supply chain activities The three competitive advantage strategies are as follows:

- 1) Support the strategy of the lowest cost: In most cases, the issue of the high costs of green products is raised, but the possibilities of reducing them are possible, as green production processes contribute to reducing costs related to waste, in order to take into account the high quality in design and production methods that would put an end to defective products and remove the burdens of

dealing With it, green processes also contribute to saving energy and reducing resource exploitation, as well as the reverse supply represented by recycling, meaning returning production waste or residues to their production centers to obtain benefits, as waste management and recycling constitute a strategic dimension in energy consumption because it works to save a lot. of time and effort in the production process. (Khaled and Hamza, 2018: 12.

2) Supporting the differentiation strategy: the economic unit can reap the fruits of achieving a competitive advantage related to differentiation through green marketing activity. Several green marketing methods and practices, such as starting from the desires and needs of customers, as the privacy that characterizes customers towards green orientation makes the unit constantly search for ways to satisfy them by focusing on desires and needs so that it can achieve differentiation in meeting them and adopt a green product through customers who demand with these products. (Khaled and Hamza, 2018: 12.

3) Supporting the strategy of focus and creativity: Focusing on the customer who prefers green products is in and of itself focusing on a specific category in the market without ordinary customers, as the role of adopting green standards to generate competitive advantages is closely related to the extent of motivation, development and creativity of the products of the economic unit (Al-Gharbawi and others, 2021:38)

The fourth topic / the application of the green supply chain in the State Company for the Textile and Leather Industry / Al-Jaladi Factory / Factory No. (7)

4.1 Introduction to the company

The General Company for Leather Industry is one of the reputable companies specialized in the manufacture of shoes, leather clothes and bags of all kinds. Its first factory was established in 1932 as a private sector (Bata Company), which was merged with the popular shoes factory in Kufa, which was established in 1963 to be the Bata General Company in 1970, and merged This company is with the National Tanning Company (which was established in 1945), which is the General Establishment for Leather Industries in 1976, and it is one of the formations affiliated with the Ministry of Industry. Factory No. (7) is one of the factories affiliated with the company. It produces eight models of different models and prices, so one model will be chosen to apply the entrance practical, and the model's share will be extracted from the total costs of laboratory No. (7) as shown in the following table:

Table (1) The share of the model (79199) of the total costs for the production quantity of 550 units (amounts in dinars)

S	details	Total cost(1)	The cumulative production quantity of the plant (unit) (2(	The share of one model (3=1÷2(	Production quantity (unit) for the research sample form (4(	The model's share of the total costs (5 = 3 x 4(
1	Total salaries and wages	494,363,889	4000	123,591	550	67,975,035
2	Total merchandise supplies	157,140,000	4000	39,285	550	21,606,750
3	Total service supplies	43,765,000.00	4000	10,941	550	6,017,688
4	total depreciation	64,125,000.00	4000	16,031	550	8,817,188
5	total	759,393,889		189,848		104,416,660

Source: Prepared by the researchers based on the detailed cost balance and the cumulative production report for the year 2021

4.2 Implementation of green supply chain activities

1) Green research and development activity: The first step is to direct the research and development activity towards suggestions in which products are green, as well as working on the establishment of laboratories that can conduct the process of testing the proposed ideas that meet the requirements of the activity, and studying the specifications of the products offered by competing companies on an ongoing basis and providing continuous improvement To upgrade the product to the environmental direction, and to analyze the activities that add value to the product for the company's laboratories, specifically for the laboratory No. (7), the research sample is first determined by the number of non-value adding workers and calculating the actual working hours to determine the additional costs due to the waste in human and material resources from the increase in workers whose numbers are not commensurate With the quantity produced and the increase in working hours, as follows: The following table shows the manufacturing time of the factory activities.

