

Role of Information in Optimizing the Supply Chain : A Case Study on Arun Leather**Naman Shrivastava****Assistant Professor****Acropolis Faculty of Management and Research, Indore****Abstract**

The case focuses on the Arun Leather, a mid size leather production unit located in the industrial area of Dewas, MP. The case is based on the supply chain malfunctions of the Arun Leather. It tells about the situations when a small error at one end can lead to disastrous consequences. From a successful leather manufacturer to a struggling production unit, Arun Leather depicts the need for consultation from an expert and showcases the feature that the top-management should be flexible in its thinking and perspective of the employees.

The case also highlights personal traits of an entrepreneur who accepted the weakness in his employees and like a good leader stood with them in the tough times. It shows that embracing new technology is vital now for any organization to survive the competition in today's market scenario.

The case findings lead to the conclusion that modern business scenario can't function without information technology and how IT has revolutionized the way we go about our businesses.

Role of Information in Optimizing the Supply Chain : A Case Study on Arun Leather

For Ranjeet Kumar, a normal day at Arun Leather begins with him monitoring the stocks of the leather produced the previous day and planning for the day ahead. His routine has never been different for the past two years. The factory located in an industrial area boasted of the modern machines and equipments available for the leather industry. But now for the past 4 months despite this mechanical superiority the factory was going steadily in losses. The inventory was piling up, many orders were getting cancelled and few others were not being delivered. The top management had asked Ranjeet to find the solution to this problem. It had been two weeks into him checking for errors in the system but he came up empty handed. He asked the management to hire external consultants and thus Roshani Consultants were called in for help.

Background-

The company was established by Mihir Devnath in the year 1995. He named the company in the name of his son Arun Devnath. Mihir was an entrepreneur and had dreamt of owning his own factory since an early age. After graduating from Bhopal he worked with some big manufacturing names like *Modi Mills and S. Kumar* for eight years. His experience with garment and accessories manufacturing industries gave him the valuable insight on handling the intricacies that his business of leather presented. Mihir's struggle began from the obtaining the license from the Indian Government. The leather business had the religious turmoil waiting to unleash as it involved the usage of cow skin for the manufacturing process. Any miscalculated step could result in his complete shutdown.

Mihir established his factory in the industrial area of Dewas, a city almost next door to the economic capital of Madhya Pradesh- Indore. The main hurdle before Mihir stood as the availability of raw material- the animal skins of cow, sheep and goat- the technical name for it being "*Wet Blue*" in the leather industry.



Wet Blue Sheet

The entire process of leather manufacturing is divided in five major operations-

- ❖ Raw Material Processing
- ❖ Shaving
- ❖ Dyeing
- ❖ Setting
- ❖ Crusting
- ❖ Finishing
- ❖ Warehousing

After going through these processes the raw hide from animal is ready to be converted to products like shoes, purses, wallets etc. Each operation is a long and time consuming process where each step is carefully planned and executed. Mihir had people specializing in each of these departments with an experience of 5-6 years. The capacity of the plant was initially at twenty five thousand square feet of leather per day which with advancement in technology and manpower reached almost fifty thousand square feet each day. Factory being located in a special economic zone provided Mihir cheap labor. The labor was available in the flexible timings and the payment scale was not too high. The plant was the first leather industry establishment in Dewas and thus attracted people seeking job in the manufacturing industry. Mihir also provided the bus facility to the employees from neighboring villages of Kshipra, Mangliya and Dakchaya and in later years extended this till Indore. The growth was slow but steady till year 2000. Mihir then planned to go international and the trips to leather importing countries began.

Expansion and Emergence of Problem-

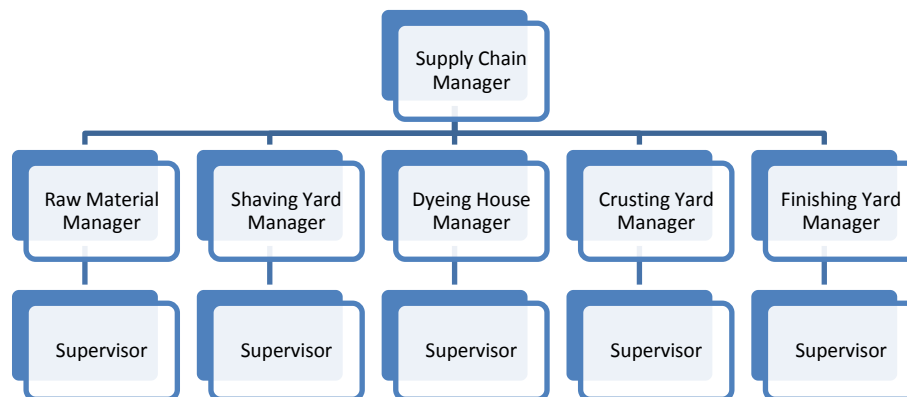
Mihir made deals in the majority of importing countries like USA, Germany, France and Italy. The deals allowed him to obtain special grants from the government and thus the growth of the company rose sharply. During the year 2007 Mihir's son Arun entered the business and soon established the Marketing and Sales division headquarters at Mumbai.

