

## OPTIMIZING SUPPLY CHAIN VALUE CREATION: THE MEDIATING INFLUENCE OF SUPPLIER NETWORKS ON CUSTOMER SATISFACTION AND SALES PERFORMANCE

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### Abstract

The objective of the current research examines the mediating effects of the supplier networks between the operational strategies of the supply chain management, with the satisfaction to increasing firm sales. The research study was based on quantitative research methods to better understanding of customer satisfaction, to increase firm productivity and sales performance. The approach of the lean manufacturing is positive associated with the operations of the supply chain management, and current research study provides the significance and greater understanding and better relationships among the approach of lean manufacturing and the operations of the supply chain management in the manufacturing industry in Pakistan. The data collection through the administrative developed questionnaire with the help non-probability with convenience sampling. The data analysis through the Smart pls and interpretations the results. The results suggested that manufacturing flexibility, productivity, cost reduction, positive associated with the supplier networks, and customer satisfaction has the significance and the statistical impact on the firm's performance. Thus, the manufacturing flexibility, productivity, cost reduction positive impact on the suppliers' networks, and the mediating effects of the suppliers' networks between the productivity, and customer satisfactions cost reduction. Further, customer satisfaction mediates the supplier networks relationship and the firm's performance, and also customer satisfaction has a positive impact on the firm's performance. As the managerial implications, the current research study results indicate the experts and the production managers, Supply chain managers to develop supplier relationships, to better efficient productivity, good quality products, to achieve operation alignment with customer expectations.

### Background of Research Study

The concept of supplier networks has the significance importance of the operations of the supply chain management has the greater associated with customer satisfaction to increase firm productivity. Supplier networks have the

mediating role with the supply chain management operations to increase customer satisfaction and to increase firm sales (Ochieng, 2021). But most of the past research studies suggested that in the production level performance, through the implementation of

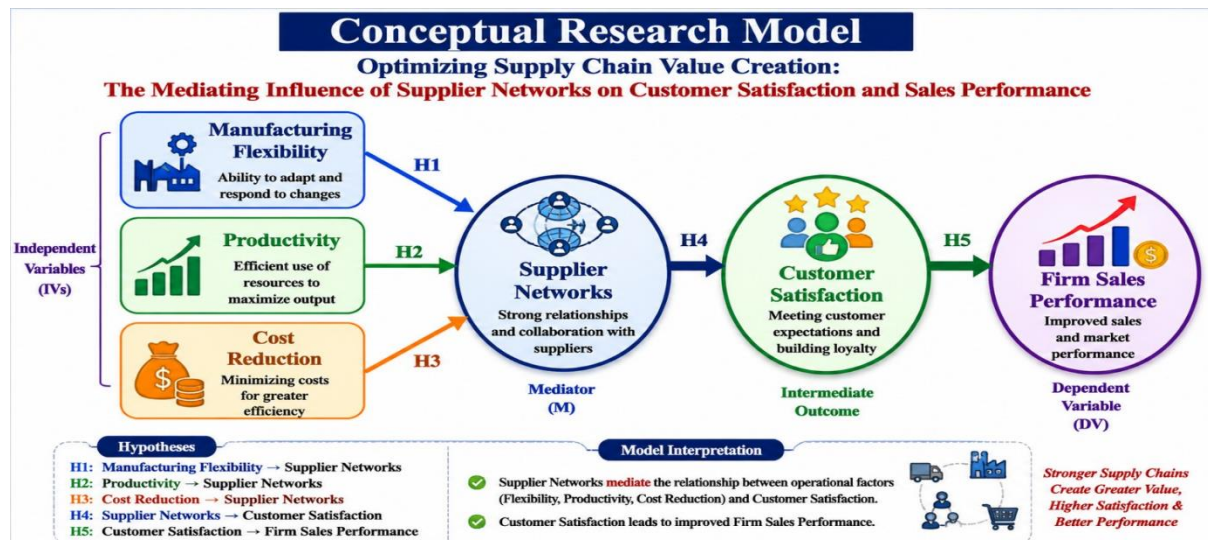
the principles of lean manufacturing, and these all principles or practices based on the historically and these practices in the process interdependent (Ochieng, 2021). Thus, the past research studies identified them, found that there is lack of the significance studies examine the factors of the operations of the supply chain management and impact of the lean manufacturing on the organization productivity. thus, the current research study the focus on the research gap and investigates the mediating effects of the operations of the supply chain with the lean manufacturing practices and the organizational productivity performance in the manufacturing companies in Pakistan (Ochieng, 2021). Thus, to more focuses and more comprehensive research study, integrated with the approach of lean manufacturing with the mediating role of the operational activities of the supply chain management to increase productivity through the practices of the lean manufacturing in the companies of the country of Pakistan (Ali & Ahmed, 2023)