Table (2) Time to make (time in seconds)

s	details	Activities						Production manager + assistant manager	total
		Receipt of raw materials	separation	sewing	traction	Packaging	examination		
1	Number of employees	2	3	12	15	2	2	2	38
2	Product making time in seconds	170	400	760	880	30	..	..	2240
3	Handling time in seconds	17	17	17	17	17	..	..	85
4	Check activity in seconds	10	10	10	10	10	..	..	50
5		197	427	787	907	57	..	..	2375
	Total time in seconds (2+3+4								

Source: Prepared by the researchers based on the opinion of the Time and Movement Division in determining the times of activities, the production manager and workers in the laboratory

The activity of checking and receiving raw materials: There are 2 workers who check and receive raw materials from the warehouse and in the quantities required for production per day, with the remaining time of seconds allocated for manufacture, estimated at 170 seconds, and handling time 17 seconds, the time is (170 seconds + 17 seconds = 187 seconds). Separation: The number of workers in this activity is 3 workers, two workers are left, and according to the mechanism of the research and development activity, electronic machines are proposed and purchased that can reduce the time and number of workers, so the materials and the separation process are received and the production is delivered to the sewing activity, and the time required for this process is 200 seconds.

Sewing activity: The number of workers reaches 12 workers in this activity, in which the raw materials received from the first activity are prepared. It consists of several stages: gluing the palm and pressing the lining to the upper part of the shoe with cutting the outer edges of the shoe face for each worker stage. As for fixing the label and placing the strings on the top of the face of the piece The sewing position at this stage determines one factor and the time is limited to only 23 seconds for each stage, after which the sewing stage takes place (sewing the upper part of the face, sewing the bubble and fort, and sewing the lines), and this activity consists of Three machines and each machine has a worker, and the time is set at 15 seconds for each machine, so it is 45 seconds, so the number of workers is 6 ($3 \times 23 \text{ seconds} + 3 \times 45 \text{ seconds} = 204$), traction activity: each worker examines the product and each worker according to his work in the traction activity in each Whoever presses the garden on the mold and installs it on the sole (the floor of the shoe) and performs these two stages with 2 workers, and then puts the molds in the three traction machines designated for this activity, and each machine has one worker, so the number of workers in the traction activity is 5 workers and the allotted manufacturing time ($2 \times 60 \text{ seconds} = 120 \text{ seconds}$) + ($3 \times 60 \text{ seconds} = 180 \text{ seconds}$) = 300 seconds, packaging activity: in this activity 2 workers are employed. ($2 \times 30 \text{ seconds} = 60 \text{ seconds}$). The following table shows the number of employees and the time after the reduction.

Table (3) Calculation of activities and time after reduction (time in seconds)

S	Details							Production manager and assistant director	Total
		Receipt of raw materials	separation	sewing		Packaging	exam		
1	The number of employees before the reduction	2	3	12	15	2	2	2	38
2	The number of employees after the reduction	2	2	6	5	2	..	2	19

3	reduction	..	1	6	10	..	2	..	19
4	Manufacture time in seconds after measuring the need	170	200	204	300	60	..	..	934
5	Handling time in seconds	17	..	..	..	..	..	..	17
6	Total time (4+5)	187	200	204	300	60	..	..

Source: Prepared by the researchers

The following table shows the costs that were saved

Table (4) Amount of cost savings in research and development activity (amounts in dinars)

S	Details	Sum
1	Total salaries and wages	67975035
2	Actual number of employees	38
3	One worker's salary (1÷2)	1788817
4	Salaries of non-value adding employees	19
5	Total costs saved (3 x 4)	33987517

Source: Prepared by the researchers

2) Green design activity: It has been suggested to purchase a modern machine that does not have toxic emissions and does not consume electrical energy, thus preserving the internal environment of the plant, reducing pollution in the external environment and speeding up work. To reduce the energy consumption in the production process, it is possible to purchase a machine for cutting and separating shoes, since the separation stage is done manually, type AOL-1825-ZS8) cutting speed (200-2000 milliliters) and depends on advanced technology and keeps pace with the trend of industrial development and is a machine A smart blade that is used to cut leather and laser engraving and is widely used in the shoe industry and others. It cuts leather through a oscillating knife as a vibrating blade installed on a mobile head with one arm, where the size and shape of the piece to be separated is determined through the programs that have been designed where the

Connecting it to the machine that is equipped with a screen (LCD) as a control system in it to link the program and receive the instruct to complete the process of skin separation according to the designs received and specified in the program as well as distinctive It reduces the percentage of waste resulting from the separation process, and this machine can reduce production costs due to the novelty of the design and the time required for the production process without the need to increase the number of workers to follow the program, so only one worker is satisfied.

