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# Supplier Selection and Evaluation in Apparel Industry

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**Abstract**

Due to the inability to obtain materials in a timely manner, the apparel manufacturing company has been experiencing delivery challenges. The focus of this research is on the supplier selection criteria in order to discover the right one to place material orders on time and improve the supply chain in the garment manufacturing business. Furthermore, in a disaster event, the normally picked providers' delivery status has been shown to be delayed. Moreover, the dimensional analysis method has implemented to select right suppliers for the apparel manufacturing organization. Meanwhile, the results were demonstrated after placing orders with the appropriate vendors in real-time to achieve the greatest results. Because of the timely received of materials, which helps to eliminate the productivity gap and ensure steady supply. Overall,15 percent efficiency has been increased. In this study, we have selected an apparel manufacturing organization to collect the data for implementing Dimensional analysis method to select the supplier who is the best for the specific item.

**Keywords:** Cost reduction, Supplier selection, Dimensional analysis method

**1. Introduction**

For enhanced efficiency, a seamless supply chain is essential. Because the textile manufacturing industry imports its raw materials from other countries, maximizing profits requires managing the supply chain in the garment manufacturing organization. The majority of apparel manufacturers, on the other hand, have expressed anxiety about acquiring materials on time. A primary factor for this is traditional supplier selection without performance evaluation. As a result of the strain to achieve supply deadlines, manufacturers suffer. Choosing the right suppliers is crucial for an apparel manufacturing firm to be competitive in current environment. The apparel manufacturing industry has tried to modernize, for example, by introducing the green supply chain concept (Akhter et al,2020).

Without having realistic knowledge about quality, delivery, and other essential criteria, the textile manufacturing industry's merchandising staff places raw material orders with suppliers by dialing a phone number, sending an email, or contacting any known individual. Scientific analysis of supplier selection methods can be utilized in the garment manufacturing business to discover the best suppliers in real time. In supply chain management, the importance of the connection between procurement, external suppliers, and quality has a significant impact on product and service quality (Bal.M et al.,2013). In today's modern supply chain, selecting the right suppliers is a strategic problem for the company. The entire business of a company is a significant strategic aspect. The relevance of this is that competent supplier selection was recognized at the start of the previous century's last decade (Liao C.N et al.,2011). According to one scholar, one of the supply chain's three key sources of uncertainty is suppliers' inability to meet their delivery responsibilities and expectations (Davis.T,1993). Because suppliers play such an essential role in supply chain management, supplier selection is a crucial procurement activity. Supplier characteristics in terms of cost, quality, delivery, and service in achieving supply chain objectives (Kagnicioglu, C. H. ,2006). Dickson's (1996) measurements, which were later refined by Weber (1991), are still commonly used in many investigations; The context and relevance of individual measure adjustments, on the other hand, complement the authors' effort, which includes over 110 publications on the topic of providers' choice (Cheraghi, S. H et al.,2011). This later prompted an assessment by a big number of supervisors to see how they come to a compromise when choosing providers. R. Verma et al., 1998. According to their findings, the most significant aspect of suppliers to supervisors is quality, followed by delivery and pricing. Around the turn of the century, research on the effect of measures in the production network began, with perceived dependability of conveyance as a rule of choice (Krause, D. R et al., 2001), while others noted the need to

add development as an equivalent rule in their models (Krause, D. R et al., 2001), others in their review (Krause, D. R et al., 2001) noted the need to include development as an equal norm (Karpak, B,2001).

According to this 2001 study, you must first develop a strategy that takes into account the customer-supplier relationship before establishing the most important criteria by which providers must be evaluated (Birch, D. ,2001). As a result, procurement managers must first negotiate conditions with suppliers. Cost, logistics, quality, development, and management are five categories of criteria for selecting suppliers, according to the same author; however, in their study, they used four elements to evaluate suppliers: price, quality, technology, and service (Bhutta, K. S et al.,2002). It was later discovered that similar criteria may be processed in research (Cebi, F et al., 2003). Obtaining resources from outside Bangladesh is one of the most difficult challenges for the apparel manufacturing industry in Bangladesh. It takes 60 days for materials from a faraway country like China to arrive in Bangladesh, and the manufacturer has fewer than 30 days to make and ship the items to the target clients. Meanwhile, creating a seamless supply chain and achieving optimal chain performance requires selecting the appropriate supplier at the right time. As a result, for clothing factories under our jurisdiction, supply chain optimization through careful supplier selection is important. Supplier selection employs artificial perspicacity. Although a lot of study has been done on supplier selection and evaluation, just a few companies have used it in the garment business. Using artificial neural networks, several researchers examined mathematical analysis for garment supply chain optimization, focusing on correct supplier selection (Shibbir et al,2022). The study's limitations were the inability to carry out the real process of selecting the best supplier for an apparel manufacturing company. In this paper, we used the Dimensional Analysis Method to choose the proper supplier and place an order with them for the study's results to be validated.

Subsection 1.1 discuss the conventional supplier selection strategy and its effect on apparel supply chain. Section 2 describes the methods which have applied for the supplier selection. Section 3 explain the details results of the study and finally section 4 discourse conclusion.

