PRACTICES OF GSCM FOR ENHANCING THE FINANACIAL PERFORMANCE OF THE ORGANIZATION

Muhammad Asif
Management Science Department
DHA Suffa University
Karachi Pakistan

Abstract

The research aims to determine the Green Supply Chain Management (GSCM) practices effect the financial performance of the organization. This study carried out to analyze the influence of financial performance when implementation green supply chain practices. Deductive approach was adopted for this research which means hypothesis were developed based on relevant literature, which was analyzed, and then questionnaire was developed to acquire data from respondents. This research is of Quantitative in nature. Statistical tools such as Correlation and regression analysis are being used to study the data. The target population is undefined, so convenient sampling strategy is used for this research. 250 questionnaires were sent to the respondents out of which 2 were found patterned and that were deleted, so 114 responses are to be considered which means a response rate of 46%. The result analysis shows that Investment Recovery and Eco-Design have a optimistic influence on the financial performance of the firm and are considered to be the key factors in the execution of GSCM practices and their impact is significant with p values of 0.000 and 0.00 individually. Whereas, Cooperation with the Customer and Green Information System has not proper influence on Financial Performance. Outcomes of this research reveal that acceptance of the practices of green supply chain significant effect in financial performance of firm. However, green supply chain practices implementation relies on factors like Investment Recovery and Eco design are important to increase financial performance of the organization. Cooperation with customer and Green Information system is not considered an important factor to increase the financial performance. This research will be useful for organization to decrease waste, save energy, minimize the emission, protect natural resources, minimize the production cost and increase his financial performance through execution of GSCM practices and academia may also benefit from the findings of this study.
**Keywords:** Practices of (G.S.C.M), Financial Performance, Cooperate with Customers, Green Info System, Investment Recovery and Eco-Friendly Design

**Introduction**

Green Supply Chain Management (GSCM) defined by (Srivastava, 2017) as the practice of the improved performance of the setting along with the supply chain process, including designing of the product, relationships with customer and operations management. Organization must fulfill with environment friendly business practices in their organization. (Chuang, 2018) Globalization, in term of localization, increase the burden of companies for improving his environmental performance. (Sarkis, 2005). Now a days Management of Green Supply Chain of the origination has facing a lot of challenge. Different consumers, supplier, legal entity and government are demanding to the organization to implement friendly environment practice because their production activity of goods give negative impact on the environment. (Beatriz, Jabbour, Govindan, Kanna, & Arantes, 2014). Organizations make reactive strategy to get a good position in the market. Adopting new policies and management approaches, to make sustainable development strategy and adopt in their practices. (Oliveira, Espindola, Silva, Silva, & Rocha, 2018).

A number of GSCM literature have inspected that whether the acceptance of strategies for environment in (S.C.M) to increase performance of the organization. Many studies including (Wua, Ding, & Chen, 2012), (Tan, Zailani, Tan, & Shaharudin, 2016), (Choi & Hwang, 2015) shows that the various factors of GSCM (eco-design, green purchasing, investment recovery, green production) have a significantly positive effect and help in improving the firm’s financial performance and overall environmental performance. According to (Choi & Hwang, 2015), GSCM allows every organization to get financial benefits and market share goals to lessen their environmental costs, and each organizations should follow the friendly environmental operation.

The optimistic connotation between practices of GSCM and financial performance is strong when organization integrates different factors of green supply chain together, (Choi & Hwang, 2015). Management of Green Supply
Chain is very important. It has received considerable attention. A firm can take benefit by applying Practices of (G.S.C) Management because these practice can drive revenue for a firm. However, most of (G.S.C) management related studies are yet for exploring that which capabilities a firm need to have adopt for implementation of successful practices of GSCM need to implement to achieve financial and environmental success (Choi & Hwang, 2015).

Previous studies tell us that performance of the environment has an insignificant connection with firm performance. (Rockness, 1986) Though, the modern view recommended that environmental performance of the organization is eliminates waste and minimize use of energy, and allowing firm to save their costs and increase his financial performance. (Sanchez Medina, 2015). Among current study for protection of environmental, practice of (G.S.C.M) is important to adoption by organization to obey environmental rules, and norms. (Zhu- Q., 2012). Our country Pakistan, practices of (G.S.C) management as good solutions for follow the environmental rules and regulation. GSCM, recognized as justifiable SCM and environmental SCM. (Seuring, 2004) Integrates green buying, green production, reverse logistics green system of distribution, green marketing, and green systems of information (Chien, 2007). The study added literature in different step. This study implemented GSCM practices including the organization activity like green manufacturing (Liu, 2010). Cooperate with consumers, green buying, Eco friendly design, (Zhu Q. S., 2013), and green systems of information (Esty, 2009) eloping best understanding of the role of every GSCM practice in relation to financial and environmental performance.