3) Green purchasing activity: It is the activity that is responsible in the company for purchases. When purchasing materials, the purchasing officials in the company should take into account the quality control measures to evaluate the performance of suppliers with regard to environmental aspects, as well as the purchase of materials that can be recycled or used as raw materials. New, the company has adopted a type of Turkish leather in the production of leather shoes for the model (79199), the Italian model, and to use another type of leather that is better in terms of leather thickness, which is lighter during use and more quality (ie, replacing both raw materials and polluting and dangerous components with environmentally friendly ones) from a supplier Another has a document of compliance and environmental behavior. Since the leather pieces that the company buys are cut randomly and irregularly with leather appendages, the company can obtain Italian type leather from another supplier that is better than Turkish leather in terms of thickness and softness during use and more quality, and the pieces are regular and not random At a price of 577,333 dinars per (fat) and in the amount of 24 dm² instead of the type of skin that swallows the price of one (fat) at 649,416 dinars and in the amount of 24 dm², as well as The use of an insole (shoe floor) type (5286) at a price of 6000 dinars per pair, so it is possible to obtain another type (the advanced eco shoe floor) that is more quality and more flexible (medical) during use and suitable for the specifications of the Italian leather shoe product, but at a higher cost of 7000 dinars per pair As shown in the table.

Table (5) Costs available in the green purchasing activity (amounts in dinars)

S	Details	Sum
1	Low price of used leather	1730
2	The high price of the shoe floor (the sole)	1000
3	Savings per unit (1-2)	730
4	production quantity	550
5	Total cost savings (3 x 4)	401500

Source: numbers of researchers

4) Green manufacturing activity: A proposal was submitted by researchers: Since the men's leather shoe product goes through several stages within the production line, including separating, sewing and traction. And the factory has many problems related to production processes. In the sewing stage, machines are used that depend on manpower, which leads to a decrease in production capacity due to the large number of faults in the work because most of the work still depends on manpower. Plant No. (7) can reduce production capacity and waste through the use of the four green manufacturing strategies that contribute to achieving a green environment, collecting financial savings and reducing costs, as a result of its use or sale (because the largest amount of waste is leather waste) to benefit from and dispose of the remaining in a way It is safe and by selling those products that have been treated or sold as waste to the beneficiaries, it achieves revenues and benefits for the company.

5) Green marketing activity: two proposals can be applied: The first proposal: the agency system can be implemented, meaning that the company assigns the work, ie granting agencies to a third party with experience, technical capabilities and marketing skills that enable it to sell the product at an estimated discount of 5% of the selling price of the product and the price Which is imposed by the company, which in turn achieves profits for all parties. The proposal of the agency system contributes to increasing sales by 40%. To calculate the amounts realized from the application of the proposal as follows:

Table (6) Revenues and costs of selling through retail authorization (agency owners) (amounts in dinars)

s	Details	Sum
1	production quantity	550
2	Increase in sales	40%
3	Number of pairs units sold (1×2)	220
4	Actual selling price	45335
5	Complement the discount _a	95%
6	Selling price to agency owners (retailers) (4×5)	43068
7	The number of pairs sold	220
8	Sales revenue generated by retailers (6×7)	9474960
9	number of pairs sold	220
10	Manufacturing costs	31538
11	Total manufacturing costs for 220 pairs	6938360

12	Total Available Costs (8-11)	2536600
----	------------------------------	---------

Source: Prepared by the researchers

The second suggestion: that the men's leather shoe product needs a promotion and advertising campaign to identify the advantages it enjoys, so the product will be displayed on social networks, and this proposal will reduce the impact of exhibitions on the environment and the waste that can arise from those exhibitions, and here this proposal will be in line with Preserving the sustainability of the green environment. In addition to reducing the price by 5% of the price as promotional offers, the goal is to increase sales and know the company's products. This proposal can be applied instead of selling through exhibitions owned by the company, which costs it large sums of money from workers' salaries, commodity supplies and other expenses, The amount of sales increases by 60% in order to remain aware and analyze the sales of the corresponding companies in the activity, as their electronic sales exceed 80% globally, and 60% was identified as a starting point for analyzing the proposal, and to calculate the amounts realized from the application of the proposal as follows:

Table (7) Revenue and costs of implementing the second proposal for green marketing activity
(amounts in dinars)