### 1.1. Conventional Supplier Selection Policy

The traditional technique is used by the supply chain (SC) department to identify vendors. Initially, the materials supplier is introduced to the SC department through acquaintances or acquainted people. Suppliers, on the other hand, send an email to the manufacturers with prior knowledge of the factory's strength if they find the relevant person's contact number or email for any company. The first point of discussion is if the suppliers are capable of producing the requested items. If a manufacturing company

believes the unit price is reasonable, it will immediately place orders with these selected suppliers without going through any supplier evaluation criteria. The purchaser receives a commission from the suppliers in this situation. The unofficial agreement was accepted by both parties. In most circumstances, the merchandiser persuades the inspection quality controller (IQC) to approve the item, and the IQC benefits from the merchant's perspective. They produce and transport the goods once the materials are received in poor condition. Furthermore, the materials are delivered 15 to 40 days after the scheduled delivery date. As a result, items are either shipped by air or at a lower cost. Owners cannot do anything in this situation since they are reliant on merchandisers, who openly misinterpret the owner by claiming that this is a nominated supplier from the buyer's end or that suppliers for these specific things are extremely rare. The typical supplier selection procedure is a vicious circle that must be broken.

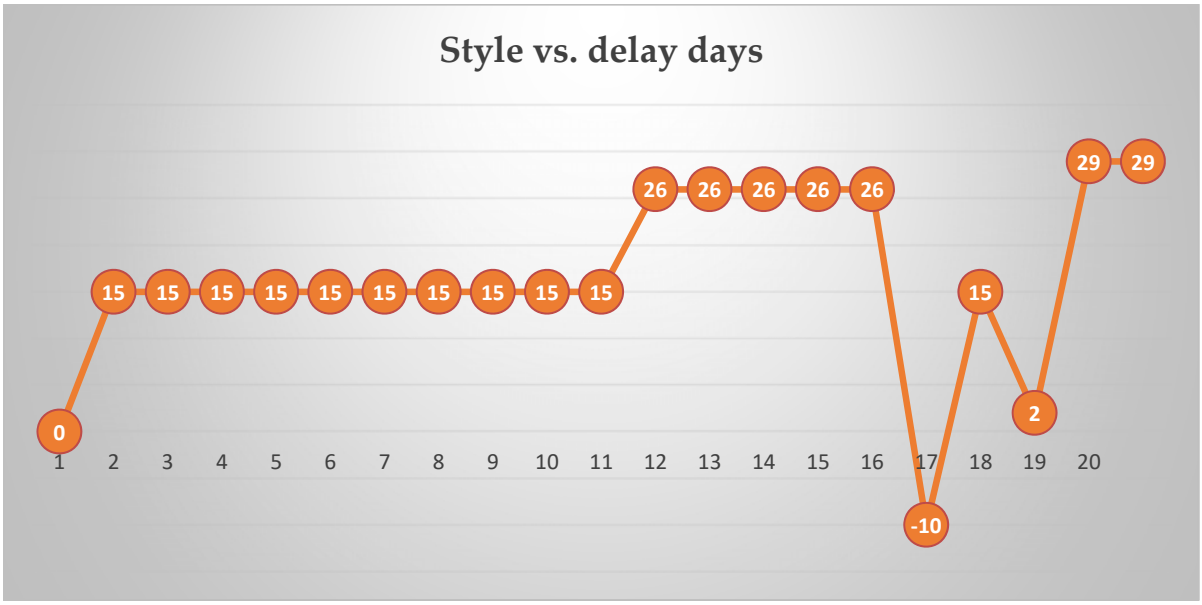


**Figure 1.** PO vs. delay status (PU-1)

From figure 1, the supplier is supplied materials after the minimum zero days to a maximum of twenty-nine days after the actual delivery date. This is an absurd delivery status. For such delays, the goods must be shipped by air, even if buyers cancel their orders, resulting in a massive loss for the manufacturing unit.

