ORGANIZATION NAME: **SKF**®

PROBLEM STATEMENT: Real Time Supply Chain

Component suppliers plan raw material procurement and their internal manufacturing processes as per the 'forecast' from SKF. Any delay due to manufacturing / dispatch of raw material due to machine breakdown, workmen absenteeism, over booking by customers with respect to capacity etc, can delay deliveries to customers in turn affecting final customers. A system to be developed to know real time status of all vital activities/ actions to customer & advance warning alarm should go off in case of any delays.

Team Name: **Zero2one**

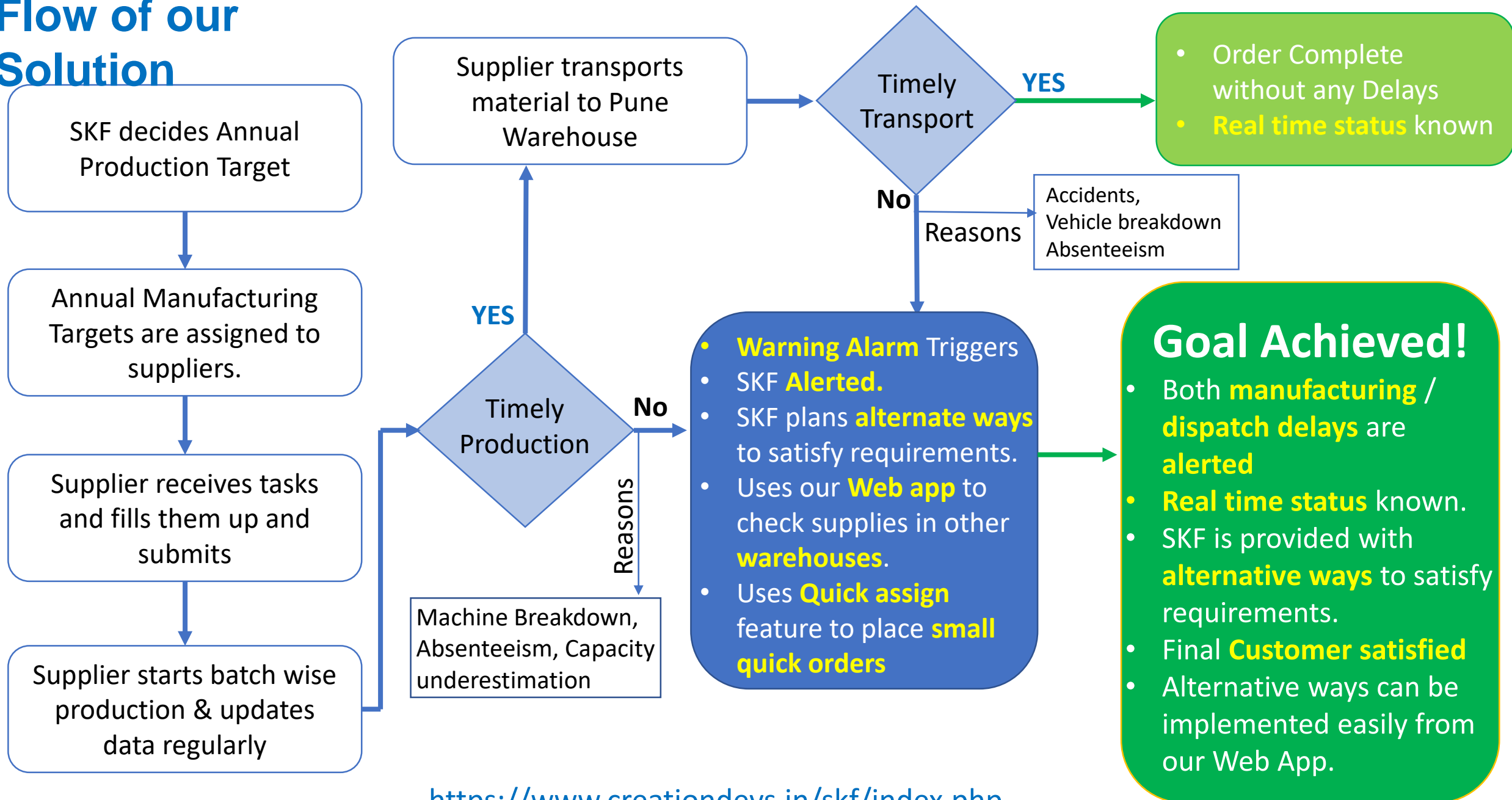Team Leader : Dheeraj Komandur   College Code: 1-3713389121

Solution

SKF Web-app supply chain management system.
(Live Website : https://www.creationdevs.in/skf/index.php   )
OR creationdevs.in/skf/

- **Communication** Channel b/w **SKF and Supplier** for functioning of Supply Chain.
- **Creates, assigns** and **manages** yearly targets and coordinates with supplier about production.
- **Alert System** tackles delays in **SCM with real time Status** of components.
- Total **SCM management system**

Flow of our Solution

SKF decides Annual Production Target

↓

Annual Manufacturing Targets are assigned to suppliers.