Few current studies have find out the relationship between (G.S.C.M) and financial performance or performance of environment has positive linkages (Chuang, 2018). (Saeed, 2018) This researcher said that performance of environment is increase, the operational activity of the organization, and explain the missing link between GSCM practices and financial performance of the firm. GSCM has mostly focus on large, medium or small businesses, due to pressure of institutions and environmental rules and regulation (Dias A, 2019). (G.S.C) management does not improve the performance of environment of firm only, but also improve firm’s financial performance. (Longoni A, 2018) The relationship between vendor and buyer to purchase/sale green goods is called GSCM. (Suryanto, 2018). This relationship have been accepted, executed and practices by
Practices of GSCM for enhancing the financial performance of the organization

business all over the world from former decade. (Ananda, 2018). It has been demonstrated by previous readings that beside minimize the environmental impact, GSCM practices progress economic performance and improves operational and organizational performance of a production company. (Green Jr, 2012).

Last 04 decades, supply chain management (SCM) becomes defenseless and wants more strategic plaining and the organization and combination with end-to-end business supply chain procedures because to fulfill the need of end consumers of the supply chain. (Green KW Jr, 2006) And (Ho DCK, 2002). Business process should coordinated and integrated with different departments like logistics department, marketing department purchasing department, and manufacturing department (Green Kenneth W. Jr, 2012). Strategic plaining required to be aligned and improve productivity, quality, focus to consumers, environmental sustainability programs and green practices. (Green Jr, 2012) (Zelbst P, 2010) Organizations should concentrate on practices of (G.S.C) management and implement on this practices to their industry operation to minimize the customers and government’s compression (Theyel, 2001) and get improvement in the performance such as green marketing, eco-friendly tagging, reverse logistics, and green activity of advertising (Smith, 2010). Pressure of consumers inspires industries to adopt practices of (G.S.C) in their industry operation for increasing the performance of the company. (Kagan RA, 2003) When organization invest to purchase cleaning technologies it’s not improves only the performance of environment of the industry and it also get advantage of competition and increase the industrial financial performance (Rao P. a., 2005). Different researchers found that follow of practices of (G.S.C) management it gives good impact on industrial financial performance and environmental performance. (Zhang, 2016). Stakeholder theory suggest that, stakeholders are those group of persons who can affects company performance or company actions directly or indirectly. According to this theory firms produce externalities, so stakeholder pressure create on industries to overcome the harmful effects. Pressure of the stakeholders motivate the management of the organization to implement the green practices to save the environment (Zhang, 2016).

In the number of decades, customers are aware from environmental issue so they pressurize to the management of the organization to overcome the effect of dangerous chemicals and follow the practices of (G.S.C) in their (S.C) process.
On the other hands environmental practices have been reduce company profitability because adoption of green practices need big investments in technological equipment’s, need more training of employees, use different process to implement practices of (G.S.C) in the industry. (King A, 2004). (SB, 2001). Suggest that environmental sustainability program in organization and its strategic planning not efficient and effective and strategic plaining not able to overcome the uncertainties but it’s create competitive advantages. Implementation of practices of the green supply chain and ecofriendly design approach can save the energy and water during manufacturing process and organization effectively use of byproducts. (Pappis CP, 2006).

According to the (Zhu at et. 2005) in china there are many firms like textile industry, chemical industry, electrical industry, petroleum industry and auto power generation are follow ecofriendly design to safe the energy and minimize the use of raw material. Product has ability to recycle and reproduce. Firms should follow the practice of investment recovery in this practices firm’s sale their extra inventory, extra surplus material, scrap and extra capital equipment for purpose of profit and its effect the company financial position.

**Problem Statement**

There has been a lot of research work done in different countries for practices of (G.S.C) management and its impact on organization’s financial performance but the researcher has not found any research work done in the cement industry, of Pakistan for the impact of practices of (G.S.C) Management such as Cooperate with the consumer, Green system of information, Investment Recovery and Eco-design on the financial or economic performance of the industry. As earlier researches have described the importance of practices of GSCM on the organization’s performance, it is also vital to study the influence of GSCM practices on firms operating in Pakistan. So this study will aid the industry operating in Pakistan to achieve competitiveness and improvement in their profitability in an environmental friendly way by implementation the practices of the (G.S.C) management in their industry.
Research Questions

The drive of this study is to investigate the association between GSCM practices and firm increase his financial and environmental performance by answering the below mention questions of research:

1. What’s the influence of collaboration with the customer on financial performance of a firm?
2. What is the impression of green information system on financial performance of a firm?
3. What is the impact of investment recovery on financial performance of a firm?
4. Is there any influence of Eco-design on financial performance of a firm?

Research Objectives

The goal of this study is;

- To scrutinize the effect of cooperation with the customer on financial performance of a firm.
- To inspect the impression of green information system on financial performance of a firm.
- To examine the effect of investment recovery on financial performance of a firm.
- To discover the impression of Eco-design on financial performance of a firm.

Scope

Scope of the study is in the Cement manufacturing sector of Karachi, Pakistan and the statistics will be collected from the Cement industry of Karachi Pakistan. As discussed in the problem statement there has not been found any research work on the impact of cooperation with the customer, green information system, Investment Recovery and Eco-design impact on organization’s financial performance. This study will help the firms involve mainly in manufacturing that on which extent the cooperation with the customer, green information system, Investment Recovery and eco-design, help organizations to attain financial success and enhance the environmental performance.
Significance of the Study

The research is beneficial for the organization to adoption and implement the Practices of GSCM to increase financial performance of the firm. When organization implement the green supply chain practices, it reduce waste, reduce emission, lessen the use of natural resource and minimize his manufacturing cost and it’s earn maximum profit and get sustainability in environment.