S	Details	Sum
1	Production quantity for the year 2021	550
2	Increase in sales	60%
3	Number of pairs sold (1×2)	330
4	Actual selling price	45335
5	Complement the discount	95%
6	Selling price by electronic proposal	43068
7	Income generated from electronic sales (3×6)	14212440
8	number of pairs sold	330
9	Manufacturing costs	31538
10	Total manufacturing costs of 330 pairs (8×9)	10407540
11	†Total available costs	3804900

Source: Prepared by the researchers

The following table shows the total costs available from the green marketing activity

Table (8) Amounts available from the application of green marketing proposals

S	Details	sum
1	Retail Suggestion Application	2536600
2	Electronic proposal application	3804900
	Cost saving	6341500

S	Details	Sum
1	Research and development activity	33987517
2	green buying activity	401500
3	green marketing activity	6341500
4	Amounts saved	40730517
5	Production quantity for the research sample form	550
6	Cost per unit (4÷5)	74055

Source: Prepared by the researchers

6) Green recycling activity: a proposal was presented by the researchers. The first is to offer to return the product when customers purchase the product, and according to the director of the marketing department, the amount that can be retrieved annually is estimated to be 150 pairs, by working on separating the insole (shoe floor) for the recovered quantity and selling it to Specialized laboratories to be made. Flooring sold to factories and manufacturing companies after adding materials to it to be semi-acoustic during work or as a floor as a muqarnas for public places because it is characterized by high quality and is more flexible and meltable during its transformation. As for the leather with a quantity of 150 pairs, it is made as new, unconventional handles due to the quality of the leather used Environmentally friendly, harmless and characterized by quality that can be used for a handbag by cutting leather scraps into small pieces to use as medium length handles for bags of all kinds or making leather wallets, or making them in the form of a carpet with leather pieces by cutting the leather into small pieces and using a floor as a support layer for cutting and pasting the pieces Small geometric shapes on it and the quantity is estimated at 50 pairs. As for the remaining quantity, it is possible to change the shoe's floor and make some modifications to it from a new floor, but at a lower price, and glue and dye it in the event of the return of the valuable product (lowly used), which was estimated at 100 pairs and the possibility of recycling it as a men's leather shoe product and selling it at an appropriate price that achieves a competitive advantage as it is genuine leather It is more popular with customers for the prices and quality of ordinary products of lower quality.

The following table shows the total cost reduction saved from green supply chain activities

Table (9)Total costs available from the analysis of green supply chain activities (amounts in dinars)
(10)table

Saving in the total costs of the model and reaching the real cost (Amounts in dinars)

	Details	Sum
1	The total costs of the model according to the detailed cost balance	189848
2	Total costs saved from green supply chain activities	74055
3	The total cost of the form	115793

Source: Prepared by the researchers

From the table it is noted that the real cost of the men's leather shoe product of model (79199) appears after identifying and analyzing the activities of the green supply chain, meaning that reducing costs as much as possible and reaching an amount of (74055) dinars and providing a green product suitable for the internal environment of the factory and friendly to the external environment contributes to improving the image and reputation of the product With customers, distinguishing it and achieving competitive support, because the company has adopted specific standards when manufacturing.

The fifth topic: conclusions and recommendations

5-1 Conclusions

- 1) Low interest in environmental aspects, which led to the weak interest of economic units, especially the local (Iraqi) in the green supply chain, specifically with regard to recycling and waste treatment, despite the damage it causes in a case that was thrown without treatment and recycling.
- 2) The green supply chain is one of the most important technologies that support the competitive advantage of the economic unit through its interest in the social and environmental aspect, as its work is a group of organized activities that work permanently to improve the value and determine the costs of activities, taking into account the required quality in order to achieve the excellence of the products of the economic unit.

5.2 Recommendations

- 1) That the economic units direct their interest in redefining and evaluating the activities of the green supply chain and making it more customer-centric through the application of value-adding

activities and the production of an environmentally friendly product, as well as providing employees with training courses to identify the role played by the green approach.

