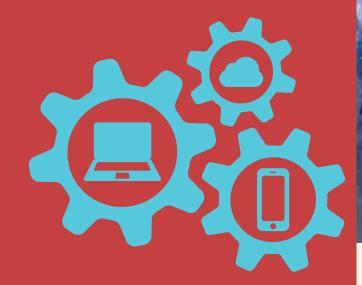


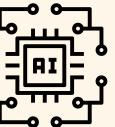
# PRAXEIS NEWSLETTER

2023

















### **ABOUT PRAXEIS CLUB**

PRAXEIS Club of Alliance University is a student-driven club with the initiative of collaborating on both academics and extracurricular activities related to academics where inputs are taken from various academic staff and with experts of various corporate sectors.

This helps students to engage in activities that will help in value addition in academics. Students are encouraged to participate in various activities which will help them in corporates by molding them.

This club will organize various workshops, guest lectures also activities that will keep students updated in day-to-day life.



# "INTERNSHIP INSIGHTS OF INFORMATION SYSTEM AND OPERATION MANAGEMENT" JULY BATCH -2022 OF "MANUFACTURING SECTOR"

### B.L. Agro Industries L.T.D. Bareilly

### production and loading department

-Sarthak Agarwal

In my 8 weeks of internship process, I worked in B.L. Agro Industries L.T.D. Bareilly. I was assigned 4 weeks in production and 4 weeks in the loading included department, The nature of the work production management/plant operations overseeing the whole from process procurement of edible oil to finished goods i.e. 200ml,500ml,11 of purest edible oil(mustard oil). Managing the three different lines of production Line i.e. Line 1 includes the production of 200ml,500ml,11 and Line 2 includes the production of 2l, and Line 3 includes the production of 5l bottles so synchronizing all the three lines according to the work order and managing the whole operation under plant operation manager was my nature of work.

Working in different shifts according to the work order was sometimes required i.e. successfully operating the production line from 10 am to 5 pm and 11 pm to 6 am and also managing the staff required for full completion of the work order.

Not only managing the production but also packaging which includes carefully stacking the cases according to batch no and sending them to inventory.

Overseeing the wellness of the machines understanding the HMI(Human Machine Interface) for production line and continuously working on that was my KRA throughout my internship process.

After completing my whole 8 weeks of internship time my learning outcome is as follows,

Got a good grasp on how the organization works in completing customer demands.

I've learned when to produce based on make-to-stock and make-to-order techniques.

Can plan which production lines work on which days of the week according to the work order given by the upper management.

Understood how the communication works between upper management and lower management and what all things a POC (me) between them has to keep in mind.

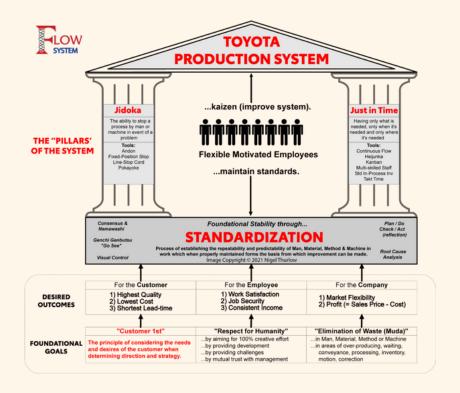
During my internship tenure, I was able to learn a lot of things but it was also fruitful to the organizations in handling not all, but some of the tasks single-handedly.

### Toyota Kirloskar Motor Pvt. Ltd

### The Toyota Production System (TPS)

- Subir Roy

The Toyota Production System, also referred to as TPS, is a strategy that helps organize the manufacturing and logistical aspects of a business. Developed by the Japanese auto manufacturing company Toyota, this Lean method has a special focus on auto manufacturing. However, it has been modified to work with other manufacturing outlets and businesses as well. The system helps bring improved organization efforts to a facility, reduces waste, and can improve the bottom line of companies that choose to adopt it.



Whenever learning about TPS, it's common to visually depict the system as a house. A well-made home often still must undergo renovations as time passes whether that be because of outdated materials or broken appliances. TPS is made to achieve the same goals regarding updating old and worn-out systems for ones that are new and improved. Applying the Toyota Production System into any business model makes for "living" in that metaphorical house better for those within the organization.