Therefore, the current research study has the significance importance regarding the examines the manufacturing supply chain operational process problems in the manufacturing companies in Pakistan, and found that the lack of the knowledge, lack of technical efficiency, and the efficiency have the main objective of the manufacturing process and the system of manufacturing in the context of Pakistan. Therefore, in order to achieve productivity in the manufacturing operational process, technical efficiency has a greater impact on the firm performance, and the inefficiency means that there is found inability planning in the operational level methods and not achieve maximum output through the minimum resources (Jin et al., 2019). Thus, needs to be a high level of efficiency in the resultants-oriented outputs, more important factors change in the process of the operational activities regarding the techniques, operations process, methos. So, lean manufacturing has a significance impact on the performance of productivity and efficiency and eliminated nonvalues activities and increase the values added activities in the process to increase productivity (Tarigan et al., 2018). There is found that, the topic of the mediating effects of the supply chain operational activities

with the lean manufacturing and the firm performance still very limited and not founded the empirical evidence regarding the approach of the supply chain management practices with the relationships of the lean manufacturing and the organizational performance, thus the more investigates the significance and the substantially need in the field of the lean manufacturing with the supply chain management practices (Ochieng, 2021). Thus, the current research study was filling the empirical evidence research gap with the regarding the mediating effects of the supply chain practices with lean manufacturing and the firm performance. The prior research study suggested that the supply chain practices examine the mediating effects with organizational productivity and the lean manufacturing and firm performance (Khan, Azhar, Ali, & Shahid, 2023). Thus, the need to better understanding regarding the mediating effects of the supply chain practices with the lean manufacturing and the productivity of the firm performance, with includes the factors of the lean manufacturing and the factors of the supply chain practices and the factors of the organizational productivity (Hadrawi, 2019). The research aims to examine and explore the effects of the operations of the supply chain with lean manufacturing and organizational productivity and increase profitability, with reducing the wastages, minimizing operational cost, thus increasing productivity and creating competitive advantages in the manufacturing industries (Ali, Khan, & Ali, 2022). The current research study was based on the method of quantitative and explored the concept of lean manufacturing and the mediating effects of the supply chain management practices with the research hypotheses developed and associated with the approach of the deductive methods. The small lot production in the concept of the lean manufacturing, provides the significance benefits in terms of increase productivity, firm performance, remove the non-value-added activities, minimizes the wastage and maximized the organizational performance, lead time improve, better quality of the production, produced right quantity, right place, right time, through the concept of the lean manufacturing in the production system (Tarigan et al., 2018). As explained that the scope of the lean

manufacturing widely used in the lean manufacturing for the purpose of improving firm performance, also improve the performance of the business. Thus, the prior research study based on empirical evidence the companies of the manufacturing lean strongly eliminated waste, reduced lead time and improve inventories, increased efficiency in the productivity, better quality increase through the lean manufacturing methods (Hassan, & Pasha, 2023). Because, in the process of the significance methods of lean manufacturing practices is significantly associated with the set of objectives, set of goals, such as the firm performance, and the firm performance is integrated achieved set of objectives, and the firm performance is based on the process which is predetermined the firm objectives (Ali & Nasir, 2025). The firm's financial performance is incorporated with the factor of the profit, and the important factors of the return on investment, variance of the price, return on sales, per employee sales, are associated with the firm's performance. The indicators of the firm performance, such as the non-financial indicators, such as the quality, flexibility, lead time, customer satisfaction, impact on the firm's performance (Hassan, & Pasha, 2023). Most of the research studies, which are conducted, the academicians and the practitioners examine the impact of the lean manufacturing approach on the firm performance, and lean manufacturing implementations of the practices of the lean manufacturing process, in the process of the manufacturing to increase firm performance (Ali, Nasir, & Haider, 2025). The firm measures performance through the indicators such as the quality measures, flexibility of manufacturing, the lead time reduction, minimization inventory cost, increase productivity, reduced cost of the operations, and the firm performance related the firm sales, firm