Limitation

This report has provided a good value in the shape of the result that the study has provided but there are some restrictions which must be taken into attention. First the basic of the study is those factor that have an impression on the financial performance of the firm. This study only limited to cement Industry in Karachi Pakistan. The main factors for the limitation of this research include time period and the resources as in a small period of time only four months. It is extremely difficult to collect data from every region of Pakistan. Additionally, the research is limited to those respondent who are apart of cement manufacturing and supply chain of cement industry of Karachi Pakistan and are willing to participate for the cause of this study out of those respondents which were selected for this study, as it is almost practically impossible to involve every person linked with supply chain in cement industry in Karachi, Pakistan.

Literature Review

The concept of an environmental-friendly Supply chain is based upon (3PL) theory, this theory comprises economic performance, environmental performance and social performance. (Jääskeläinen, 2019). In past, firms give important to his consumer on the basis of supply chain. Supply chain operations directly and indirectly effect the environment. Direct affect when occur when organization uses practices materials which massive wastage during, processing of material, disposal of material and transportation of material. Cement industry manufacturing use several chemicals when processing of product which upsurge the quantity of water and increase air pollution. Indirectly affect when occur, the operations and action of harmful and its answerable for upstream suppliers.
Operation of GSCM practices enhance the ability of organization in sustainable problem in direct or indirect affect. Example of this eco-design and green manufacturing increase financial performance and increase the environmental by reducing production processes, minimization of cost and reduction of wastage. Green buying/purchasing is outsource processes its create pressure to supplier supply environment friendly parts and goods.

It is not essential, to implementing the practices of GSCM, to make a good competition and increase financial performance. Many researchers told that to acceptance of green design product and practices of the (G.S.C) management may lead for minimizing wastage, it also help to reduce the use of by product, water, and energy, and get competitive advantages and productivity increased when implementing the practices of the GSCM and new technologies. (Gupta, 2015).

Now a day there are we focus those practices that are friendly with environment and give positive impact on economic performance of the organization. (Linton J, 2007) Said that, sustainability has move from the company to Supply Chain management. (Seuring S., 2004) Considered big G.S.C.M as the managerial combination of material and data circulated throughout the (S.C) Management and it’s fulfil the consumer demand and consumer want to goods and services must be environmental friendly and during production process company must follow the practices of green supply chain. (Seuring S., 2004) Said that “(S.C) management of Environment” as the combination of information and material circulated throughout the (S.C) management to fulfil the consumers need for green services and goods manufactured by green process of manufacturing.

Practices of GSCM for increasing the sustainability in environment so GSCM focus that to achieve this purpose supplier and customers do manufacturing work together. Acceptance of the practices of GSCM, result to improved environmental performance as restrained by reduce in air releases, wastage, and the uses of poisonous resources. Company profit and market share will be increase if company improve his environment sustainability practices. To increase the organization performance its only responsibility of the production manager to proper check the production process that organization assign his task. (Green K. J., 2008).
Practices of GSCM and Financial Performance

Adoption of practices of Green Supply Chain are improve environmental and financial performance of the organization (Lee et al., 2012). By adoption of GSCM practices effectively, organization decrease their wastage. This process allows organization to produce the ending product at very minimum cost (Yang and Zhang, 2016). (Rao P. a., 2005) Showed a link among practices of (G.S.C) management and financial performance. They also found that practices of GSCM, resulted to competitiveness and enhance their financial performance.

If company increase their financial performance and saves their costs so company should have ability to make goods and services environmental friendly to satisfaction for those customer who need green products and services. The charges of implications of practices of environment friendly should improve the overall financial performance of the organization. It is still an open question that whether GSCM practices can improve financial performance (Seuring S. , 2004). Some have shown that environmental management and GSCM have a constructive association with an organization’s financial performance (Rao & Holt, 2005). Green purchasing minimize buying cost, eco design and green manufacturing, minimize wastage of company and need minimum energy and customer cooperation and a Green Information System assist organization to reduce the accidents such as environmental. So organization safe from penalties. Many researcher found that performance of environment increase the financial performance of the industry (Lee, 2012).

Research Gap

There is not any research done on the impact of GSCM practices and enhancement of financial performance of cement industry in Karachi Pakistan. This paper will be helpful to the managers and people who are involve in supply chains. Follow these green supply chain practices to reduce waste, reduce emission and reduce the production cost and increase firm’s profitability.

Variables of the Study

This study comprises two type of variables, first type is independent variables, while the second types of variables is dependent variable.
Independent Variables

If the development of variable is not dependent on any other variable of the study, then that variable is termed as independent variables. Following are four independent variables of this research:

- Cooperate with the Consumers.
- Green System of Information
- Investment Recovery.
- Eco friendly Design.

Dependent Variables

If the development of a variable is dependent on any other variable of the study, then that variable is called dependent variable, which mean fluctuation in any of the independent variable will cause change in the development of dependent variables. They only dependent variables of this research is Financial Performance of the Firm.