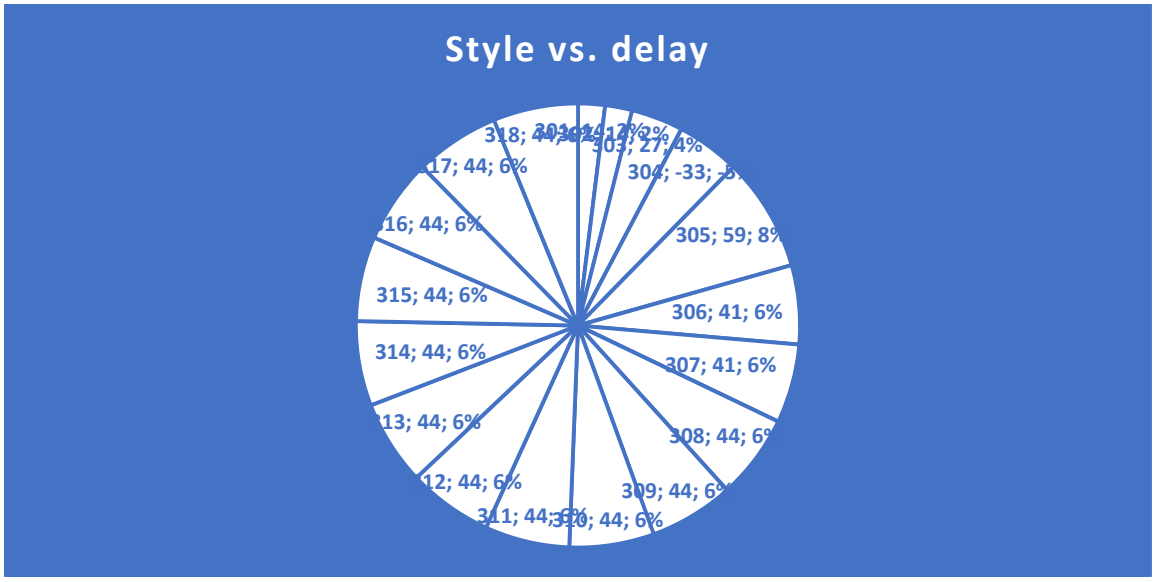


**Figure 2.** PO vs. delay status (PU-2)

Similarly, another manufacturing unit is suffered from delayed delivery of raw materials. It is found from figure 2 that 46 days are delayed for each purchase order. Subsequently, manufacturers have to pay more for air shipment and discount purposes. It is happened due to selecting the suppliers without any evaluation prior to the order placement. Customers are thus dissatisfied with placing orders to the same location in the long run. The business is in the risk zone. Many factories had to shut down since they were unable to pay workers' salaries on time due to delayed shipments and their related consequences.

**Table 1.** Factory wise income vs. profit loss

| Factory | Order quantity | price | Income | Production cost | Air cost | Discount | Total cost | Profit/loss |
|---|---|---|---|---|---|---|---|---|
| PU1 | 300000 | $ 0.18 | $ 54,000.00 | $75,000 | | $12,000 | $87,000 | $ (33,000.00) |
| PU2 | 250000 | $ 0.28 | $ 70,000.00 | $85,840 | $18,000 | | $103,840 | $ (33,840.00) |

The results of the analysis are presented in Table 1 for production units 1 and 2. A customer, for example, placed a 300,000-piece order with the manufacturing unit 1. The outfits have a unit price of $0.18. As a result, the total revenue is $54000, but the manufacturing cost is $75000, which is greater than the revenue because additional machines are utilized to expedite delivery because the materials are twenty days late. Finally, the shipment is delivered two weeks later than expected. As a result, the buyer has given the orders an 18.75 percent discount. The corporation received a $12,000.00 discount. The total cost of shipping the goods is $87000, which includes $33000 extra in addition to income. Production unit 2 has, on the other hand, received 250000 orders at a unit price of $0.28. The production cost, on the other hand, is $75,840. Air

transport is used to deliver the items. As a result, an extra $18000 is added to the overall cost, bringing it to $103,840, while the actual revenue from those purchases was $700,00.00. The end result is a loss of $33,840 paid out of the manufacturer's pocket due to the materials' acknowledged delay.

## 2. Methods

### 2.1. Dimensional Analysis Method

In this paper, the dimensional analysis method is applied to pick the right supplier in real time for the apparel manufacturing industry to optimize the supply chain.

$$VPI = \sqrt[w]{\prod_{i=1}^{n} \left(\frac{X_i}{Y_i}\right)^{w_i}} \quad (1)$$

Here,

VPI=Vendor Parameter Index

Xi= Performance Criteria Score for Supplier

Yi=Standard Performance Criterion (i=1,2,3,……...nth)

Wi=Weight (Relative Importance) Assigned to Criterion

$$w = \sum_{i=1}^{n} |w_i|$$

In this research, the supplier selection process is analyzed using equation 1. Table 2 shows that the VPI scores for suppliers A is higher than any other for production unit 1. Hence, this one supplier can be selected as the right suppliers. The demo calculation is given below for understanding the selection methodology using the dimensional analysis method.

$VPI(A) = \sqrt[16]{(0.95/1.00)^{5}.(21/27)^{-6}.(3/2)^{-5}}$

$=9.49$

Similarly, the VPI scores of suppliers A and C are higher than the others. Thus, these two suppliers is selected as the best ones, which is depicted in Table 3 for manufacturing unit 2. The analysis is done for five suppliers who are supplying the same materials. By studying the selection criteria, the decision can be taken from such an analysis as to which one would be the best and right supplier. The appendix A1,A2,B1 and B2 have sued to do the analysis in selection suppliers.

**Table 2.** Implementation of dimensional analysis method to select the right suppliers for PU-1

| | Quality(%) | Delivery (days) | Cost($) | VPI |
|---|---|---|---|---|
| Weights | 5 | -6 | -5 | |
| Supplier A | 95 | 21 | 3 | 9.49 |
| Standard | 100 | 27 | 2 | |
| | Quality(%) | Delivery (days) | Cost($) | |
| Weights | 2 | -5 | -5 | |
| Supplier B | 85 | 23 | 3 | 6.41 |
| Standard | 100 | 27 | 2 | |
| | Quality(%) | Delivery (days) | Cost($) | |
| Weights | 4 | -2 | -5 | |
| Supplier C | 78 | 25 | 3 | 3.31 |
| Standard | 100 | 27 | 2 | |
| | Quality(%) | Delivery (days) | Cost($) | |
| Weights | 3 | -4 | -5 | |
| Supplier D | 75 | 38 | 3 | 1.59 |
| Standard | 100 | 27 | 2 | |
| | Quality(%) | Delivery (days) | Cost($) | |
| Weights | 8 | -3 | -5 | |
| Supplier E | 65 | 35 | 3 | 0.07 |
| Standard | 100 | 27 | 2 | |