profitability, and customer satisfaction (Ali, 2023). Thus, the approach of the lean manufacturing, provides the significance benefits in terms of increase productivity, firm performance, remove the non-value-added activities, minimizes the wastage and maximized the organizational performance, lead time improve, better quality of the production, produced right quantity, right place, right time, through the concept of the lean manufacturing in the production system (Tarigan et al., 2018). The current research study was based on the significance knowledge and also based on the theories, that how supply chain practices mediate the effects between the independent variables of the lean manufacturing and the dependent variable firm performance. Thus, the current research study was giving the significance evidence, the importance of lean manufacturing, and the mediating effects of the supply chain practices, the firm productivity. The prior research studies were suggested that, most of the research studies explained just examines the relationship of the independent variable of lean manufacturing and the dependent variable of firm productivity, but the current research study was investigating the mediating effects of the supply chain practices between the lean manufacturing and the firm productivity and also the relationship of the lean manufacturing and the firm productivity (Smirnov & Sorokin, 2022). In the process of the production system, the lean manufacturing practices collective impact on the performance of the organizational productivity, thus, the complete includes or adaptations of the concept of the lean manufacturing to increase better productivity, better quality of the products produced, right quality, right quality, reduction of the cost, minimizes wastes and increase firm performance (Saini, & Singh, 2022)



**Problem Statement and Research Gap**

The concept of the Supply Chain Management Operations, in the manufacturing industry, has significant importance with supplier networks and creates customer satisfaction to increase firm productivity. Thus, the current research study was investigating the impact of operations of the supply chain management, such as the factors, manufacturing flexibility, productivity, cost reduction, quality, with the mediating effects of supplier networks, to increase customer satisfaction, and to develop firm productivity. The approach of the lean manufacturing has the significance importance in the implantations to enhance the firm’s performance in terms of profitability, in term of sale, and also satisfaction, with the mediating factors of the supply chain operations, such as quality, manufacturing flexibility, lead time reduction, inventory minimization, productivity and cost reduction and widely applied in many countries and as well as industries (Ali, Siddiqui, Ali, & Lutufullah, 2025)

**Research Questions of the Study**

The background of the research study and the research study, problem statement explained the above sections, and the main objective of the current research study, how the better mediating effects of the supply chain management practices with the lean manufacturing with associated on the productivity of the organizational? Thus, some research questions are as follows.

RQ1. What is the impact of manufacturing flexibility on the firm’s productivity?

RQ2. How does the impact of productivity on the firm’s performance?

RQ3. How is the association the cost reduction with the firm productivity?

RQ4. What is the impact of quality with the firm’s performance?

RQ5. How does customer satisfaction with the firm’s productivity?

**Research Objectives of the Study**

RO1. To examine the significance associations with manufacturing flexibility and supplier networks

RO2. To analysis the productivity regarding the operations of the supply chain management and the and the firm productivity

RO3. To examine the mediating effects of the supplier networks with the firm performance

RO4. To analysis the factors of the quality to associated with the firm performance

RO5. To investigate customer satisfaction with the firm’s productivity

**Theoretical and Practical Significance of the Study**

The research study was investigating the factors of the operations of the supply chain management, the manufacturing flexibility, productivity, cost reduction, and quality, with the mediating role of supplier networks to increase customer satisfaction, for the purpose of firm productivity (Ali, Khan, Khan, & Ali, 2024). Thus, the current research study was giving the significance evidence, the importance of lean manufacturing, and the mediating effects

of the supply chain practices, the firm productivity. The prior research studies were suggested that, most of the research studies explained just examines the relationship of the independent variable of lean manufacturing and the dependent variable of firm productivity, but the current research study was investigating the mediating effects of the supply chain practices between the lean manufacturing and the firm productivity and also the relationship of the lean manufacturing and the firm productivity.

### Research Study Scope

The scope of the current research study, analysis the effects of the operations of the supply chain strategies with the mediating effects of the supplier networks for the purpose of customer satisfaction and the firm productivity based on the methods of the quantitative research approach. Thus, the concept of the lean manufacturing significance importance in the field of manufacturing area, to increase firm performance, with the different factors of the lean manufacturing, flexible resources, quick setups, uniform production level, quality control, supplier network and the firm productivity factors, lead time reduction, minimization inventory, cost reduction, and the firm productivity factors, profitability, revenues, and also customer satisfaction (Ali, 2024). The lean manufacturing objective is to reduce waste in the process of production, and performance of the productivity increase, thus the operations performance mediates the association between the lean manufacturing and the firm performance (Wainaina, & Odari, 2023). The prior research studies were suggested that, most of the research studies explained just examines the relationship of the independent variable of lean manufacturing and the dependent variable of firm productivity, but the current research study was investigating the mediating effects of the supply chain practices between the lean manufacturing and the firm productivity and also the relationship of the lean manufacturing and the firm productivity (Kumar, 2023).