To understand TPS, it is important to learn about the principles used in this system. Each of the following fourteen principles are integral to the success of the Toyota Production System:

- Avoid overproduction with pull systems. This is the basic idea of Just-in-Time production as it reduces inventory and enables the company to satisfy the customer's demands.
- Build a positive company culture that assists the company with fixing problems as soon as they occur. This will help create quality product the first time around.
- Develop excellent people and teams to create a stable company culture.
- Implement a long-term philosophy even if it sacrifices short-term financial goals of the company.
- Level the workload to prevent burnout, this is referred to as Heijunka or "work like a tortoise, not the hare."
- Only use tested technology. The point here is to use technology to support those who are working rather than replacing people with technology.
- Respect all suppliers and stakeholders as they are an extension of the business.
- Standardize workplace tasks to give employees a reliable job method. This works to eliminate any confusion and boosts efforts for continuous improvement.
- Teach leaders to live and pass on the TPS philosophy. A leader is a role model for everyone else working in the facility, which in turn positively affects the established company culture.
- Use visual tools to indicate special procedures, warn employees of dangerous conditions, and to create a more organized workspace.

- Work to create a continuous flow. This in turn will help to bring production problems into view.0
- Observe and reflect on improvements by using techniques such as Gemba. Taking a trip to the factory floor to converse with workers reveals opportunities for improvement.
- Make educated decisions but implement changes quickly. Make sure to explore all possible alternatives before coming to a consensus on the final decision.
- Reflect on the process regularly. Staying true to additional Lean techniques such as Kaizen, Six Sigma, Kanban, and the Shingo method will only benefit the business in its quest for continuous improvements.

When implemented properly, TPS and its corresponding fourteen principles can have a positive impact on the entire manufacturing process. Aside from the above principles that the Toyota way is built upon, TPS also relies on two other primary concepts: Jidoka and JIT production.

### Terminology + Tools Used in TPS:

Most people quickly find that there are many unusual terms used in TPS. These are typically Japanese terms used to describe a specific concept or process that is important to the overall success of a project or system itself. Learning what some of these terms are and what they mean can help avoid a lot of confusion and other issues, both during the initial implementation and long into the future. Some of the most common terms used are:

- Andon This term is literally translated into signboard and is used to describe a large board, often a TV or computer monitor, that is used to alert those in a problem at a given location in the production process.
- Gemba Gemba means "the actual place" and is used to describe a management concept where the supervisors must spend time on the actual shop floor where the employees are working. This gives them a much better view of what is happening, what problems there are, and where the improvement opportunities exist.

Muri - This means overburden.
 Overburdening a person, a machine, or anything else can lead to serious problems. Some companies are tempted to push people or things to their limits, but this only leads to unexpected problems over time.

- Mura Mura simply means unevenness and is a type of waste or defect in a product. It can also be used when discussing how different shifts or different people perform the same task differently.
- Muda This is a general term that means waste.
   Muda is the first of the 3Ms regarding waste.
- Seiri This means to sort or remove anything that is not necessary to the process. Seiri is the
  - first of the 5 S's in 5S.
- Seiso The third S is to clean and/or inspect. Keeping a facility clean can help avoid many problems and inspecting work areas is important way to identify problems and address them before they cause downtime



- Seiketsu This S means to standardize. Making sure things are done in the most efficient way possible no matter where the work is being done, who is doing it, or when, is the goal of this term.
  - Shitsuke Finally, the last S in 5S is to sustain. Many companies make improvements and then move on without doing anything to ensure the improvements are sustained over time.
  - Seiton The second of the 5 S's is a term that means to organize. Keeping a facility organized is essential to eliminating waste.

### Kanban system:

Kanban, the "Just-in-Time" manufacturing system of TPS is a strategy for scheduling in the manufacturing process. Rather than having a massive inventory of each part that is required for the products being made, systems running the Kanban Toyota strategy will have only as many as are needed for a specific amount of time.

When the amount of a certain part is low, the Kanban system will alert the supplier so they can deliver more. When running perfectly, the new shipment will have the parts arriving at the production line where they are needed just as the last one was being used. Operating in this way allows a company to reduce the risk of being stuck with a large amount of a certain part if the demand suddenly dries up. It also eliminates the need to have large areas for storing these types of parts.