**Table 3.** Implementation of cost ration method to select the right suppliers for PU-2

| | Quality(%) | Delivery (days) | Cost($) | VPI |
|---|---|---|---|---|
| Weights | 6 | -3 | -5 | |
| Supplier A | 90 | 22 | 2 | 13.93 |
| Standard | 100 | 27 | 2 | |
| | Quality(%) | Delivery (days) | Cost($) | |
| Weights | 5 | -4 | -5 | |
| Supplier B | 85 | 26 | 2 | 9.99 |
| Standard | 100 | 27 | 2 | |
| | Quality(%) | Delivery (days) | Cost($) | |
| Weights | 4 | -3 | -6 | |
| Supplier C | 95 | 30 | 2 | 10.75 |
| Standard | 100 | 27 | 2 | |
| | Quality(%) | Delivery (days) | Cost($) | |
| Weights | 7 | -6 | -2 | |
| Supplier D | 70 | 32 | 2 | 2.38 |
| Standard | 100 | 27 | 2 | |
| | Quality(%) | Delivery (days) | Cost($) | |
| Weights | 3 | -5 | -3 | |
| Supplier E | 60 | 29 | 2 | 6.71 |
| Standard | 100 | 27 | 2 | |

### 3. Results

In addition, it is also detected from Figures 3 and 4 that the benefit-to-cost (BR) ratio intensified. BCR is shown 1.20 on average from figure 3 while materials are taken from traditionally selected suppliers, and the significance of the delay in delivery of the materials to the production unit is clear. However, the BCR is increased by 50%, which portrayed in figure 4.

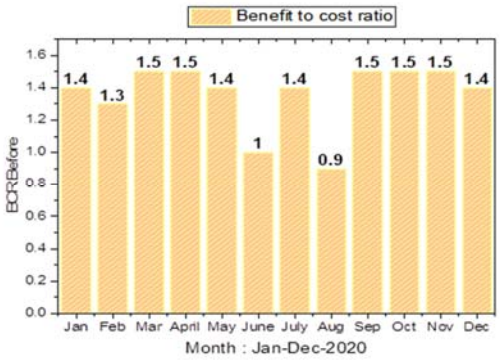


**Figure 3.** Benefit -to-cost ratio analysis -before (PU-1)

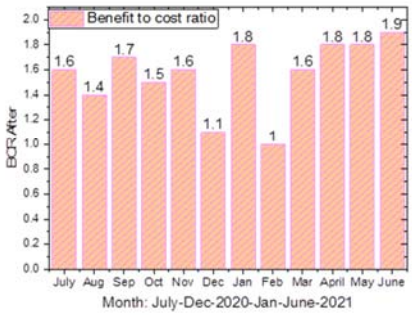


**Figure 4.** Benefit to cost ratio analysis -after (PU-

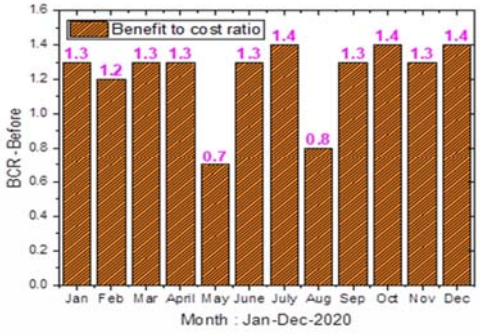


**Figure 5.** Benefit -to-cost ratio analysis -before (PU-2)

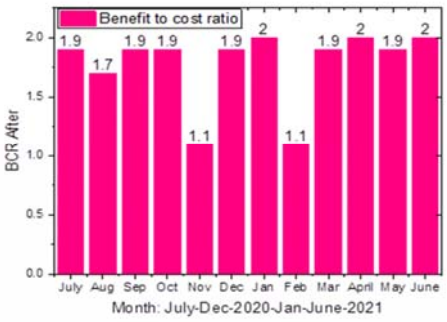


**Figure 6.** Benefit -to-cost ratio analysis -before (PU-2)

Similarly, the BCR ratio is augmented from 0.7 to 2.0 which has shown in figure 5 and 6 respectively where the improvement over the earlier BCR because of the best supplier selection for purchasing the raw materials from the right suppliers, which leads to an optimized supply chain. After the selection process through cost ratio analysis and the dimensional analysis method, manufacturing units 1 and 2 are placed material orders to the best selected suppliers. It is seen from figure 8 that the materials receiving status improved to 94% to 96% and 94% to 97% once the right supplier's selection.