### Manufacturing Flexibility and Supplier Networks

In the prior research study was suggested, the concept of lean manufacturing globally

accepted, as the more expanding, more consisting and the objective of lean manufacturing minimizes the wastage and maximize the productivity, with enhanced the organizational productivity (Ochieng, 2021). The different lean manufacturing concepts and definitions are as follows. The concept of lean manufacturing is philosophy consists of the methods, approach, technique and the associated with better organizational operations productivity, improvements, performance, and integrated with the management system and the production system (Wahab, 2022). The lean manufacturing is the philosophy of the manufacturing system, which have the focuses on the functionality of the production system, such as the functionality factors such as the right quantity, right items, right quality, the right place, the right time in term of the production process, and higher productivity, good quality, reduced costs, and maximalize profits, increase productivity (Smirnov & Sorokin, 2022). The lean manufacturing approach or the philosophy is based on the remove or eliminated the activities of the non-value added in the system of the production and operational activities (Hadrawi, 2019).

### Productivity and Supplier Networks

Through the concept of the lean manufacturing, provides the significance benefits in terms of increase productivity, firm performance, remove the non-value-added activities, minimizes the wastage and maximized the organizational performance, lead time improve, better quality of the production, produced right quantity, right place, right time, through the concept of the lean manufacturing in the production system (Tarigan et al., 2018). As explained that the scope of lean manufacturing widely used in lean manufacturing for the purpose of improving firm performance, also improve the performance of the business (Ali, Khan, Bhatti, & Siddiqui, 2023)

Thus, the prior research study based on the empirically evidence the companies of manufacturing lean strongly eliminated waste, reduced lead time and improve inventories, increase efficiency in the productivity, better quality increase through the lean manufacturing methods (Hassan, & Pasha, 2023)

### **Cost Reduction and Supplier Networks**

The prior research study was suggested that, in the field of the operations management, production management, the words such as just-in-time, TPS, Toyota production system, and the approach of lean manufacturing, thus, there are little differences in the meaning, approach of the lean manufacturing, just-in-time, Toyota production system (Takeuchi & Kimura, 2022). The lean manufacturing is related as the system of the manufacturing, which is developed Toyota, which is referred as the Toyota Production System, TPS, thus, the lean manufacturing is based on the TPS, which is referred to or based on just-in-time, JIT (Kibisu, & Machoka, 2021).

### **Quality and Supplier Networks**

The research study explained that lean manufacturing has a significant and positive impact on organizational productivity and eliminates waste in the production system (Daonil, & Zagloel, 2021). In the process of the production system, the lean manufacturing practices collective impact on the performance of the organizational productivity, thus, the complete includes or adaptations of the concept of the lean manufacturing to increase better productivity, better quality of the products produced, right quality, right quality, reduction of the cost, minimizes wastes and increase firm performance (Saini, & Singh, 2022)