↓

Supplier receives tasks and fills them up and submits

↓

Supplier starts batch wise production & updates data regularly

→ **Timely Production**

YES → Supplier transports material to Pune Warehouse → **Timely Transport**

YES →
- Order Complete without any Delays
- **Real time status** known

Timely Transport — **No** / Reasons → Accidents, Vehicle breakdown Absenteeism

Timely Production — **No** →
- **Warning Alarm** Triggers
- SKF **Alerted.**
- SKF plans **alternate ways** to satisfy requirements.
- Uses our **Web app** to check supplies in other **warehouses**.
- Uses **Quick assign** feature to place **small quick orders**

Reasons → Machine Breakdown, Absenteeism, Capacity underestimation

→ **Goal Achieved!**
- Both **manufacturing / dispatch delays** are **alerted**
- **Real time status** known.
- SKF is provided with **alternative ways** to satisfy requirements.
- Final **Customer satisfied**
- Alternative ways can be implemented easily from our Web App.

https://www.creationdevs.in/skf/index.php

Technology Stack

Mobile App: Android (Java + XML), SQLite Database , Firebase.

Website : PHP , HTML , CSS ,SQL Database, JavaScript.

Advantages & Features

- **Easy to use** with good UX design;**small scale suppliers** with no SCM knowledge **use it with ease**.
- **Swift communication** between SKF and Supplier.
- Supplier Responsiveness Check(**Real-Time**).
- SCM Terminologies with **auto calculation** of columns.
- **Frequential Target calculations** and updates are provided on **timely basis**.
- **Auto Alert** to SKF and Supplier when **targets not achieved.**

- **Real-Time Warehouse Availability Check** without any Supplier Communication .
- **QuickAssign feature** to deal with any **delays** in the **Supply Chain**.
- **Master Chart** shows to all; Data can be **analysed** for further **interpretation**.
- **The Complete Supply Chain Management Software** for SKF and similar companies.
- Working Website: https://creationdevs.in/skf

Dependencies
- SKF Annual Production Plan
- SKF Bearing Profiles
- SKF Supplier Database
- Supplier Warehouse Information

Live Website : https://www.creationdevs.in/skf/index.php

Website Manual: **https://drive.google.com/drive/folders/1HRXX5hjx1wlTcJz8aWmzLq8wgo0ci6n8?usp=sharing**

Website essentials like username, password and website flow explained in Manual Link.

SKF Login

1. LOGIN

SKF Login
> User : **skf**
> Password: **password**

2. ASSIGN NEW ORDERS AND VIEW ORDERS

Supplier	Bearing Type	Bearing Part	Date of Order	
pune_supplier	Deep Groove	Seal	18-01-2019	View
belgaum_supplier	Cylindrical Roller	Outer Ring	18-01-2019	View
belgaum supplier	6207	Ball	18-01-2019	View

Bearing details

Bearing Profiles

Order details unfilled by supplier

Order details filled by supplier

Supplier Responsiveness Check

3. ORDER DETAILS

Project-Pune3

Bearing Type	Deep Groove
Bearing Part	Seal
Yearly Volume	150000
Frequency	10
Date of Order	18-01-2019
Supply Mode	B
Service Factor	1
Flexibilty Factor	4
Service Stock Level	18000
Replenishment Lead Time	10
Call of LDT	5

Assigned Order Specifications
- Real Time assigned order details can be checked.
- SCM Terminology ⟶ Familiarity
- Automatic Calculation of quantities based on factors provided

SUPPLIER LOGIN

Username : rajkot_supplier Password: password (other users mentioned in manual)

1. Supplier Order View

2. Supplier Filled Data Form

Orders:

Project-Pune1

Bearing Type:	Cylindrical Roller
Bearing Part:	Seal
Yearly Volume:	134000
Frequency:	12

Fill order

Project-Pune2

Bearing Type:	Roller
Bearing Part:	Cage
Yearly Volume:	120000
Frequency:	14

View/Update

- Shows all orders which are currently in production or **transit.**
- Orders are sorted based on **Date of Order**
- Filled data updated in **Real Time**.

- SKF can **access all data** i.e. SKF Order details + Supplier filled data on a single webpage **in real time**
- SKF can keep a tab on the **last date of modification** by the supplier.
- **Warehouse stock** of any particular part can be checked directly.

Fills order details for newly arrived orders

SKF can check when supplier has filled the data

Updates order details for previously filled orders

Forged Ring Stock	22
In Transit Forging	123
Turning vendor WIP	111
Finishing Ring Vendor	1455
In Transit Finishing Ring	1345
Finishing Ring Warehouse	11
Total Stock	12345
Last Receipt Date	2019-01-24
Rlt Given	

Update

Update data regularly to keep SKF notified

LIVE WEBSITE MANUAL :
https://drive.google.com/drive/folders/1HRXX5hjx1wlTcJz8aWmzLq8wgo0ci6n8?usp=sharing