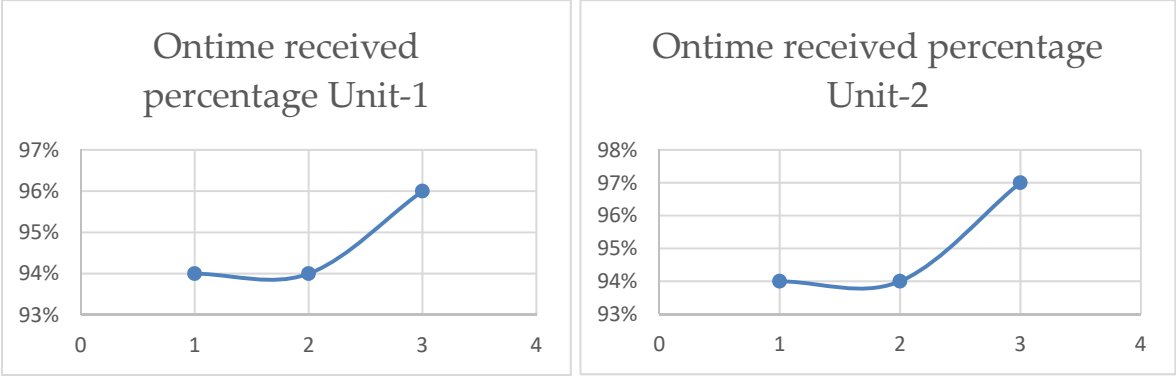


**Figure 7.** Ontime materials received status

The right supplier's selection is the core task for any apparel manufacturing to keep the supply chain smooth and get the optimal results from the chain as a whole. That's why the research is emphasized on hunting for the right supplier's selection based on the criteria, i.e., quality, delivery, and least cost.

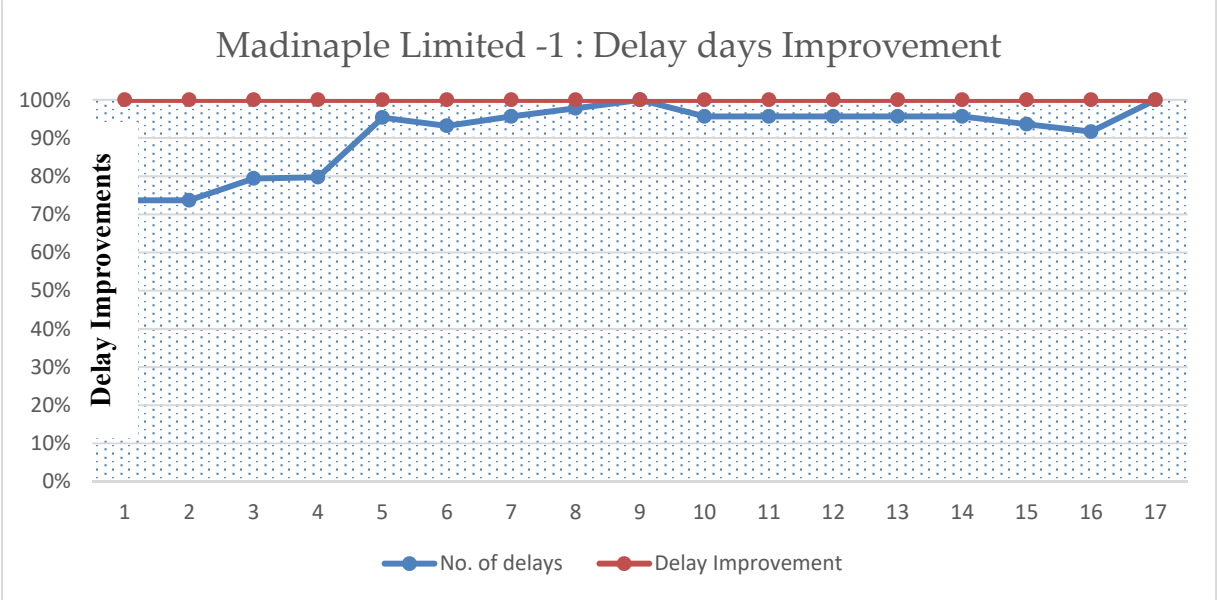


**Figure 8.** Optimized delay improvements (PU-1)

Figure 8 shows the reflection of the delayed delivery improvement while bringing raw materials from the analytically selected suppliers through the cost ratio and dimensional analysis method for the production unit 1. The receiving date and delivery date are very close, which is manageable to keep the smooth production and get the best outcome, which leads to higher efficiency.