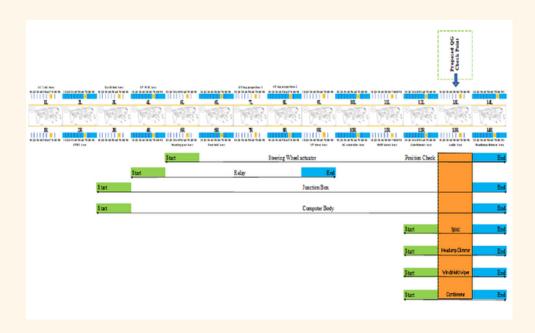
### Value Stream Mapping:

Value Stream Mapping (VSM) is a lean manufacturing technique that originated from the Toyota Production System (TPS) and is widely used in Total Quality Management (TQM) practices. VSM is a visual tool that helps organizations analyze, understand, and optimize the flow of materials, information, and activities required to deliver a product or service to customers.

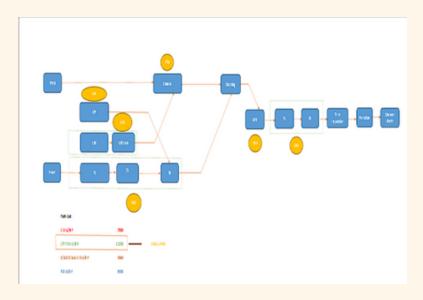
# Key aspects of Value Stream Mapping in the context of Total Quality Management (TQM) include:

Visual Representation: VSM uses visual symbols and diagrams to map the entire value stream, which includes all the steps, processes, and activities involved in delivering a product or service, from the raw material stage to the end customer.

One of the visual representations of Instrumental Panel Line/IP Line in TKM Assembly Plant-



ShapeShapePrecedence Diagram of TKM Assembly Plant-1:



Exploratory Qualitative Study on the Potential Impact of Introducing IoT Technology in Inventory Management within the Print Media Industry

-H SYED SHAHBAZ

During my internship at Outlook Group, I was able to participate in a variety of key tasks that gave me significant insights into the company's operations and strategic ambitions. I worked on four major aspects during my internship: aggregate planning, supply chain design, vendor management, and a summer internship project. This overview summarizes my contributions as well as the major takeaways from each work.

- 1. Aggregate Demand Planning: I actively took part in the process of matching production capacities with demand estimates in the area of aggregate planning. I helped create strategies to balance inventory levels, optimize resource allocation, and reduce production costs by analyzing data. This assignment improved my analytical abilities and gave me the chance to see how operational planning and corporate goals might be coordinated practically.
- 2. Supply Chain Design: Working on supply chain design was a fantastic learning experience for me. I was in charge of mapping out the entire supply chain, assessing various transportation and distribution strategies, and identifying ways to improve efficiency and minimize lead times. Working out this task provided me with insights into the intricacies of developing a resilient and flexible supply chain network.
- 3. Vendor management: This task exposed me to the crucial aspect of maintaining strong relationships with suppliers. This task provided me with insights into the significance of effective vendor collaboration and its direct impact on maintaining a seamless flow of materials and resources, ensuring timely deliveries and high-quality products.

4. Summer internship project: As a culmination of my internship, I undertook a comprehensive summer internship project that required me to draw upon the knowledge and skills I had acquired throughout my internship journey. The 4th and the final task was the preparing a summer internship report where the topic was given by the company itself.

To sum up, my time spent interning at Outlook Group was a transforming experience that gave me a comprehensive understanding of the business' operations, dynamics of its supply chain, and methods for making strategic decisions. I gained a variety of skills through the duties of aggregate planning, supply chain design, vendor management, and 39the summer internship project that I will surely use in my future work in operations and supply chain management. I am incredibly appreciative of the chance to develop professionally while working at Outlook Group.

## Stellantis Production Way in FIAT INDIA AUTOMOTIVE PVT LTD

-BADRINARAYAN P

FIAT INDIA AUTOMOTIVE PVT LTD IS AN Automobile organization in Pune, which manufacture JEEP and TATA cars as it is a joint venture between FIAT and TATA

Cars which they manufacture are Compass, Meridian, Commander, Wrangler, Grand Cherokee, Nexon.

Stellantis is the organization formed after the merger of FCA and PSA group.

Stellantis Production Way is the company's global comprehensive and structured production approach, SPW aims to achieve the highest level of performance to deliver exceptional value to our customers. SPW leverages the best practices of World class Manufacturing (WCM) and PSA Excellence system (PES) that preceded it. Its about working the right way with everyone focused on best-in-class results as well as employee safety, human development and environmental sustainability.

### Vision -

- To define, deploy and continuously improve the best production system in the industry in order to realize the aspirants of Stellantis.
- · We aim to produce vehicles safety and in environmentally friendly factories.
- We want our customers to experience exceptional quality and value in our products.

