Customer-focused supply chain strategy developing the 4Rs model in the apparel industry

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Abstract

In CFSCS the chief achievement is to counter consumer demand in real-time, that act will cut down the cost to experience productivity at an economical scale and give a chance to customers to practice a superior experience. The organizations practicing or implementing a strong CFSCS (customer-focused supply chain strategy) are performing at their excellence in the sales sector, share in the market, productivity, and high level of customer satisfaction. The supply chain mechanism is highly customer focused in CFSCS, Chief elements of the success are highly dependent on the 4Rs model (responsiveness, resiliency, reliability, and realignment) and provide better services at low cost as compared to the traditional supply chain model. The study explores that the 4Rs model in CFSCS is a chief driver for this purpose we develop various frameworks. Our field of proving the CFSCS 4Rs model is in the apparel industry.

Keywords: 4R model Responsiveness; Resiliency, Reliability; Realignment; Acronyms CFSCS; Customer-focused supply chain strategy.

JEL Classification: Z00

1. INTRODUCTION

In this modern era, the product life cycles have become pretty shorter and the customer wants innovations in the product. Due to the highly competitive pressure, organizations systematically yield quality control and standards and produce good bed line outputs. Organizations are enhancing their ability to produce and spawn ways to be more dynamic, competitive, and resourceful because said aspects can shake up their ability to perform better. Supply Chain performance is crucial to expand business performance and processes in briskly unstable situations. The Supply Chain is one of the major organs of an organization. Therefore, business strategy can be fulfilled with the support of the supply chain. To achieve high levels of customer service customer-focused supply chain strategy plays an important role. It can create differentiation through customer service.

Denning (2016) To focus on customers in well-organized and inline set targets, organizations must be careful about a high level of harmony and loom around the acceptance level that relies on being aware of the supplies of its customers.

The organization must safeguard exceptional customer proficiencies which add unceasing value to customers and for success which is required instead a goal maximizing execution is scaled down in terms of economic- metrics. The achievement of a company must future appeal to and for the satisfaction of the customer, as the business success shadows the unceasing novelty to supply exclusive value to customers. Denning (2016)
The chief objectives of the said paper are initially to familiarize the hypothesis of the CFSCS as a practice that gets under the umbrella of the potencies of Supply Chain nets by transforming the tendency of the buyer moreover to regulate in what way such proposal encounters the opposes of customer value innovation in today’s rapidly moving and extremely bloodthirsty market-place 3rdly to advocate numerous research skeletons of C.F.S.C.S for superior consideration customer boundary and organizations from inside to out. Finally, this learning emphasis tow C.F.S.C.S mends business functioning.

In the apparel industry, a customer-focused used supply chain is the need of time. Organizations are shifting towards demand-oriented from profit-oriented.

Customer Focus can be elaborated as; “The bundle of beliefs, which compiles the interest of customers as a priority, whilst not eliminating the owners, employees, and managers to build a long-term profitable organization.”

Customer Focused Supply Chain highlights the most challenges facing organizations needing to select, design, and implement fruitful supply chain strategies in a competitive environment.

Due to the huge competition, competitive advantage derives from the capability of supply chain associates to the end user. Hence, Customer Focused Supply Chain comes into play to meet demand and supply. It also cut down the cost and drove customer satisfaction. By adopting Customer Focused Supply Chain Strategy firms can expand the product design and planning process, their distribution strategy, and the overall SCM decision-making process linked to it. Following are the driver tool of the 4Rs’ models is responsiveness, which is the counterpart of responsive and responsive means the ability to handle extensive changes in demand. Hence, responsiveness is the tendency of the organization to regulate strategies and processes within its supply chain to deal with environmental changes and opportunities. Resiliency designates the capability to adapt overpower over time to marketecture and strategies progress.

It allows firms to modify the strategy of the supply chain w.r.t. to changes in products, plans, markets, policies, and technologies. Reliability denotes accurate supply chain deliverance execution in terms of place, time, packaging, documentation, product, and quantity, to the definite customer Realignment states to affiliates the benefits of supply chain associates frequently by verifying that the goals of SC partners are in synchronization.