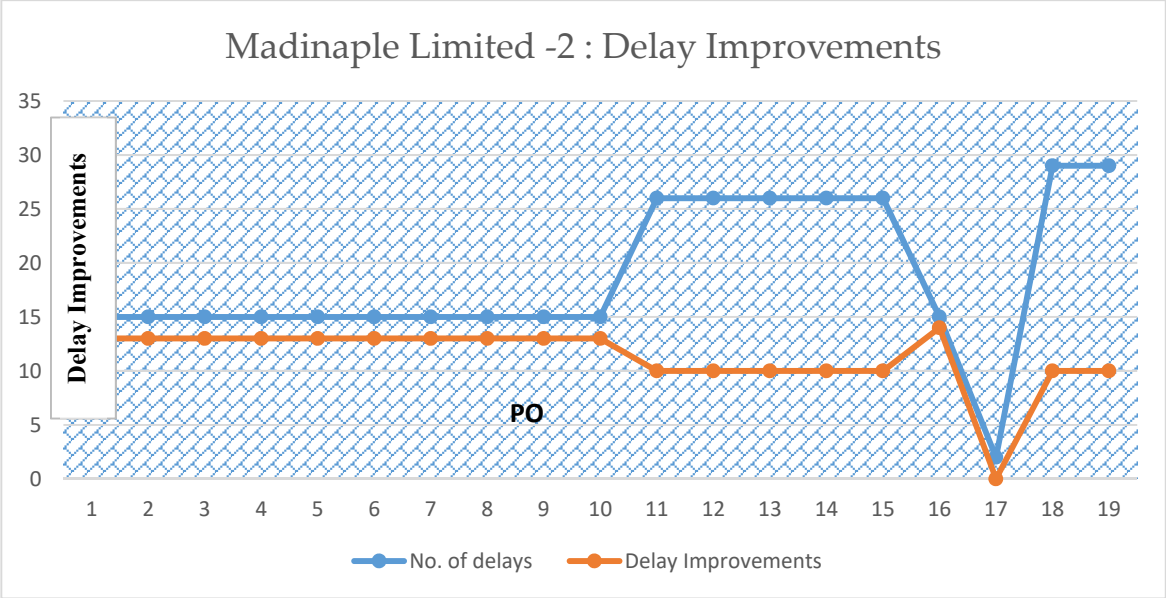


**Figure 9.** Optimized delay improvements - (PU-2)

The same is true for manufacturing unit 2. Figure 9 displays the enhancement of the delay days, which is very narrowed to the actual receiving date. The study shows that 95% of the on-time tracking (OTT) or actual receiving dates are met. That implies that the delivery commitment of the selected suppliers is correct and the results are result-oriented. As a result, production units 1 and 2 are able to produce goods and ship them at the right time. The efficiency level of production units 1 and 2 has increased by 15%–20%, which is shown in Figures 10 and 11.

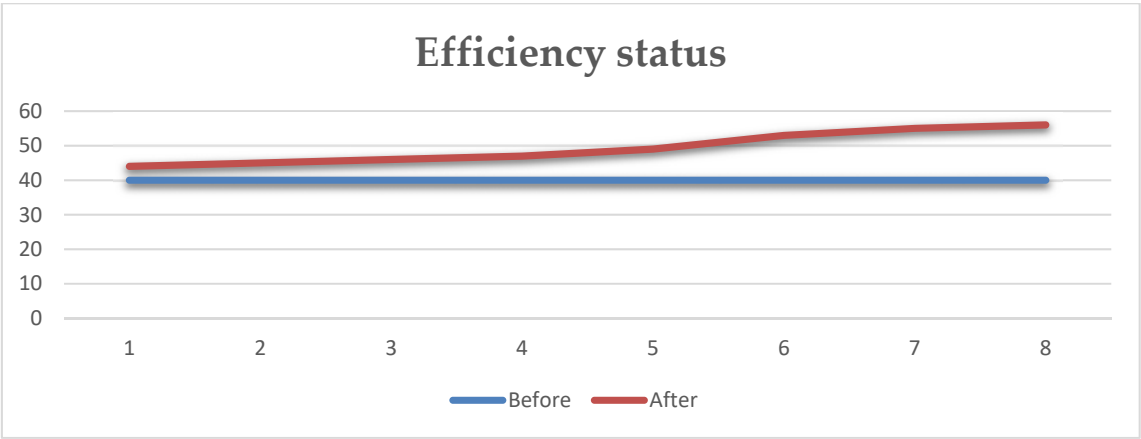


**Figure 10.** Comparison of efficiency improvement status (PU-1)

The comparison of the efficiency improvement status while purchasing the materials from conventional suppliers and the best results after sourcing the raw materials from the right suppliers at the right time is shown in figures 10 and 11 for the production units 1 and 2 successively. Tables 1, 2 ,3 and figure 2 ,3 data have been analyzed from appendix A1,A2,B1, and B2.

been analyzed from appendix A1,A2,B1, and B2.