Theoretical framework

Based on the discussion above and considering the variables that has been discussed before following theoretical framework have been developed for this study.
Hypotheses

Financial Performance of Organization and Cooperation with the Customers

Consumers are play a very important part and they are important participant in the Supply Chain, and consumers force to firms to decrease hazards and harmful effect in their supply chain practices (Freeman, 2010). Consumers affect firm’s practices. All, customers’ play a positive role and they pressurized to the organization to implement GSCM practices (Harms, 2013). Customer relationship enhance the F-Performance of the industry (Inman & Green, 2005). (Green K., a., 2005) And (Geffen, 2000) said that better association with customers and suppliers increase the environment performance, in the manufacturing company. (Vaccaro, 2010)

Suggested that company transparency about the sustainability by eco-friendly practices implemented by firms it’s may encourage consumers to play a role in environment-friendly initiatives. Production Company cannot judge the needs of their customers as eco-friendly until the customer are participation in organization feedback and it’s very useful for the organization. (Vachon, 2008). So the hypotheses are that:

$H_1$. Customer’s cooperation gives positive influence on the firm’s financial performance.

Financial Performance of the Firms and Green Information System

A green information system is a proper use of the information system that may lead to environment friendly processes and sustainable development in the organization. It is a proper utilization of activities of the organization concerning green innovation and green supply chain practices (Corbett, 2013). The adoption of green information system that assist the organization to share the information about environmentally friendly steps, throughout a whole Supply Chain, in the term of coordination (Chandra, 2007). Green information system provide a complete information, reporting and coordination in many supply chain steps (Khan, 2017).

(Cote, 2004), found that in Supply chain management 459 firms are adopted GIS to upsurge environmental performance in terms of efficiency, cost reduction, and quality of the product. Furthermore, organizations get operations
Practices of GSCM for enhancing the financial performance of the organization. (Linn, 2013). It’s very difficult to compare firm’s financial performance and environmental performance, if the obtain data of environment is untrustworthy (Nunnally, 1978). The current studies focus the green information system in production companies is very important for company operation. (Dao, 2011). If organization utilize the green information system its gets a modest advantage and effective performance that is not easy for other competitive company to use it (Klasen, 1999). The implementation of Green Information System throughout the Supply Chain its can improved efficiency of the firms and increase the operational performance and financial performance throughout the proper distribution of resources (Daugherity, 2005). Additionally, organizations successful implement the Green Information System it’s enhance organization to get sustainable development competences (Dao, 2011). So, Green Information System is play a good role in all activities of the organizational performance (Yaang, 2018). We find that effective adoption of Green Information System increase the organization’s financial and environmental performance of the firm. So the hypotheses is that:

H2. Green Information System is positively effect on financial performance of the organization.

Firms Financial Performance and Investment Recovery

Investment recovery can be defined as the recovery of the maximized worth of assets that are no longer require by a company. According to (Zhu Q. G., 2010), investment recovery process that include the sale of additional inventories, scrap and used materials, and surplus capital equipment. The determination of Inv Recovery is to higher value returned from out dated goods, life ended product & extra stuffs (Ayress at el. 1998). Inv recovery assist organization for reducing his cost and increase value recovery. Investment recovery is applied successfully in different manufacturing industries like automobile and computer (White at el. 2003). The basic emphasis on return of recyclable goods and material is onward to the supply chain process. So investment recovery increases the financial performance of the organization. Therefore, we develop hypotheses that:
H₃. Investment recovery give positive effects on the organizations financial performance.

**Firms Financial Performance and Eco Friendly Design**

Meanings of eco design is to make product design with less energy and it’s easy to recoverable and recyclable of the product parts and do not use dangerous process in the production phase.

(Zhu Q. S.-H., 2008). Similarly, (Grønhaug, 1988) said that eco design give positive consequence on the performance of organization and key role plays to attain competitive benefits in the market. Many firms are use eco design for eco-friendly product, it makes product, to get a competitive advantages and make different product from other competitors (Renhardt, 1998). Eco design depends on management of supplier, management of consumer and management of internal of the company. (Linn, 2013) Firms may reduce 80 percent of harmful consequences in environment when they use green design practices in their organization. (Büyüközkan, 2012). (Zhu Q. F., 2017) Said that green design practices overcome the dangerous impact on environment and enhance sustainability of industry. Firms should reduce the use of harmful raw material in manufacturing process and also use minimum resources in production process. Green design practices assist organization to reuse of material, remanufacturing process and recycling of goods. Eco design give optimistic consequence on performance of the organization, and similarly, consumers are want to buy friendly environmental products for saving of cost and safety of environment (Linn, 2013). So we find that eco-design products have an optimistic result on firm’s financial performance (Linn, 2013). Hence, we make hypotheses that:

H₄. Eco-design give positively effects on the firm’s financial performance.
Methodology Overview

Research Design

Research Strategy

The research design adopted for this project is Explanatory research design. Quantitative Research use to check the problem in making numerical information way or information which can be altered into practical visions.

