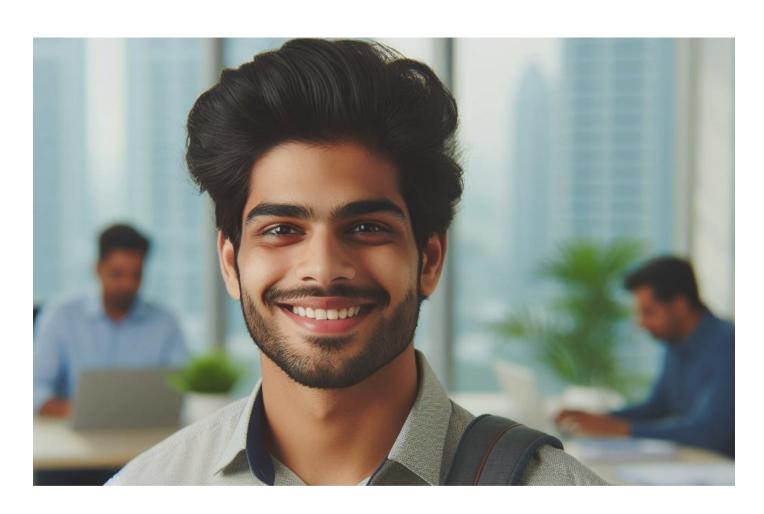
## **Production Scheduling**

**Presenter: Suyog Joshi** 

# MEET OUR PLANNER SAMPATH



#### HE GENERATES DAILY SCHEDULES



AND SAMPATH LOVES EXCEL

## THOUGH SAMPATH SMILES HIS LIFE IS NOT EASY

Fluctuating Demand

Strategic Goals



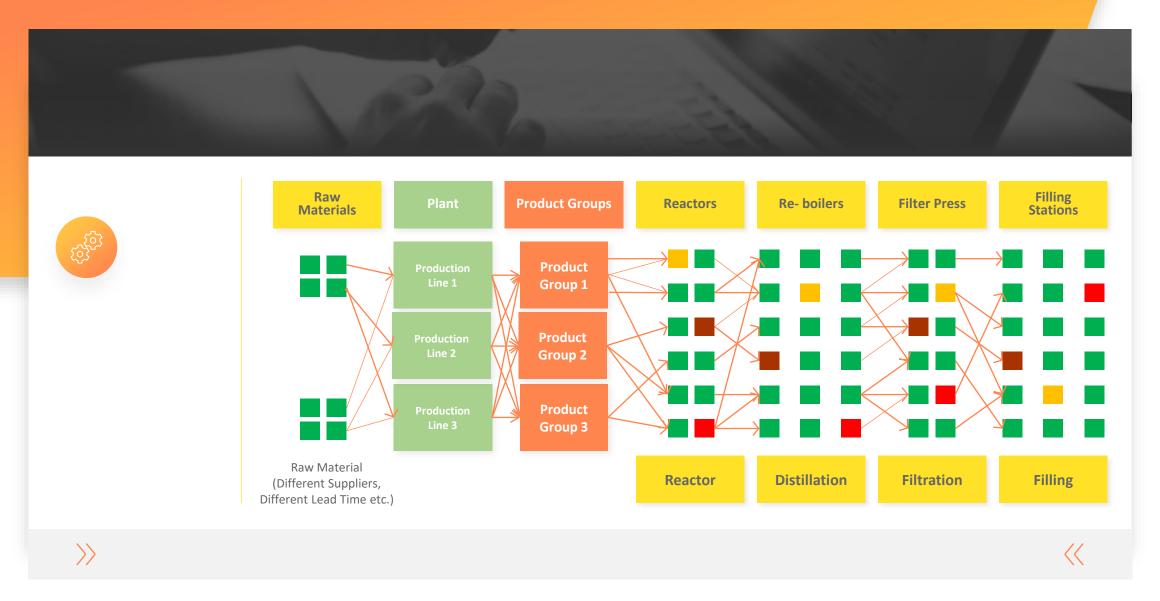
Delays in Tasks

Events on Shopfloor

Unplanned Resource Unavailability

Complex Product Mix

## LOOK AT SÁMPATH'S PROCESS ©



# INSPITE OF BEST EFFORTS SAMPATH'S BOSS IS NOT HAPPY



Unutilized Capacity 👢

Lower Throughput **J** 

Higher Cycle Times **J** 

Higher WIP |

#### CURRENT SCHEDULING SYSTEMS DO NO JUSTICE



Are independent of factory floor data



Do not account for resource constraints



Do not allow easy maintenance of sequencing And other master information



Do not account for indirect tasks and other Functions such as quality and maintenance