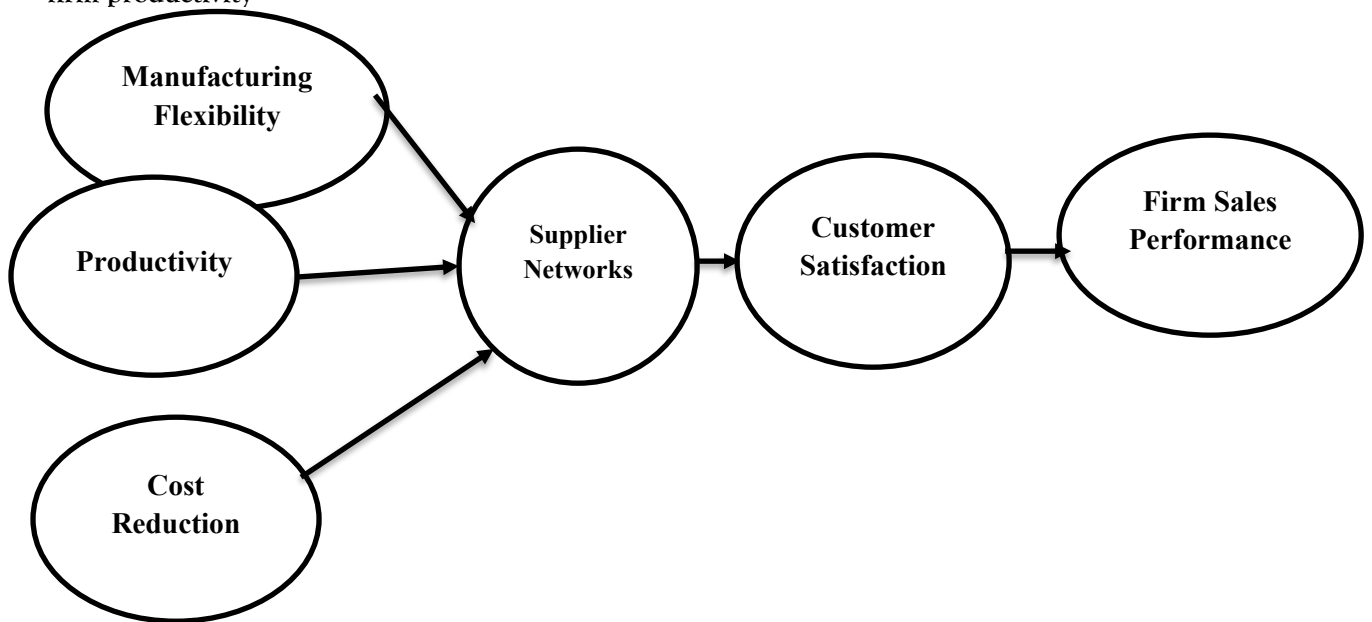
### **Supplier Networks and Customer Satisfaction**

The prior research study suggested that the concept of lean manufacturing practice has the greater benefits to implementations in the process, practices and performance, the combinations of these activities to increase the productivity of the firms. Therefore, the practices, approach, methods of manufacturing regarding the implementation to increase firm productivity, firm performance, because the concept of lean manufacturing reduced or eliminating the activities, which do not produce values, products, or service (Singh, & Saini, 2020)

### **Customer Satisfaction and Firm Performance**

The current research study was based on the significance knowledge and also based on the theories, that how supply chain practices mediate the effects between the independent variables of the lean manufacturing and the dependent variable firm performance. Thus, the current research study was giving the significance evidence, the importance of lean manufacturing, and the mediating effects of the supply chain practices, the firm productivity. The prior research studies were suggested that, most of the research studies explained just examines the relationship of the independent variable of lean manufacturing and the dependent variable of firm productivity, but the current research study was investigating the mediating effects of the supply chain practices between the lean manufacturing and the firm productivity and also the relationship of the lean manufacturing and the firm productivity.

Conceptual Research Model of the Operational performance of the Supply Chain Management and firm productivity



Research Hypotheses

- H1: Manufacturing flexibility has a positive impact on the Supplier Networks
- H2: Productivity has a positive impact on the Supplier Networks
- H3: Cost reduction has a positive impact on the Supplier Networks
- H4: Supplier Networks mediates the relationship between manufacturing flexibility and customer satisfaction
- H5: Supplier Networks mediates the relationship between productivity and customer satisfaction
- H7: Supplier Networks mediates the relationship between the cost reduction and customer satisfaction
- H8: Customer satisfaction mediates the relationship between the supplier networks and the firm’s performance
- H9: Customer satisfaction has a positive impact on the firm’s performance

Research Design

The research study was data collection through the approach of the cross-sectional design, because the technique of the cross-sectional research design based on the data collection at the same time from the different objects, thus the current research study collects the data from the different firms, organizations and also several different factors at the same time, which

are varies from organizations to organizations, and individuals to individuals (Tripathi et al., 2024). Because the design of the cross-sectional will be conducted when data collected at once and all data representation the respondent in the form of snapshot at the time of once. Through the approach of the quantitative research technique, the current research study based on the development of the measurement scales and thus, also instrument of the research pre-test to validate of the research instruments.

The Sample and Sampling Technique

Because the sample is the subset of the population; thus, sample is the small part of the population, which is representation of the population, thus base on the research questions, thus the organization as the unit of the analysis as the considered in the study. The data collection through the non-probability, convenience sampling technique, have the knowledge of supply chain management concepts. Therefore, the organization responsibility and the respondent have the knowledge regarding the concept of the supply chain management operations, with the mediating effects of supplier networks to increase customer satisfaction and the firm performance.