2) The need for economic units to pay attention to two items (green purchase and green manufacturing) by eliminating toxic pollutants, achieving quality and spreading environmental awareness

References

1. Mr. Muhammad Arwa. (2018): "The Impact of Green Supply Chain Management on Achieving Excellence in Green Storage Activity Performance." *The Scientific Journal of Commercial and Environmental Studies*. Volume (9). Issue (4). pp. 653-671.
2. Ali, Suzan Abdul-Ghani and Mohsen, Iyad Fadel. (2019): "The extent to which a number of green supply chain management activities in industrial companies are adopted, an analytical study behind a sample of workers in the Kirkuk Cement Factory", *Journal of Economics and Administrative Sciences*, Volume 25, Number 151.
3. Al-Sharif, Rawan Bassem Eid. (2015): "The Impact of Strategic Flexibility in the Relationship Between Strategic Learning and Achieving Competitive Advantage in Jordanian Insurance Companies." Master's Thesis. College of Business. Middle East University, Jordan.
4. Aisha, Misbah and Boukhmakhm, Abdel-Fattah. (2019): "The Role of Strategic Vigilance in Developing the Competitive Advantage of the Economic Institution: A Case Study in the Eastern Regional Directorate for Ooredoo Mobile Phone Operators" *Journal of Economic Studies*, Vol. (6). Issue (1). pg. (23 -46).
5. Al-Ammari, Abdul Karim Ali Naji. (2017): "The Impact of Strategic Orientation on Competitive Advantage in Yemeni Universities." Master's Thesis, College of Administrative Sciences. Andalus University of Science and Technology, Sana'a, Yemen.
6. Khaled, Bin Jalloul and Hamza, Baali. (2018): "Green Marketing and its Importance in Achieving a Competitive Advantage for the Economic Institution". The first national scientific forum on: Organizations and the adoption of green marketing: a new approach to sustainable development under the slogan: Development steps towards a green future. Faculty of Economics and Management Sciences. University of Badji Mokhtar Enaya
7. Al-Gharabawi, Hazem Abdel-Aziz, Suleiman, Raed Fadel Hamad Wishon, Russell Ali Atab. (2021): "Adopting the green value chain to achieve a sustainable competitive advantage: An exploratory study of the opinions of a sample of the Ur State Company for Engineering Industries in Dhi Qar". *Journal of Accounting and Financial Studies*. (JAFS) The Second

International and Fourth National Scientific Conference on Leadership and Creativity in Building Financial and Accounting Policies in Economic Units.

8. Diabat , A., Khodaverdi ,R. & Olfat, L. (2013): “An exploration of green supply chain practices and performances in an automotive industry.” *International Journal of Advanced Manufacturing Technology.*(68).pp(949–961).
9. Djunaidi, Much . sholeh, M. Abdul Azis & Mufiid, Nur Muhammad. (2018): "Analysis of Green Supply Chain Management Application in Indonesian Wood Furniture Industry", *Human-Dedicated Sustainable Product & Process Design: Materials, Resources, And Energy AIP Conf. Proc.* Pp(1-7).
10. Nawire, Malaba Petwa, Kennedy, Ogolla & Kiarie, Mburu David (2014): “Influence Of Green Supply Chain Management Strategy On Procurement Performance Of Sugar Industry In Kenya.” *International Journal Of Economics, Commerce And Management, UK.* II (11). Pp(1-24).
11. Kung, Fan-Hua . Huang, Cheng-Li & Cheng, Chia-Ling . (2012): “Assessing the green value chain to improve environmental performance Evidence from Taiwan’s manufacturing industry.” *International Journal of Development Issues Vol. (11) . No. (2).* pp (111-128).
12. Lee, Ki-Hoon & Min, Byung . (2015): "Green R&D for eco-innovation and its impact on carbon emissions and firm performance". *Journal of Cleaner Production.* PP(1-9) .
13. Anoop A.T., & Kumar V. Regi . (2013): “A review of green supply chain management issues in the Indian bottledwater industry.” *International Journal of Innovative Research in Science, Engineering and Technology.* Volume 2, Special Issue 1.pp(395-406).
14. Wang, M.L. & Lin, M.L. (2010): "Empirical Analyses Of Relationships Between External Driving Force And Organizational Performance For The Adopted Green Supply Chain Management – An Example Of Taiwan's Hybrid Electric Vehicles.' Pp.1335-1338.
15. Demirci, Ugras. (2014): “Green Supply Chain Management Case: Turkish Automotive Industry By Practices, Pressures And Performance.” *A Thesis Master Program In Management Of Logistics And Innovation Degree*