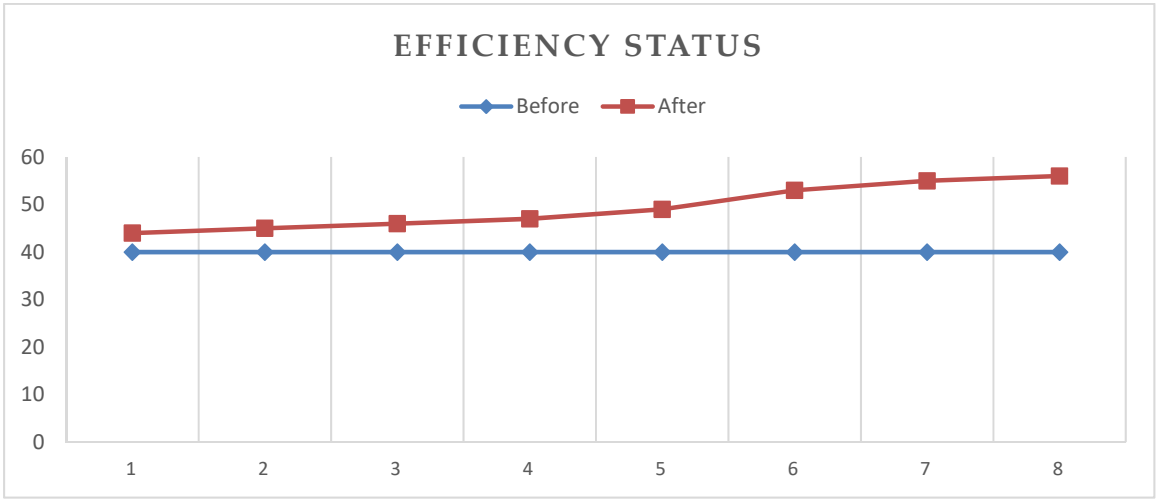


**Figure 11.** Comparison of efficiency improvement status (PU-1)

**4. Conclusions**

The goal and ambition of the apparel manufacturing sector is to make money by lowering costs across the supply chain. The majority of the product's cost is made up of materials rather than manufacturing costs (CM). Cutting and making fees account for 32 percent of the FOB (freight on board) price of any garment, with materials cost accounting for the remaining 68 percent. As a result, it can be difficult to make money using CM charges at times. Producers must optimize the entire supply chain in this case to save money on materials and transportation. Finding the right vendors to accomplish this procedure is one of the most difficult challenges for clothes manufacturers. As a result, selecting the right supplier is crucial. Because the amount saved is dependent by the time it takes to get materials and the resource's quality, In order to assess the current state of the materials supplied as well as the profit margin scenario in this study, data was collected from two textile manufacturing enterprises. 60 percent of materials are expected to arrive on time, with a potential loss of 38 percent for the manufacturing unit if materials are not delivered on time. In this case, the manufacturers are unable to deliver the goods on time. Consequently, a manufacturer will be unable to pay the wages of its employees within the specified time limit, meaning that the improved

working environment will be lost. As a result, the analysis is complete and a conclusion can be made. The dimensions analysis approach is used to define criteria so that the best provider may be chosen at the correct time to provide the best service in terms of delivery, quality, and price. The efficiency of the chosen production unit is substantially increased because the supplies are purchased from the top vendors. The rate of on-time delivery has grown considerably compared to the previous status since the proper supplier was chosen. The study for the correct supplier's selection could be premeditated by implementing software which would be more user friendly while analyzing supplier criteria and selecting the best one.

**Data Availability Statement:** The basis data supporting the results of this research are stated in the manuscript.

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**Appendix A1**

| Buyer | Style | Inhouse date | Actual Inhouse | No. of delays | Delay Improvement | Earliest Time | Late Time | Effects on Mode of shipment |
|---|---|---|---|---|---|---|---|---|
| Gemo | 201 | 5/5/21 | 5/4/21 | 1 | 0 | 4/28/2021 | 5/5/2021 | Sea |
| Gemo | 202 | 5/5/21 | 5/9/21 | 4 | 0 | 4/28/2021 | 5/5/2021 | Sea |
| Gemo | 203 | 5/5/21 | 5/4/21 | 1 | 0 | 4/28/2021 | 5/5/2021 | Sea |
| Gemo | 204 | 5/5/21 | 5/9/21 | 4 | 0 | 4/28/2021 | 5/5/2021 | Sea |
| Gemo | 205 | 5/24/21 | 5/26/21 | 2 | 0 | 5/17/2021 | 5/24/2021 | Sea |
| Gemo | 206 | 5/24/21 | 5/26/21 | 2 | 0 | 5/17/2021 | 5/24/2021 | Sea |
| LPP | 207 | 5/13/21 | 5/25/21 | 12 | 3 | 5/6/2021 | 5/13/2021 | Air |
| LPP | 208 | 5/13/21 | 5/31/2021 | 18 | 7 | 5/6/2021 | 5/13/2021 | Air |
| LPP | 209 | 5/13/21 | 5/31/2021 | 18 | 0 | 5/6/2021 | 5/13/2021 | Air |
| LPP | 210 | 5/13/21 | 5/27/2021 | 14 | 8 | 5/6/2021 | 5/13/2021 | Air |
| LPP | 211 | 5/13/21 | 4/15/2021 | 28 | 10 | 5/6/2021 | 5/13/2021 | Air |
| LPP | 212 | 5/20/21 | 6/13/21 | 24 | 0 | 5/13/2021 | 5/20/2021 | Air |
| LPP | 213 | 5/20/21 | 5/27/2021 | 7 | 0 | 5/13/2021 | 5/20/2021 | Sea |
| LPP | 214 | 5/20/21 | 4/15/2021 | 35 | 10 | 5/13/2021 | 5/20/2021 | AIR |
| LPP | 215 | 5/20/21 | 5/25/21 | 5 | 0 | 5/13/2021 | 5/20/2021 | Sea |
| LPP | 216 | 5/20/21 | 5/31/2021 | 11 | 0 | 5/13/2021 | 5/20/2021 | Sea |
| LPP | 217 | 5/6/21 | 6/13/21 | 38 | 10 | 4/29/2021 | 5/6/2021 | Air |
| LPP | 218 | 5/6/21 | 5/25/21 | 19 | 7 | 4/29/2021 | 5/6/2021 | Air |
| LPP | 219 | 5/6/21 | 5/31/2021 | 25 | 7 | 4/29/2021 | 5/6/2021 | Sea |
| LPP | 220 | 5/20/21 | 5/31/2021 | 11 | 0 | 5/13/2021 | 5/20/2021 | Sea |