Quantifiable information use in quantitative research to plan reveal designs and certainties in research. Quantitative information strategies are significantly developing in good manner than qualitative information methods (De Franzo, 2011)

Explanatory research design is adopted when researcher needs to connect ideas to comprehend cause and effect. In other words, it is a research design when the aim of investigator is to tell a story or prove his finding or results with the help of numbers (Knaflc, 2014).

Sample Design

Non Probability sampling is use by researchers for this study because of few limitations like he was time bound, commuting problems, people were reluctant to meet/response due to Covid-19 and lack of personal relations and references in industrial and manufacturing sectors. Therefore, it was not possible for him to collect data of the entire population that what is the actual size of the population. He has used convenience sampling because it is easy to use. Researcher has collected data from various cement manufacturing firms and firms operating supply chain practices.

Instrument Selection

A survey has been intended conferring to the Five Points Likert Scale. It will measure reactions of the defendants on the scale of 1 (strongly disagree) to 5 (strongly agree). The survey involves of five variables that are cooperation with the customer, green information system, eco-design, investment recovery and financial performance of a firm. All variables will be measured using questionnaire used in base paper.
Data Collection Technique

Researcher has designed a questionnaire in Google forms and sent it to the 250 number of people who are working in various cement manufacturing firms of Karachi, Pakistan and received only 116 responses in which 2 responses were found patterned which was deleted so the total responses are 114. The response rate through Google Forms was 46%.

Target Population

This study analyze the impact of factors influencing practices of GSCM (support with the customer, green information system, eco-design and investment recovery) on financial performance of the organization. Target population include those respondent that are the part of cement manufacturing industry of Karachi Pakistan. As it is almost practically impossible to involve every individual working in cement manufacturing industry of Karachi Pakistan. The target population of this research are those individual that are involve in cement manufacturing industry located in Karachi Pakistan.

Sampling method

Non-probability sampling method in which convenience sampling was adopted for collecting the statistics.

Validity and Reliability Tests

The validity and reliability of the scale was check by the researcher for internal consistency through the Cronbach’s Alpha. The value of the Cronbach’s alpha should be more than 0.7 to make it acceptable but if it is more than 0.9 it is excellent (Kline, 2000). And the values of Cronbach’s alpha in the results prove that the data is reliable and acceptable. To check the validity researcher has checked the factor analysis with the help of outer loadings and it also proves that the items of all five variables are valid.

Data Analysis Tools and Techniques

The research validated the above hypothesis based on the modeling of the structural equation using Partial Least Squares (PLS) technique using the version
Practices of GSCM for enhancing the financial performance of the organization

3.0 of Smart PLS. The Partial Least Squares method is a recognize techniques to find out the path coefficients of structural models. It is progressively used in studies of marketing because of its ability of model latent structures under non normality conditions in small to medium samples (Hair, Hult, Ringle and Sarstedt, 2013). Researcher completed the Partial Least Squares algorithm that defines the significant path coefficients, weight and loading and then applied a method of bootstrap to define the significance level of the hypothesis. The process recommended by Anderson and Gerbing (1988), the researcher predicted the goodness of fit of the measurement model and validity formerly testing the structural relationship defined in the structural model.

Software Used

Smart PLS will be used for data analysis. Reason for using Smart PLS is that it is quite easy to use and to obtain the results. It gives all the required results within seconds and on just few clicks.

Findings and Results

Validity and Reliability

Smart PLS version 3.0 is used by researcher and he has inspected the Composite Reliability, Average Variance Extracted (A.V.E), Convergent Validity, Outer Loadings and the (D.A) Discriminant Validity. Initially, researcher verified the measurement model for convergent validity by measuring the Factor Loadings, Average Variance Extracted (A.V.E) and Composite Reliability (C.R).

Suggested value for Factor Loading, Composite Reliability and (A.V.E) Average Variance Extracted, is greater than 0.6 (Chin, Peterson, & Brown, 2008). Table 1 indicate that (A.V.E) Average Variance Extracted and (C.R) Composite Reliability, of five variables (Financial Performance, Cooperation with consumers, Green system of Information, Inv Rec and Eco friendly design) and Factor Loading of all the items is more than 0.6 except of CWC-01 that is 0.476, CWC-04 that is 0.545, GIS-01, that is 0.578, GIS-02 that is 0.333, IR-03 that is 0.541, IR-04 that is 0.526 that means the statistics is reliable and valid. Composite Reliability (CR) and Cronbach’s Alpha that displays the degree to which the construct indicators identify the latent construct should be more than 0.7 (Hair et al., 2013) and Average
Variance Extracted (AVE) which represents the general variance in the items or indicators accounted by the latent construct is suggested to be more than 0.5 (Hair et al., 2013).

Table 1 displays the Cronbach’s Alpha value of all five variables is greater than 0.7. The Cronbach’s alpha value of the first variable Financial Performance is 0.768 and (A.V.E) value of first variable 0.593, likewise the Cronbach’s Alpha value is 0.720 and (A.V.E) is 0.508 of the second variable Cooperation with the consumers, third variable Green system of Information has 0.782 value of Cronbach’s Alpha and 0.503 value of (A.V.E), fourth variable has 0.704 value of Cronbach’s Alpha and 0.520 value of (A.V.E) of Inv Rec and last variable five has the Cronbach’s Alpha value is 0.874 and (A.V.E) value is 0.799 of Eco-Design.