Strategic Supply Chain Management (SCM) The SCM maneuvers around three levels i.e. strategic, tactical, and operational, the utmost level of SCM decisions is the strategy referred to as “strategic supply chain management” which is pertinent to the entire firm organization.

In the current era of a complex and highly competitive business environment, the apparel industry is stressed to survive due to shortened product lifecycles w.r.t. design and season, the clock is ticking very faster and the significance of disappointing a customer have become more unembellished. Due to the competitive environments of business, the apparel industry is under extreme pressure to scientifically produce quality control, quality standard, and, produce bottom-line results. Developing a supply chain model by adopting that model built a system to overcome said problem in the apparel industry.

- The goals of a customer-focused supply chain strategy (CFSCS) are listed below:
  - The first and foremost goal is to boost responsiveness towards the demand fulfillment process by supplying the raw materials in right the t order in the proper shape. Supply chain responsiveness allows initiating underlay response to a change in demand and supply.
  - To improve the supply chain’s resilience to satisfy volatile demand changes by business process re-engineering to counter the dynamics of the market. A resilient supply chain analyzes the changes in the market to fulfill customer demand and adaptability to novel risk environments
  - To lift the scale of reliability by catering to possible causes of supply chain threats.
  - To enhance realignment amongst supply chain associates by producing incentives for them to enhance the whole supply chain performance so that it can operate uninterruptedly and smoothly.
CFSCS facilitate organizations to understand customer demand and responsiveness to it in actualize scenario. Postulates an untouchable customer experience in every gap. Also, efficiently decrease time to market and cut down overall costs, augments productivity, and finally attains consumer-based objectives.

Research Questions

- What is the impact of Customer-focus supply chain strategy on the top-line and bottom-line progress of an organization?
- How did differ the performance of the firms with Customer Focused Supply Chain and with Customer Focused Supply Chain Strategy?
- How did the 4R model shrink in cost of the supply chain, a quicker response mark that and elevate efficiency and supply chain effectiveness?
- How we can streamline organizational resources with customer value creation?

The research has established several frameworks and showed numerous case studies to highlight the 4 Rs’ as significant elements of Customer Focused Supply Chain strategy. The scope of the study is to prove the importance of Customer Focused Supply Chain Strategy by creating the 4Rs Model in the Apparel Industry. Research Implications operational efficiencies improve by putting great heed to demand and delivery schedule, which provides business value to an organization. The research emphasizes reliability, responsiveness, resiliency, ad, and real alignment i.e. four integral elements of Customer Focused Supply Chain Strategy. CFSC plays a vital role in the topline and bottom-line progress of an organization. It can also enhance forecasting, planning, and optimization. Limitations from junks of brand study are only effective for readymade garments. The performance level may vary from organization to organization. That was volunteer research financial restriction limits the research.

Assumptions: The data provided to fill out the questionnaire is correct and considered valid for subject research. The gathered information from the sample firms’ will be considered applicable to the population. Customer focus objectives can be attained with the help of CFSCS Customer value prepositions improves by the dynamic capabilities of the 4Rs’. It helps to earn a competitive advantage. Building a long-lasting connection with customers is part and parcel of accomplishing customer organizational goals

2. LITERATURE REVIEW

The long-established Supply Chain approaches in which the eventual objective is the customer, that kind of Supply C in processes are no further appropriate today because much effectiveness-based, cost-cutting Supply Chains incline with more probability of risk to unpredicted moves in customer-based demand Lee (2004).

A CFSCS standpoint recognizes the annexation of the customer privileged the Supply Chains progression such as it unveils the customer not entirely as the intention of Supply Chains progressions, but typically as an energetic member in the value-adding progression. The annexation of the customer-privileged configuration and procedures of the Supply Chains is a cradle of supplementary value for the unabridged link at both ends i.e. the customer performance and fulfillment level, delivering a competitive gain Jüttner, et al. (2006).