**The Method of Data Collection**

For the purpose of the views of the post-positivist, the reality objectively and the and the research objectives, the data collection through the questionnaire survey methodology, with the experts of the supply chain management in the field and have the greater knowledge regarding the supply chain management.

**Data Analysis**

In the current research study, the used of the quantitative approach, as the Structural Equation Modeling technique, to data analyze, and also recognized the second-generation technique, the Structural Equation Modeling, to analysis the more than variables and the associations of the different variables. Thus, the first-generation technique known as the regression modeling techniques. The technique of the has the two important factors of the SEM, the measurement model and the structural model.

**Construct Validity**

In the phase of the quantitative, the study the biasness through the construct validity and found the error in attitudinal measurement, the presence possibility, construct validity significant importance and based on the three important factors of convergent validity, discriminant validity, and the criterion validity (Sekaran, & Bougie, 2009).

**Convergent Validity**

The convergent validity, through the based on the factor loading, average variance extracted

and composite reliability. The value of the AVE measured the variation of the items, and the range of the values of the average variance extracted is from 0 to 1 and exceeds 0.5, suggested convergent validity.

**Discriminant Validity**

Through the discriminant validity, explained the uniqueness of the construct from the others. Thus, the discriminant validity, the square root of AVE, each construct higher than the correlation (Fornell & Larcker, 1981)

**Reliability and Validity**

The reliability explained the internal consistency of the items, through the results of the Cronbach’s alpha values, greater than 0.7. which are suggested that good internal consistency between the items.

**Outer Model Results Test Analysis (Measurement Model)**

The prior research study suggested that the in partial least square method, the examines the two-model carried out, the first model’s name is, the measurement model, also known as outer model, and another one is the name of structured model, which also known as inner model. Thus, through the measurement model results analysis, the reliability, validity, composite reliability, convergent validity, discriminant validity, and the average variance extracted, and through the inner model, which is also known as structured model, examines the association between the variables.

**Reliability and Convergent Validity**

	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
Cost Reduction	0.737	0.755	0.834	0.658
Customer Satisfaction	0.735	0.727	0.768	0.678
Manufacturing Flexibility	0.786	0.702	0.798	0.686
Productivity	0.825	0.835	0.870	0.547
Firm Sales Performance	0.726	0.788	0.833	0.569
Supplier networks	0.733	0.763	0.776	0.632

Through the results, indicates the values of the average variance extracted, greater than 0.5, which is indicates that the all the items of the variables have sufficient convergent validity of the constructs in the research study, the manufacturing flexibility, 0.686, productivity=0.547, cost reduction=0.658, customer satisfaction=0.678, firm sales performance=0.569 and supplier networks=0.632, have observed that all the variable in the research study greater than 0.5, which is suggested that the all the variables in the current research study, have the convergent validity. As the validation of the variables in the current research study was explained, the researcher should also conclude the reliability of the constructs, for further used in the questionnaire to collect the data. To examine or

determine the reliability of the constructs, the through the composite reliability, the values of the Cronbach's alpha coefficient greater than 0.6, which is explained that the internal consistency of the items in the questionnaire has a fairly good level of reliability.

**Structural Model (Inner Model)**

The analysis the measurement model, and through the measurement model examines and identify the internal consistency of the item's reliability and the validity of the construct's measurement model and the next step is to be analysis the structural model. In the structural, the analysis the relationship of the independent variables, mediating variable and the dependent variables, and the empirical testing regarding the hypothesized conceptual research model.

**Hypothesis Testing Analysis**

Hypothesis	Relationships	P-Value	Results
H1: Manufacturing flexibility has a positive impact on the Supplier Networks	MUF -> SUPN	0.000	Accepted
H2: Productivity has a positive impact on the Supplier Networks	PROD -> SUPN	0.000	Accepted
H3: Cost reduction has a positive impact on the Supplier Networks	CR -> SUPN	0.000	Accepted
H9: Customer satisfaction has a positive impact on the firm's performance	CS -> SP	0.000	Accepted