### Mission -

- Drive best-in-class performance in health, safety, quality, delivery, cost and environmental metrics.
- · Continuously enhance the skill of our employees to rapidly and effectively deploy best-in-class processes.
- Empower everyone to apply the stellantis production way and ensure its application.
- Share best practices, model areas, digital strategies, and benchmarks rapidly.
- Improve methods and tools of the production system to frugally maximize the added value.

### SPW Domains

- Want To Be
- Cost Deployment
- Health & Safety
- Customer Experience
- Environment
- Continuous Improvement

- Workplace Organization
- Maintenance
- Energy
- Logistics
- People Development
- Launches

### Want To Be

- Providing and leveraging benchmark data within and between the plants to beat the external competition.
- · Setting ambitious targets to ensure the company reaches competitiveness in safety, Quality, Cost, Delivery and Environmental.
- Providing guidelines to help managers make a real breakthrough and achieve success.

### Cost Deployment -

- Establishing a rational and systematic program to reduce waste and losses through the collaboration between Manufacturing and Finance Identifying waste & losses and evaluating the economic impact to produce a list of opportunities for Total Production Cost reduction
- · Addressing resources and managerial commitment towards the activities with the greatest potential
- Supporting the route map for yearly objectives (Scorecard or "Contract") and Want To Be improvement plan.

### Health & Safety -

- Providing world class Health & Safety for everyone, everywhere, everytime Preventing fatality, disability, injury and occupational illness.
- Promoting Health and Wellbeing to support a motivated workforce.
- Empowering everyone to contribute to the improvement of the workplace Making Health and Safety a part of everything we do.

### Customer Experience -

- Delivering products and services that guarantee maximum customer satisfaction by exceeding expectations.
- · Involving each and every level to support manufacturing quality.

### Environment -

- · Providing effective environmental management with engaged environmentally conscious people.
- · Contributing the company's vision of minimal use of raw materials, zero waste, zero emissions, fully using sustainable materials, enhancing biodiversity at our sites and preserving natural habitat.

### Continuous Improvement -

- · Make your activity visible and visual.
- · Solving the problems that appear.
- · Standardizing and capitalizing on gained knowledge.
- · Training yourself and others to do it.

### Workplace Organization -

- · Systematic improvement of workstations.
- · Creating effective workstations for operators, pursuing maximum added value, zero waste, and zero defects through standardization and effective visualization.
- · Helping each plant improve productivity and profitability with the highest levels of Safety and Quality.

### Maintenance –

- Driving a zero breakdowns and zero defects mentality to ensure high Overall Production Efficiency (OPE) and effective asset management.
- Applying the maintenance fundamentals and monitoring the maintenance KPI's, which were defined to drive efficiency and effectiveness in the planning and execution of Maintenance activities.
- · Developing maintenance and production employees' capabilities to apply methods and tools.

### Energy -

- · Managing and controlling overall energy performance through smart energy solutions. Driving world class results in specific energy consumption & costs.
- Ensuring a carbon neutral future and energy reduction.

### Logistics -

- Providing an efficient flow, aligning production variables & reducing inventory by ensuring the right parts, at the right time, at the right place at right cost.
- · Continuously reducing lead time using the minimum amount of company resources (eg stocks, manpower. equipment) without affecting service level and total cost.

### People Development -

- · Development and enhancement of knowledge and skills.
- · Motivating and engaging all employees.
- · Creating an environment where people are encouraged to leam, develop and use their potential Supporting the business to reduce waste, improve efficiency, safety and quality.

### Launches -

- Defining and rigorously driving, within Manufacturing and with our partners from project teams, the organization and methodology to introduce new products in our plants.
- · Making sure that products are easy and safe to manufacture.
- Optimizing quality at each step of the manufacturing process.
- Minimizing the investments and designing equipment to be safe, reliable, easy Reducing the transformation cost, in line with plant Want To Be target.
- · 6 Shortening and reducing the cost of the launch phase.

My Role was to Study the whole process of manufacturing and understand the SPW (Stellantis Production Way) and help them in implementation of it in required area.

The area which was allotted to me was Indirect materials, which was adding huge cost to the inventory.

So to find all the materials whose ageing was above 5 years and suggest ways to remove them.

Overall it was very fun filled experience as I always wanted to work in an Automobile organization with the same time I got to learn many key things from the leaders of various departments.