2.1 An Integrative Framework of C.F.S.C.S

There are two major objectives of a customer-focused supply chain. The first objective is to satisfy the customer (to activate the overall supply chain partner’s efforts to enhance the level of Service and Responsiveness). The second target of cost-cutting (To integrate supply chain processes efficiently and
effectively so that to restrict unevenness and increase revenue and produce more profit. The greater the customer satisfaction, the higher will be the sales, and cost reduction will improve profitability. Operational performance processes suppress perfection in cycle time, utilization rate, times, and forecast accuracy.

Customer Focused Supply Chain Strategy (CFSCS) causes to enhance product planning process, product dispersal plan, and overall SCM decision and forecasting linked to it. It enables organizations how to launch new products and augment old-existing products very effectively and efficiently. Due to sharing of customer and product information & data in actual scenarios with the SC partners the span of the fulfillment of customers’ demand is reduced Madhani (2020b)

The goals of a Customer Focused SC Strategy (CFSCS) are listed below:

1. The first and foremost goal is to augment the responsiveness to demand accomplishment procedure by delivering the supplies in the right order, right time, and packing. The responsiveness in Supply Chain enables it to instigate rapid responsiveness on short-range and provisional variations in demand & supply.
2. To improve SC resiliency to satisfy unpredictable demand fluctuations by business process re-engineering to counter market dynamics. Resiliency in the supply chain analyzes the market changes to encounter customer demand and adaptability of novel risk environments.
3. We can augment reliability by handling the probable causes of risks involved in the supply chain.
4. The realignment can be improved among SC partners by offering encouragement used for them to boost the whole supply chain performance so that it can operate in a never-ending and smooth way.

Below is the conceptual framework of a customer-focused supply chain strategy (CFSCS) having all these competitive primacies of realignment, resiliency, reliability, and responsiveness 4Rs.

Figure1: a conceptual framework of a customer-focused supply chain strategy
**Integration of 4 Rs**

![Diagram showing integration of 4 Rs with roles of Raw Material Suppliers, Retailer, Manufacturer, and Intermediate suppliers.](image)

**Figure 2:** Traditional SC against Customer-Focused Supply Chains

**Traditional SC against Customer-Focused Supply Chains**

<table>
<thead>
<tr>
<th>S#</th>
<th>Competitive Urgencies</th>
<th>Traditional SC</th>
<th>Customer-focused Supply Chain</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Responsive</td>
<td>The modest aptitude to reply to changes.</td>
<td>Quick aptitude to reply to changes by taking proactive action.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Resilient</td>
<td>Usually restricted to a private supply chain / or a bunch of supply chains and hence provides limited flexibility.</td>
<td>Develop a specified cluster of serval supply chains for enhancing flexibility.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Reliability</td>
<td>Focus on cost-effectiveness.</td>
<td>Specialize in reliable and price-efficient supply chains.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Usually, the interest of supply chain partners converges to develop better synergy.</td>
</tr>
<tr>
<td>4</td>
<td>Realigned</td>
<td>Often supply chain participants are asked to form a selection between self-interest and interest and interest of supply chain partners.</td>
<td></td>
</tr>
</tbody>
</table>
2.1.1. Responsiveness:

how quickly the reaction to sudden variations in demand is described by responsiveness. In the apparel industry firms can handgrip these distractions effortlessly by replying swiftly to short short-term changes in demand. Fashion keeps changing and if there is no responsiveness then there will be a danger of decline for a firm in this competitive market. quick response is mandatory in this era of intensive competitiveness. Competitive advantage can be taken by building a responsive supply chain. Madhani (2020b). To counter the challenging requirements, today’s organizations would take more pre-emptive plans which will tolerate them to catch the cores of their customers and afterward augment their affordability in the international marketplace. Roh, Min, and Hong (2011)

H1: Customer agrees that the service providers i.e. apparel industry (CFSCS) is responsive.