Based on the results, concludes that the Probability value=0.000 which is less than 0.05, thus, the H1: Manufacturing flexibility has the positive impact on the Supplier Networks, supported, and thus, concludes that the manufacturing flexibility has the positive associated with the supplier networks, thus, the manufacturing flexibility is the important factor with the supplier networks. Further, results

indicates that the significance value=0.000, which is less than 0.05, thus concludes that the H2: Productivity has the positive impact on the Supplier Networks, has been accepted, and suggested that the productivity has the significant impact on the supplier networks, in the manufacturing and the process of supply chain management, productivity has the more significance importance to increase the

relationship of the supplier networks. more, results suggested that the **H3**: Cost reduction has the positive impact on the Supplier Networks, also accepted, because the probability value=0.000, which is less than 0.05, thus, concludes that the cost reduction has the positive impact on the supplier networks, and developed the good relationship with supplier to increase the firm performance and the reduces the total cost of the production. Further, more

results suggested that the relationship of customer satisfaction with the firm's performance with the positive associated and increase the firm's performance, because of customer satisfaction. Thus, the factor of customer satisfaction has valuable factor for the firm's performance. Thus, hypothesis is supported. **H9**: Customer satisfaction has positive impact on the firm's performance

**Mediation Analysis**

Hypothesis	Relationships	P-Value	Results
<b>H4</b> : Supplier Networks mediates the relationship between manufacturing flexibility and customer satisfaction	MUF -> SUPN -> CS	0.000	Accepted
<b>H5</b> : Supplier Networks mediates the relationship between productivity and customer satisfaction	PROD -> SUPN -> CS	0.000	Accepted
<b>H7</b> : Supplier Networks mediates the relationship between the cost reduction and customer satisfaction	CR -> SUPN -> CS	0.000	Accepted
<b>H8</b> : Customer satisfaction mediates the relationship between the supplier networks and the firm's performance	SUPN -> CS -> SP	0.000	Accepted



The mediation relationship of the manufacturing flexibility and the customer satisfaction supported, based on the significance value=0.000, which is less than 0.05, thus mediating effects of the supplier networks between the relationship of the manufacturing flexibility and the customer satisfaction, thus, the supplier networks is the important for the manufacturing flexibility and the customer satisfaction.

**H4**: Supplier Networks mediates the relationship between the manufacturing flexibility and customer satisfaction, So, that the

hypothesis is supported. Further, the results indicate the probability value=-0.000, which is less than 0.05, then concludes that supplier networks mediate effects of the relationship between productivity and customer satisfaction. Thus, the hypothesis, **H5**: Supplier Networks mediates the relationship between productivity and customer satisfaction Based on the results the hypothesis is supported, because of the significance value=0.000 which is less than 0.05, thus the hypothesis, is supported. **H7**: Supplier Networks mediates the relationship between the cost reduction and

customer satisfaction, thus, concludes that the supplier networks found the mediation relationship between the cost reduction and customer satisfaction. Further, results suggested that the hypothesis **H8**: Customer satisfaction mediates the relationship between the supplier networks and the firm's performance, is support. Thus, concludes that customer satisfaction is also important factor between the supplier networks and the firm's performance.

### Conclusion and Research Summary

The current research study, conclusions, based on the research findings, the independent variables, manufacturing flexibility, productivity, the cost reduction, have a significant impact on the supplier networks, and customer satisfaction has a positive impact on the firm performance. Further, results indicate that the mediating effects of the suppliers' networks' manufacturing flexibility and the customer satisfactions, and the mediating effects also between productivity and customer satisfaction, and the mediating effects between the cost reduction and customer satisfaction. Furthermore, the customer satisfaction mediating affects the suppliers' networks and the firm's performance.

### Theoretical Contributions of the Study

The current research study supported the empirically and the theoretical contributions in the research study, through the knowledge of the body in the different form. The first is the contribution, the conceptual research model incorporated with the theory of resource based, to explain the research study model, regarding the firm productivity, and with also widely explained in the literature. Further this theory also supported the manufacturing practices. Further, the relationship between the independent and the dependent variables, with the mediating factors of supplier networks, contributes the knowledge, how these variables incorporate with the firm proactivity. Also, the current research study provides the details analysis, the firm performance, in the pharmaceuticals.

### Study Limitations and Future Research

#### Directions

Thus, the current research study has some limitations, the current research study includes the pharmaceutical industry, of the firm performance., in the city of Karachi. More industries, and more cities could be included. The current research study incorporates three independent variables, one mediating and one dependent, more mediating and the more mediating and moderating variables could be incorporated in the research model. The current research study based on quantitative, the research study could be based on the mixed, quantitative and qualitative approach.

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