<table>
<thead>
<tr>
<th>Constructs</th>
<th>Item</th>
<th>Loading</th>
<th>AVE</th>
<th>CR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial Performance (Cronbach’s Alpha = 0.768)</td>
<td>FP-01</td>
<td>0.815</td>
<td>0.593</td>
<td>0.853</td>
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<tr>
<td></td>
<td>FP-02</td>
<td>0.696</td>
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<td></td>
<td>PF-03</td>
<td>0.852</td>
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<td>PF-04</td>
<td>0.706</td>
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<tr>
<td>Cooperation with the Consumer (Cronbach alpha = 0.720)</td>
<td>CWC-01</td>
<td>0.477</td>
<td>0.508</td>
<td>0.772</td>
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<td></td>
<td>CWC-02</td>
<td>0.753</td>
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<tr>
<td></td>
<td>CWC-03</td>
<td>0.895</td>
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<td></td>
<td>CWC-04</td>
<td>0.545</td>
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<tr>
<td>Green system of Information (Cronbach alpha = 0.782)</td>
<td>GIS-01</td>
<td>0.578</td>
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<tr>
<td></td>
<td>GIS-02</td>
<td>0.333</td>
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<td></td>
<td>GIS-03</td>
<td>0.839</td>
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<td></td>
<td>GIS-04</td>
<td>0.839</td>
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<tr>
<td>Investment Recovery (Cronbach’s Alpha = 0.704)</td>
<td>IR1</td>
<td>0.856</td>
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<td></td>
<td>IR2</td>
<td>0.881</td>
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<td></td>
<td>IR3</td>
<td>0.541</td>
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<td></td>
<td>IR4</td>
<td>0.526</td>
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<tr>
<td>Eco-Design (Cronbach’s Alpha = 0.874)</td>
<td>ED-01</td>
<td>0.886</td>
<td>0.520</td>
<td>0.804</td>
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<td></td>
<td>ED-02</td>
<td>0.879</td>
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<td></td>
<td>ED-03</td>
<td>0.916</td>
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</table>

Table 1: Reliability & Validity for Constructs
Discriminant Validity

The measurement model shows a suitable convergent validity and also the discriminant validity.

<table>
<thead>
<tr>
<th>Table 2: Discriminant Validity</th>
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<tr>
<td>Cooperate With the Consumers</td>
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<td>Eco Friendly Design</td>
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<tr>
<td>F.P</td>
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<tr>
<td>Green System of Information</td>
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<tr>
<td>Inv. Rec</td>
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</table>

Structural Model

Researcher has used Smart PLS version 3.0 for this study and tested the structural model and hypothesis. The scholar has directed bootstrapping process with 1500 repetitions to check the statistical importance of the weights of sub constructs and path coefficients. (S.R.M.R) is the variance among the detected correlation and the implicit correlation matrix of the model. Thus, it permits estimating the average value of the change among the experiential and expected correlations as an absolute measure of the fit criterion (model). Hu and Bentler (1998) suggested that an Standardize Root Mean Square Residual (S.R.M.R) value less than 0.10 or of 0.08 (in a more conservative version) reflects a good fit. Henseler et al. (2014) present SRMR as a PLS-SEM goodness of fit measure that can be used to prevent model description errors.

Researcher tested the hypothesized associations in the structural model after checking the measurement model and goodness of fit. Figure 4.1 displays the results of the analysis. The corrected $R^2$ in Figure 4.1 shows the descriptive power of the predictor variable on the particular construct. Cooperate with the Consumer,
Green System of Information, Inv. Recovery & E-design defines 27.0% of impact upon the Financial Performance

Chin et al. (2008) make category for the dependent constructs as high, average or low, grounded on the R^2 values of 0.67, 0.33, or 0.19, correspondingly. Therefore, the results of the Financial Performance, on Cooperate with the Consumers, Green System of Information, Inv. Rec and Eco friendly Design show that Financial Performance have mediocre impact by them. Figure 4.1 shows that Cooperate with the Consumers, Green System of Information, Inv. Rec and Eco friendly Design has total impact on the F-Performance of 20.1% (0.201), 11.5% (0.115), 24.3% (0.243) and 31.5% (0.315) respectively.

So these results show that Inv. Rec and Eco Friendly Design has an important influence upon the Financial Performance and Cooperation with the Consumers and Green System of Information has a low impact upon Financial Performance.

Figure 1: Structural Model Results
Table 3 indicate the result of regression on the Financial Performance. Chin et al. (2008) made category for the dependent variables as responsible, large, and low, centered on the values of R-Square ($R^2$) that is 0.67 or greater value for a strong impact, 0.33 or greater for moderate impact and 0.19 for weak impact. The value of R-Square ($R^2$) of Financial Performance is 0.270 and the adjusted $R^2$ is 0.241. This shows that Financial Performance is moderately affected by the Independent Variables.