2.1.2. Resilience

The resilience of the available supply chain is about how the availability chain deals with instabilities and confusions which is unexpected within the market. The number of instabilities and volatility (changes in investments and prices) is high. an enormous cause for this is the broader businesses, the economy, and political situations, which end up in unanticipated shocks and shutdowns (Eckstein et al. (2015) The resilience of the availability chain focuses on handling these unanticipated things. Organizations’ activations across three priorities of respond, reset and renew to build supply chain resiliency. Unless the industry makes their SC adaptable it is very stimulating for them to endure competitive in the marketplace. Resiliency means how quickly the supply chain returns to the state before interruption levels. organization actions across three priorities of respond, r, reset, and renew to build supply resiliency. Madhani (2020b); Ponis and Koronis
A resilient supply chain can be utilized by firms in three major ways: forming and enhancing redundancies through the supply chain; constructing flexibility and altering the corporate culture.

**H2:** Customer agrees that the service providers i.e. apparel industry (CFSCS) resilient

### 2.1.3. Reliability

Reliability denotes the execution of the SC in supplying the accurate product, to the proper place, at the proper time, in the proper condition and packaging, in the proper quantity, with the proper documentation, to an accurate customer. Reliability represents the probability that a system or a component performs its specified function as intended and hence, it refers to the degree to which an SC yields consistent performance. Kuo and Zuo (2003); Madhani (2020a)

Ever-improving reliability by planning for customer demand is the top priority for supply chain management in any organization. Today’s business scenario is described by higher levels of instability, volatility, unanticipated shocks, and discontinuities and reflects many uncertainties causing risks. Thus, supply chains are vulnerable to disruption and, in consequence, the business risk is increased. Reliability is different from toughness as toughness is concerned with uncertainty in the data, while reliability indicates uncertainty in which it is proposed to hedge against failures in the system described by a given solution. 
(Madhani (2018); Snyder (2003)

These are the main operational problems that can use interruption in a typical SC: (Madhani (2020b)

1. Late provision of supplies as of suppliers.
2. Prolonged delaying time for semi-finished products in the process.
3. Deficient stock levels in the warehouse.
4. Failure in the expectation of demands
5. Improper delivery to the customer.
6. Delayed communication of orders to logistic enterprises.

**H3:** Customer agrees that the service providers i.e. apparel industry is reliable

### 2.1.4. Realignment

Realignment of SC denotes allying it in the interest of SC partners frequently by approving that the objective of supply chain partners is consonant. While formulating such realignment of the concerns among numerous SC partners within the grid organization produces optimum SC performance once they uphold their imports and fulfill their objectives & goals. It links demand management procedures and SC operations for the higher forecast of demand so on expand inventory level if this alignment between demand & supply fails it leads towards either scarcity of inventory or surplus of inventory (Madhani (2020b).

Hill 2000; Madhani (2018) Organizations hardly own the resources and activities to form a product or provide a service from the start to the top. Since purchased goods and services account for 50 to 70% of the manufacturing company’s possible value, an organization’s competitive edge depends largely on the links it establishes with external businesses instead of its internal abilities.(Ramdas and Spekman 2000)

Chopra and Meindl (2009) SC performance is increased when an ‘inter-organizational, inter-functional approach is implemented by all SC partners. Such realignment of the supply chain enhances customer satisfaction also as overall performance.

**H4:** Customer agrees that the service providers i.e. apparel industry (CFSCS) realignment.

In our model, it is the customer’s expectation from the service. It depends upon the factors discussed above which are Realignment, Reliability, Resilience, and Responsiveness.

**H5:** Customers agree that the service quality of CFSCS in the apparel industry is satisfactory.
3. METHODOLOGY

3.1 Research Design

The document is by nature quantitative. Through questioner Primary data was collected. Customers who Utilize branded apparel loomed for this said questionnaire. Concerning previous research, the conceptual model used for this study was adopted with some reformation. The study institutes numerous concepts which may have stimulus over consumer satisfaction from apparel.

The population targeted for this research was the customers who Utilize branded apparel. For this research population was the customers who Utilize branded apparel so that their satisfaction can be measured. They are well aware of the parameters which give them satisfaction and are in a decent stance to empathize with the magnitude of this research. The scheme of sampling was opportuneness to accumulate data from respondents. All of these consumers that Utilize branded apparel and have an interest in contributing to the study were sent the link to google forms to get the online responses. We used a self-administrative gadget to gather the respondent’s responsiveness about the 4Rs mode base on customer satisfaction. The size of the sample for the said study was more than 150 customers who Utilize branded apparel. For this purpose, google form links were distributed. We received 160 respondents’ feedback. After dissecting the responsiveness, we got more than 150 questionnaire forms responded to within all aspects for further consideration.