The reason of Marketing and Sales being far from manufacturing point was that the majority of products were shipped from Mumbai. The economic capital not just offered better publicity but also attracted more customers. The initial months of this Mumbai- Indore system worked fine but then started the piling of inventories at the manufacturing end. The problem began taking toll and the warehouses flooded. The foul smell of the decaying skin gave workers horrendous conditions. The orders came but

the delivery deadline was not met. It was as if someone was pulling them back with an invisible cord. The factory workers did overtime but yet the scenario did not change.

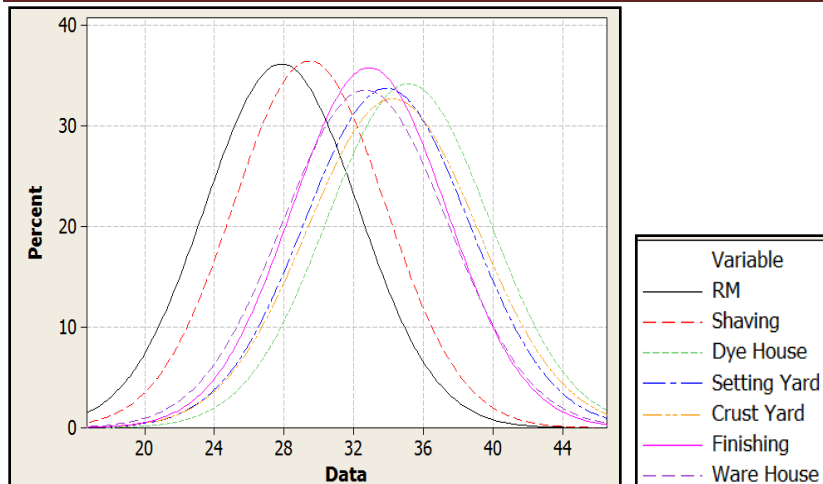
Combing through the Supply Chain-

The problems caused stir and Mihir tasked the managers to look into the problems that were causing the delay in the deliveries. The organizational structure of the leather plant is given below-



The process to look for the flaws began from the supervisor level and went on till the supply chain manager. These were the managers who had risen in the hierarchy of the factory. They were from the typical 1990's Indian corporate scenario where the ego of a person was supreme; the blame game at a high and only experienced was allowed speaking even though the subordinate was right. They were not the tech-savvy managers that we now find at modern industries.

The managers of the departments started searching for flaws in their employees and machines. The department heads met every day discussing the developments of the analysis. The analysis took time and resources of managers and the production further suffered. The overtime that managers did made them irritable at work the general morale of the factory began to deteriorate. The supply chain department heads prepared a report, graphically which can be summarized as the image below-



The perplexed managers found the departments working in synchronization as the graph shows. This unusual condition led to the appointment of Roshani Consultants to help them understand the situation and the trouble they were facing.

Roshani Consultants-

Roshani Consultants Ltd. was a startup organization based at Indore. A company started by five MBA graduates who specialized in Production and Operations Management. They started this company in the year 2011 and had few big shot companies to boast for. They were a specialist in Six Sigma and Lean Management, 5S, Kaizen and Supply chain optimizations. Their supply chain consultation with *Hydroquip International* got them recognition and they started landing bigger clients. *Hydroquip International* was name to be reckoned with in the region. They had tremendous presence and the major hydraulic equipments of the neighboring industries came from them.

The consultants were approached by Arun Leather for their help in the identification of flaw and providing optimum solution for smooth functioning.

Identification of Flaw-

Roshani Consultants started their analysis of the manufacturing process: starting with the Raw Material Department till the Warehousing stage. They checked each of the department for functionality issues and reached the similar conclusion. The departments were indeed synchronized. It was in marketing department investigation when one of the consultants saw a date and time stamp on the updation sheet of the order placed.

The consultant took the sheet and called up his colleague in Mumbai, Sales and Marketing Department. On comparing the sheet of same order at the Mumbai office the time stamp was found to be a week

older. Now the problem dawned upon them. It was the problem of updation at the right time. The mismatch of time stamp allowed to identify the flaw of lack of updated information at the Dewas manufacturing plant.

Impact and Rectification of the Flaw-

The impact of this 15 days delay was now clearly apparent. The raw material department placed order for animal hides 15 days after the actual order was booked by Mumbai office. The system updation from Mumbai to Dewas plant was done once in a week. This caused the delay in placing raw material order which in continuation caused the delay in the subsequent operations and the total number of days summing up to almost 15 by the end of the production cycle.

The inventory of the material was also apparent as the material arrived by the time delivery was to be made and since the clients were cancelling the orders; that material was now useless. This small flaw in the dynamic updation of information had caused company lakhs of rupees worth of order. Mihir was briefed on the scenario in the lack of dynamic updation from Mumbai to Dewas.

He was suggested by Roshani consultants to get dedicated Management Information System software built for his company. This would allow for the managers to get updates on orders placed on the same day and thus will be able to stick to the timeline. The supply chain will then be dynamic and will be hassle free.

Road Ahead-

Arun Leather implemented their MIS by the end of that year and the sales began to be on time again. The orders began to flow in and the deadlines being met. The company success and the dedication of the employees prompted Mihir and Arun to set up another plant in southern India. They have appointed a team of experienced managers to look for suitable location. They have asked Roshani consultants to provide him with advice on the setting of a new world class leather mill. Arun plans to get orders from fashion giants like Armani and Versace. With the dedication and support that they have the dream is now just within reach.