<table>
<thead>
<tr>
<th>Endogenous Constructs</th>
<th>$R^2$</th>
<th>Adjusted $R^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial Performance</td>
<td>0.270</td>
<td>0.241</td>
</tr>
</tbody>
</table>

Table 4 shows the finding of structural model and hypothesis test results. There are complete four hypotheses have tested in the research paper. The four positive hypotheses ($H_1$, $H_2$, $H_3$ and $H_4$) are tested through the bootstrapping and PLS factorial algorithm and consequences have been displayed in the table below. Among these four hypotheses $H_1$ and $H_2$ have been rejected because of the negligible Beta value but most importantly higher value of $P$ than 0.01 that is 0.071 and 0.473 for both $H_1$ and $H_2$ simultaneously. While $H_3$ and $H_4$ have been accepted which indicates that Investment Recovery & Eco Design has positive impact upon Financial Performance. The $H_3$ and $H_4$ (Investment Recovery and Eco Design) has $P$-value is 0.007 and 0.002 respectively and as their Beta (B) value and T-Value shows in the table that they have positive impact and also the $P$ value is also less than 0.01 that 0.000 for both $H_3$ and $H_4$.

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>B (Beta)</th>
<th>T-Value</th>
<th>P-Value</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cooperation With the Customers</td>
<td>$H_1$</td>
<td>0.201</td>
<td>1.810</td>
<td>0.071</td>
</tr>
<tr>
<td>Green Information</td>
<td>$H_2$</td>
<td>0.115</td>
<td>0.719</td>
<td>0.473</td>
</tr>
<tr>
<td>Investment Recovery</td>
<td>$H_3$</td>
<td>0.243</td>
<td>2.730</td>
<td>0.007</td>
</tr>
<tr>
<td>Eco-Design</td>
<td>$H_4$</td>
<td>0.315</td>
<td>3.164</td>
<td>0.002</td>
</tr>
</tbody>
</table>
Discussion

Literature has highlighted the importance of practices of (G.S.C) management. The adoption of practices of (G.S.C) management is very important for the success of business its create stability. The research illustrate that in cases where management implemented these practices and overcome environmental issue, companies get success. The appropriate level of initiatives from the top management and adequate leadership decisions is significant reason for GSCM practices implementation.

Organization are effort to make positive relationships with consumer, aiming on green purchasing, and adoption of Green information system to increase organization financial performance and environmental performance. Gholami et al. (2013), said that performance of the of environment of the firm enhance the execution of Green system of information, and a point of view of Chien and Shih (2007), Green information system increase the firms financial performance. Choi and Hwang (2015) said that that eco-design is a very vital element of financial and environment performance of the firm.

It is a fact that implementation of GSCM practices in a proper way, performance of the organization will be increased. Researcher such as Longoni and Cagliano (2018) are found that if upper management of firm is implement the practices of (G.S.C) management, organizations increase their environmental position as well as financial position. Eco friendly design enhance the environmental performance of the organization by recycling and remanufacturing the product after the complete the lifecycle of the product. So Eco-design increase the financial performance of the firm in long run.

According to the analysis of this study Investment Recovery of GSCM practices has a positive impact on the financial performance, as it enables companies to achieve maximum benefits from the green supply chain practices and increase the long-term profitability. The data analysis, done for this research, provides enough indication to claim that the practices of (G.S.C) management implementation is affected for the financial performance of the industry because organization sell out his extra inventory, used materials, scrap and extra capital equipment and earn maximum profit.
According to the analysis of this study Eco-design of practices of GSCM give positive effects on the company’s financial performance, as it enables companies for implementing the practices of green supply chain to reduce omission of CO₂ in air, reduce waste, save energy during production process and protect natural resource by using alternative material of fuel. So organization achieve maximum benefits from the green supply chain practices and increase the long-term profitability of the organization. The statistics analysis, done for this research, provides enough indication to claim that the practices of green supply chain implementation is affected by company financial performance.

According to this research Cooperation with the customer and Green Information system does not have impact on financial performance of the organization. The data analysis, done for this research, does not provide enough indication to claim that the financial performance is affected by the Cooperation with the customer and Green Information system provided.

Research Implications

This research is basically proper pertinent published study and has make a research model to examine impact of financial performance on cooperate with the consumers, green system of information, Inv. Rec and Eco friendly design when adoption of practices of (G.S.C) management. An analysis of the prevalent literature showing that same study has not been directed in the cement manufacturing sector in Karachi. So in addition to providing this research paper for theoretical enhancement, manufacturing companies involve in supply chain processes can take advantage to grow and implement strategies to make supply chain green.

Theoretical Implications

This research will rationalize the impact of the financial performance which hinders the application of GSCM practices of an organization. the findings increase the academic indulgent of the practices of (G.S.C) management such as cooperate with the consumers, green system of information, Inv Rec and Eco friendly design keep as an significantly important for the performance of industry.
Practical Implications

There are 03 management implications to this research. First is, the results of this research will help the cement industry management or other manufacturing industry to understand how these green supply chain practices can impact the financial performance and green supply chain negatively. If you want to improve practices of (G.S.C) management and make your supply chain greener, you need to implement the practices of (G.S.C) management and ultimately negatively affect overcome and overall performance and profitability of your organization will be increase.