#### SAMPATH'S BOSS NEEDS NEW THINKING



NEW APPROACH

# IF SAMPATH'S BOSS IS SMART HE CAN INCREASE THE PRODUCTION BY

#### DOUBLE DIGIT PERCENTAGE

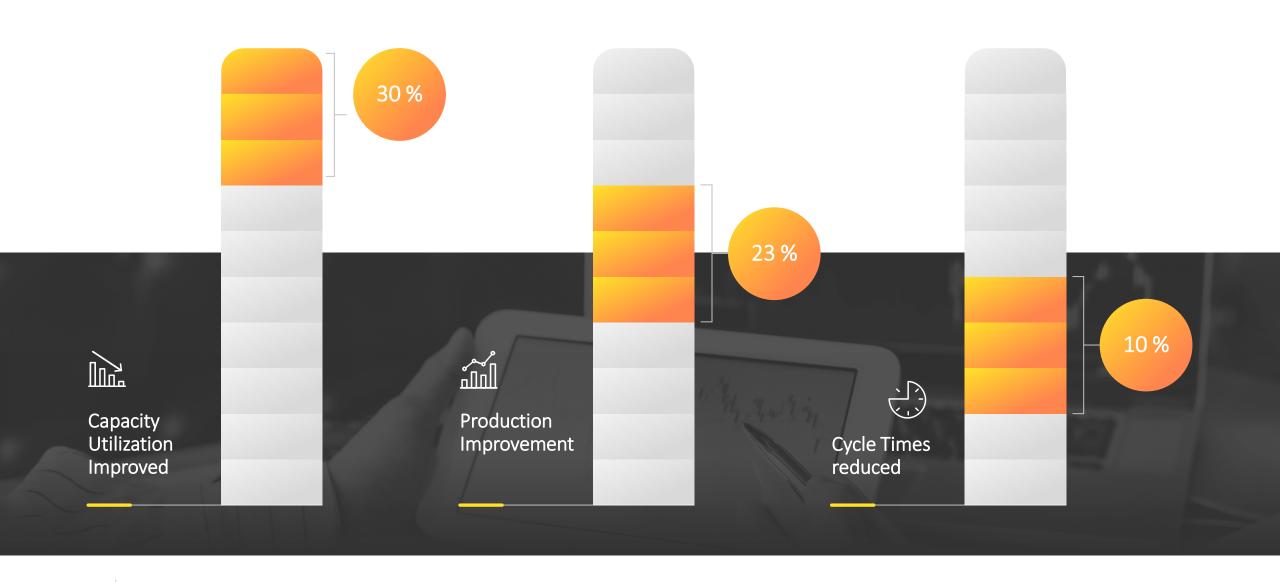
WITH LITTLE INVESTMENT IN SCHEDULING

#### HOW DID THIS HAPPEN

### 3 FACTORS

- 1. REMOVE BUFFERS
- 2. FASTER REACTION TO SHOP-FLOOR EVENTS
- 3. FAST & OPTIMIZED SCHEDULE AFTER EVERY EVENT

#### LIKE THIS PHARMA COMPANY IN EUROPE



#### HOW DOES SAMPATH'S BOSS START?

#### 1. DEFINE END VISION



## (1)



#### **OPTIMIZE REACTION TO EVENTS**

- Analytics based Recommendations on "Next Best Action" to events
- Manual and Auto Logging of Events
- Track Progress with Dashboards & Reports

#### MANAGE SCHEDULE DYNAMICALLY

- Constraints
- Objectives
- Bottlenecks
- Simulations

#### EASY METHOD FOR ENRICHING THE MASTER DATA

- Product
- Process Flow
- BOM/Recipe
- Sequencing

- Equipment
- Raw Material
- Manpower
- Skills

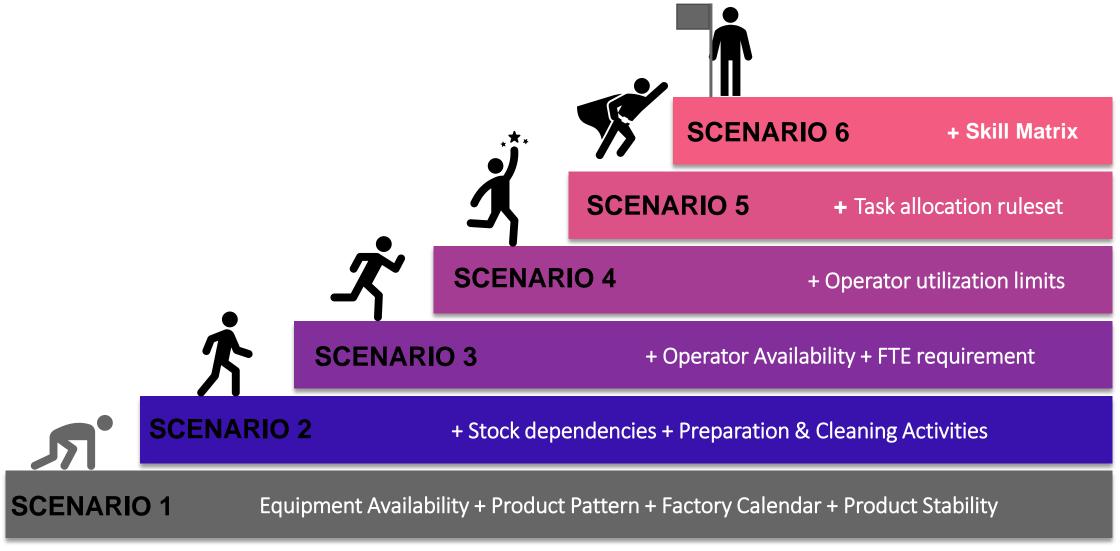
#### **USING THE POWER OF AI & IOT**

#### 2. GET MANAGEMENT BUY-IN

#### 3. CREATE MULTI-PRONGED PROGRAM

- A) MASTER DATA COLLECTION & DOCUMENTATION
- B) DIGITAL INTEFACING OF MACHINES THROUGH MIDDLEWARE
- C) IDENTIFICATION OF PILOT SITES
- D) IDENTIFICATION OF TIGER TEAM (HEADED BY SOMEONE WHO UNDERSTANDS PRODUCTION AND HAS OPENNESS TO LEARN IT)

#### 4. STEP BY STEP IMPLEMENTATION



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#### IS IT WORTH IT?

I WOULD SAY TOTALLY.

WHY?

# SHOW ME A DIGITALIZATION USECASE WHICH CAN GIVE MAXIMUM ROI IN SHORTEST AMOUNT OF TIME