We use a questionnaire for this study as a research Instrument. That is based upon the 5Likert scale. This demonstrates the level of favorable or unfavorable. Where one point indicates strongly disagree and the rest of the 4 points strongly agree. Previous studies that have been conducted to measure the semi-relationship trucks for this research study have haven selected. The research instrument reliability was confirmed by administering Cronbach’s alpha, rho-A, composite reliability, and AVE. On the scale different points show customer participation, in one scale, respondents show they are strongly disagreeing with the statement, and reaming five demonstrates that respondents have a strong understanding of the declaration.

4. DATA ANALYZING

We use smart pls to analyze the data for the study. The statistical process to prove the data is as

4.1. Construct Reliability and Validity

1. CB Alpha
2. Rho, A
3. Composite reliability
4. AVE

4.2. Path coefficient

1. Mean
2. Standard Deviation
3. P. values
4. T-test.

4.3. Confidence Intervals

4.4. Outer loading

5. Mean
6. Standard Deviation
7. P. values
8. T-test.

We analyze the hypotheses of the research by using Descriptive and Inferential statistics.

### 4.1. Construct Reliability and Validity

<table>
<thead>
<tr>
<th></th>
<th>Cronbach’s Alpha</th>
<th>rho_A</th>
<th>Composite Reliability</th>
<th>Average Variance Extracted (AVE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>REALI</td>
<td>0.700</td>
<td>0.723</td>
<td>0.829</td>
<td>0.619</td>
</tr>
<tr>
<td>REL.</td>
<td>0.788</td>
<td>0.789</td>
<td>0.863</td>
<td>0.611</td>
</tr>
<tr>
<td>RES.</td>
<td>0.732</td>
<td>0.744</td>
<td>0.847</td>
<td>0.649</td>
</tr>
<tr>
<td>RESP.</td>
<td>0.695</td>
<td>0.730</td>
<td>0.827</td>
<td>0.616</td>
</tr>
<tr>
<td>SAT.</td>
<td>0.718</td>
<td>0.718</td>
<td>0.841</td>
<td>0.639</td>
</tr>
</tbody>
</table>

**Interpretation:** The Construct Reliability and Validity table shows the Measurement Model on a Customer-focused Supply Chain by using Smart PLS software. The results appearing in the table under Cronbach’s Alpha shall be more than 0.6 however, these results are achieved and are nearest and above 0.7, whereas the results under Composite Reliability should be above 0.7 and these are achieved and the results under Average Variance Extracted (AVE) should be 0.5 or above, similarly, these results are also attained.

### 4.2. Path Coefficients Mean, STDEV, T-Values, P-Values

|       | Original Sample (O) | Sample Mean (M) | Standard Deviation (STDEV) | T (|O/STDEV|) | Statistics | P-Values |
|-------|---------------------|-----------------|----------------------------|---------|------------|----------|
| REALI -> SAT. | -0.040              | -0.040          | 0.117                      | 0.340   |            | 0.734    |
| REL. -> SAT.    | 0.516               | 0.529           | 0.103                      | 5.017   |            | 0.000    |
| RES. -> SAT.    | 0.221               | 0.223           | 0.084                      | 2.620   |            | 0.009    |
| RESP. -> SAT.   | 0.148               | 0.150           | 0.117                      | 1.268   |            | 0.205    |

**Interpretation:** The Path Coefficient table shows the Structural Model of a Customer-focused Supply Chain by using Smart PLS software. The results appearing in the table, viz: four independent variables i.e. Responsiveness Resiliency Reliability Realignment, are **significant** and have a direct relationship with customer satisfaction i.e. Dependent Variable while the remaining one variable i.e. customer satisfaction is **insignificant.** The Par Value in the above table is below 0.05 which is **significant** in the Four Independ Variables which is also attained.