Second, on the basis of this paper, before focusing on the practices of (G.S.C) management, organization can prioritize those green practices accordingly. When employing the practices of green supply chain, the management of the company should be committed to follow the green practices and must have the leadership skills to make employee follow these implementations.

Third, the management must create a learning culture and provide proper development and training to the employees for better understanding of green practices to enhance their skill levels and make them prepared and equipped to follow the practices of (G.S.C) management for reduce environmental issues & enhance the Financial Position of the industry.

Limitation

Most of the research, there is no matter how good they are, but it has facing some limitations. These limitations are beneficial for other researchers who wants to conduct a research, because it’s give good guidance for upcoming research. Researcher has confronted boundaries in terms of time. Restriction of this study, sample size for this study is 114, so it is option that these results may differ for overall population. The data has been together from few cement manufacturing companies, located in Karachi city, if the record or data has been collected from the different cities, the findings may be different. The results of the study may be different if the statistics was gather from other cement companies of the Pakistan.
Conclusion

This research finds out the effect of implementation of practices of (G.S.C) management related with the firm’s success. Scholars use quantitative analysis by gathering different feelings using descriptive and speculative statistics and find out significant conclusions. After study of this research, it may be concluded that green supply chain practices implementation is vital for any organization especially when it wants to acquire competitive edge over its rivals. Implementation of green supply chain practices enhance the financial performance and environmental performance of the firm.

The concept of green practices, implementation enables organization to have a waste free manufacturing process and value streaming, reducing energy, protect natural resources which will ultimately minimize the wastage of resources as well as increase overall profitability or industry financial performance. This study examines the effect of financial performance of the industry, to successful execution of practices of (G.S.C) management. The (G.S.C.) management practices implementation is increase the F-Performance of industry by many factors few of which are studied in this paper. These factors include Cooperate with the consumers, Green system of information, Inv. Recovery and E-design. The top management is bound to show a positive part in terms of leading the process of (G.S.C) practices, which can also be referred to as adoption the practices of (G.S.C) management.

Top management of the industry, will drive the strategy and lead the process to successful completion of green practices. However, the strategy crafted by the top management should be deployed throughout the supply chain, which is only possible if this strategy is properly conveyed through effective communication channels and give proper training to all the employees of the company how to follow the these green practices.

However, this study indicates that the practices of green supply chain implementation i.e cooperate with the consumers and green
information system is not affected by the financial performance of the organization. Another important factor to consider is adequate, Inv. Rec and Eco friendly design, especially those involved in the practices of (G.S.C) management, it upsurge the financial performance of the firm.

The findings of this study suggested that adoption of practices of GSCM helps organization for compliance the rules and regulations of environment that are impose by regulatory authority, this green practices help the firms to increase their financial and environmental performance.

Recommendations

Mentioned below are the recommendations grounded on the finding of this research:

- Firm’s management is recommended to progress expertise in implementation of practices of green supply chain and other management skills, because practices of green supply chain are only source of organization to increase his financial performance.
- The leadership initiative should come from the top hierarchy of the organization, especially regarding decisions about the adoption of the practices of (G.S.C) management.
- The efforts of all the stake holders should be in alignment with the process of (G.S.C) practices implementation according to strategies formulated by the top management of the organization.
- Managerial staff of cement industry should follow the friendly environmental practices in Supply chain process.
- Empirically test, find out the result that, when implemented, practices of (G.S.C) is imperative it enhance the financial as well as environmental performance.
- Findings of this research, provides information to the managers and professionals of (S.C) that practices of (G.S.C) management is compulsory for every organization for compliance environmental and economic rule and regulation and to increase profitability of the firms. Organization must collaborate with all partners of supply chain upstream and downstream for
effectively execution of practices of (G.S.C) and meet the need of end consumers.

- We suggested that sustainable environment is essential for economy and we provide evidence to support the need for production firm to adopt the green supply chain practices in support with customers and supplier.

- Production manager should develop the knowledge of practices of (G.S.C) management for every employee of the industry so employees are focus to implement the supply chain practices within the organization to increase his F-Performance of the firm.

- Production manager should responsible for organizational performance. If he adopt the practices of (G.S.C) and fulfil the need of final customer. The result of this practices to increase the performance of organization and it increase the profitability of the organization.

- Now a day’s sustainability of environment is very important. Organization must improve his current enterprise information system to monitor the sustainability of the environment with implementation of green supply chain practices.

- Implantation of green supply chain practices, firm’s management must follow the green practice as investment recovery. In this green practice organization sale out his extra inventory, extra material, scrap and extra capital equipment. Organization recover maximum value of the asset. After successful implementation of investment recovery practices, organization increase his financial performance.

- Manufacturing manager should focus to make a product with environmental friendly to implement the practices of green supply chain in term of Eco design. When firm follow green practice of Eco design, it’s reduce the waste, save energy during production, minimize consumption of material, minimize in CO2 emission in air and save the natural resource by using alternate material and fuels.

- Finally Government should make policy for manufacturing companies that each manufacturing company must implement the practices of (G.S.C) management for environmental sustainably and reduce hazards material and make environment friendly. This policy will be make environment clean and friendly and also upsurge the financial performance of the organization.
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