**Appendix A2**

| Buyer | Style | O.Qty | Ship Qty | Unit price | Total Income | Air cost /pcs | MC Req | CMC/day | Total cost/day | Prod/day/line | no of days to complete | Total cost | Profit/loss |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| LPP | 207 | 7890 | 7890 | 0.2 | 1578 | 0.25 | 23 | 24 | 552 | 4000 | 1.9725 | 3061.32 | -1483.32 |
| LPP | 208 | 9000 | 9000 | 0.25 | 2250 | 0.25 | 26 | 24 | 624 | 2700 | 3.3333 | 4330 | -2080 |
| LPP | 209 | 8500 | 8500 | 0.27 | 2295 | 0.25 | 27 | 24 | 648 | 2500 | 3.4000 | 4328.2 | -2033.2 |
| LPP | 210 | 10000 | 10000 | 0.27 | 2700 | 0.25 | 27 | 24 | 648 | 2500 | 4.0000 | 5092 | -2392 |
| LPP | 211 | 15000 | 15000 | 0.25 | 3750 | 0.25 | 26 | 24 | 624 | 2700 | 5.5556 | 7216.666667 | -3466.666667 |
| LPP | 212 | 20000 | 20000 | 0.2 | 4000 | 0.25 | 23 | 24 | 552 | 4000 | 5.0000 | 7760 | -3760 |
| LPP | 214 | 7000 | 7000 | 0.2 | 1400 | 0.25 | 23 | 24 | 552 | 4000 | 1.7500 | 2716 | -1316 |
| LPP | 218 | 8000 | 8000 | 0.2 | 1600 | 0.25 | 23 | 24 | 552 | 4000 | 2.0000 | 3104 | -1504 |
| LPP | 219 | 5000 | 5000 | 0.2 | 1000 | 0.25 | 23 | 24 | 552 | 4000 | 1.2500 | 1940 | -940 |
| | | | | | | | | | **20573** | | | **39548.18667** | **-18975.18667** |

**Appendix B1**

| Buyer | PO | Style | Fabric OTT | Actual Fab OTT | Actual Acc OTT | no of days delay | Delay Improvement | Consequences |
|---|---|---|---|---|---|---|---|---|
| LPP | 988026 | 1477G | 5/20/21 | 5/25/21 | 3/24/21 | -5 | 0 | Air |
| LPP | 988106 | 1479G | 5/20/21 | 5/31/2021 | 4/15/21 | -11 | 0 | Air |
| LPP | 961228 | 2129G | 5/20/21 | 4/12/21 | 4/18/21 | 38 | 5 | Sea |
| LPP | 988214 | 1897G | 5/6/21 | 5/31/21 | 6/20/21 | -25 | 0 | Air |
| LPP | 988192 | 1862G | 5/6/21 | 5/27/21 | 4/24/21 | -21 | 0 | Air |
| LPP | 988140 | 1861G | 5/6/21 | 4/15/21 | 5/24/21 | 21 | 3 | Air |
| LPP | 957647 | 3486I | 5/20/21 | 4/20/21 | 4/12/21 | 30 | 7 | Sea |
| LPP | 957648 | 3486I | 5/20/21 | 4/20/21 | 4/21/21 | 30 | 7 | Sea |
| LPP | 988042 | 1478G | 5/20/21 | 4/20/21 | 6/13/21 | 30 | 7 | Air |
| LPP | 988141 | 1861G | 5/20/21 | 4/15/21 | 5/24/21 | 35 | 7 | Sea |
| LPP | 961347 | 2326G | 5/20/21 | 5/27/21 | 6/10/21 | -7 | 0 | Sea |
| LPP | 988027 | 1477G | 5/27/21 | 5/25/21 | 3/24/21 | 2 | 0 | Sea |
| LPP | 961430 | 4708I | 5/27/21 | 3/20/21 | 3/21/21 | 68 | 10 | Sea |
| LPP | 988194 | 1862G | 5/27/21 | 5/27/21 | 4/24/21 | 0 | 0 | Sea |
| LPP | 988142 | 1861G | 5/27/21 | 4/15/21 | 5/24/21 | 42 | 7 | Sea |
| Max | UBKT01A | Mens Boxer Noos-hit-1 | 5/2/21 | 4/5/21 | 5/9/21 | 27 | 10 | Sea |
| Max | UBVS01A | Mens Brief Noos-hit-1 | 5/2/21 | 4/5/21 | 5/9/21 | 27 | 10 | Sea |
| Max | UBINVB01A | Button Boxer Noos-hit-1 | 5/2/21 | 4/5/21 | 5/9/21 | 27 | 8 | Sea |
| Max | UBKH01A | Mens Boxer Noos-hit-1 | 5/2/21 | 3/5/21 | 5/9/21 | 58 | 15 | Sea |
| Max | UBKH01B | Mens Boxer Noos-hit-1 | 5/2/21 | 3/5/21 | 5/9/21 | 58 | 15 | Sea |

**Appendix B2**

| Buyer | PO | O.Qty | Ship Qty | Unit price | Total Income | Discount @ 3 % | MC Req | CMC/day | Total cost/day | no. of days req for prod | Total cost | Profit/loss |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| LPP | 988026 | 5000 | 4950 | 0.2 | 990 | 29.7 | 23 | 24 | 552 | 2 | 1133.7 | -143.7 |
| LPP | 988106 | 5000 | 4950 | 0.2 | 990 | 29.7 | 23 | 24 | 552 | 3 | 1133.7 | -143.7 |
| LPP | 988214 | 5000 | 4950 | 0.2 | 990 | 29.7 | 23 | 24 | 552 | 4 | 1133.7 | -143.7 |
| LPP | 988192 | 5000 | 4950 | 0.2 | 990 | 29.7 | 23 | 24 | 552 | 5 | 1133.7 | -143.7 |
| LPP | 988140 | 5000 | 4950 | 0.2 | 990 | 29.7 | 23 | 24 | 552 | 6 | 1133.7 | -143.7 |
| LPP | 988042 | 5000 | 4950 | 0.2 | 990 | 29.7 | 23 | 24 | 552 | 7 | 1133.7 | -143.7 |