### 4.3. Confidence Intervals

<table>
<thead>
<tr>
<th></th>
<th>Original Sample (O)</th>
<th>Sample Mean (M)</th>
<th>2.5%</th>
<th>97.5%</th>
</tr>
</thead>
<tbody>
<tr>
<td>REALI -&gt; SAT.</td>
<td>-0.040</td>
<td>-0.040</td>
<td>-0.290</td>
<td>0.180</td>
</tr>
<tr>
<td>REL. -&gt; SAT.</td>
<td>0.516</td>
<td>0.529</td>
<td>0.329</td>
<td>0.728</td>
</tr>
<tr>
<td>RES. -&gt; SAT.</td>
<td>0.221</td>
<td>0.223</td>
<td>0.048</td>
<td>0.379</td>
</tr>
<tr>
<td>RESP. -&gt; SAT.</td>
<td>0.148</td>
<td>0.150</td>
<td>-0.093</td>
<td>0.349</td>
</tr>
</tbody>
</table>
### Outer Loadings

#### 4.4. Mean, STDEV, T-Values, P-Values

|                | Original Sample (O) | Sample Mean (M) | Standard Deviation (STDEV) | T (|O/STDEV|) | Statistics | P-Values |
|----------------|---------------------|-----------------|-----------------------------|-----------|------------|----------|
| REAL.4 <- REAL.| 0.803               | 0.798           | 0.058                       | 13.932    | 0.000      |          |
| REAL.1 <- REAL.| 0.725               | 0.713           | 0.109                       | 6.670     | 0.000      |          |
| REAL.2 <- REAL.| 0.830               | 0.831           | 0.045                       | 18.460    | 0.000      |          |
| REL.1 <- REL.  | 0.766               | 0.765           | 0.060                       | 12.856    | 0.000      |          |
| REL.2 <- REL.  | 0.804               | 0.804           | 0.044                       | 18.281    | 0.000      |          |
| REL.3 <- REL.  | 0.802               | 0.804           | 0.042                       | 19.120    | 0.000      |          |
| REL.4 <- REL.  | 0.753               | 0.750           | 0.057                       | 13.276    | 0.000      |          |
| RES.1 <- RES.  | 0.767               | 0.752           | 0.077                       | 10.011    | 0.000      |          |
| RES.2 <- RES.  | 0.845               | 0.834           | 0.059                       | 14.400    | 0.000      |          |
| RES.3 <- RES.  | 0.803               | 0.804           | 0.066                       | 12.188    | 0.000      |          |
| RESP.1 <- RESP.| 0.846               | 0.849           | 0.029                       | 29.042    | 0.000      |          |
| RESP.3 <- RESP.| 0.768               | 0.761           | 0.063                       | 12.195    | 0.000      |          |
| RESP.4 <- RESP.| 0.737               | 0.727           | 0.078                       | 9.457     | 0.000      |          |
| SAT.1 <- SAT. | 0.828               | 0.827           | 0.042                       | 19.725    | 0.000      |          |
| SAT.2 <- SAT. | 0.795               | 0.796           | 0.053                       | 15.137    | 0.000      |          |
| SAT.4 <- SAT. | 0.774               | 0.772           | 0.043                       | 17.928    | 0.000      |          |

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**5. DISCUSSION AND CONCLUSION**

CFSCS has an optimistic influence on the top to bottom-line growth of an organization. It augments the competencies of the organization to adapt to the swiftly changing environment, even with more emphasis on the customer. An organization that has an effective CFSCS system significantly achieves better presentation in the corporate sector concerning sales, productivity, share in the market, and customer satisfaction. Customer-focused supply chain strategy augments firms to unveil customer demand and counter to it in real-time and offers an exceptional customer experience with every prospect. Shrinking time to respond market and reducing overall costs to augment profitability. It will also provide a junction to harmonize a firm's resources with consumer value. It also helps to upkeep the forecasting, product development, planning, and optimization. Better intuition perception about demand and delivery calendar will augment operational effectiveness and efficiencies by helping firms in producing the business value they pursue. This research has developed by this research numerous frameworks and underlined that the 4Rs framework is a vital driver of customer-focused supply chain strategy.
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