

## Improving Production Efficiencies in Fresh Foods Industry using Wipro's Sub Daily Planning and Scheduling Composite Solution

### Sub Daily Planning and Scheduling Composite for Fresh Foods Industry

A key business challenge faced by Fresh Foods Industry today is the short timescales in which the business has to respond on a daily basis to changes made by the customers.

iSDPS is a composite solution with a set of easy to use functionalities to address the need of Sub Daily Production Planning and Scheduling, thus optimizing the production plans on a real time basis.

### Typical day in a life of a Fresh Foods Industry Planner

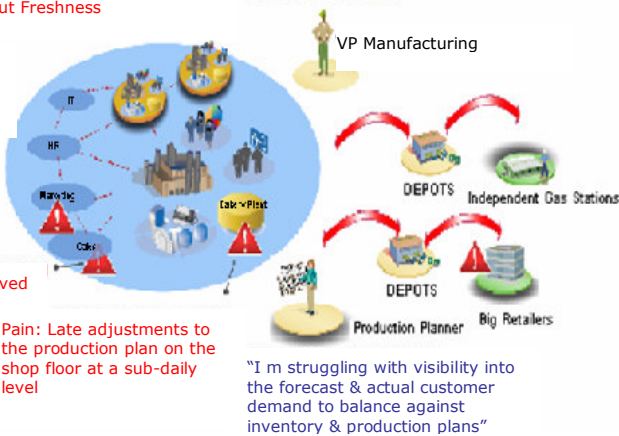
"I'm struggling with visibility into the manufacturing assets base to actively manage trade off between service levels & economies of scale (Cost)"

Pain: Customer complaints about Freshness

Pain: Forecast variance causes order Fulfillment gaps

Pain: Orders received at short notice

Pain: Late adjustments to the production plan on the shop floor at a sub-daily level



### Some Key Pain Points

- ❖ Forecast variance causes order fulfillment gaps
- ❖ Orders received at short notice; just 14-16 hrs before delivery
- ❖ Customer complaints about freshness
- ❖ Late adjustments to the production plan on shop floor at a sub-daily level

Production Planner: "I'm struggling with visibility into the forecast and actual customer demand to balance against inventory and production plans."

### How Sub Daily Planning and Scheduling Composite addresses Fresh Foods Industry Planner's Problems

The Sub Daily Production Planning and Scheduling Composite Solution is an application designed to sit over the standard ERP Platform which will update changes to the Production Plans with the demand changes that come in during the day of production. This is a joint initiative between Wipro and SAP AG. The initiative is unique as Wipro is partnering with SAP AG to build the solution as a part of CP Industry Value Network co-innovation program.

The Composite provides a consistent and simplified solution for managing the short term production planning process at all bakeries. The composite application has three modules namely Reporting, Simulation and Processing for helping the user update the changes.

- ❖ **Reporting Module:** This module displays the reports on the current demand and production plan situation to help user identify the production shortages on a sub daily basis.
- ❖ **Simulation Module:** In this module it is possible to see the current Sales order and the Process orders for the product. User will be able to simulate the capacity and material check for the changed requirement. Based on the availability of Capacity & Material, user can select the simulated version he wants to bring into effect and execute changes in Finished Goods & Semi Finished Goods Process Orders.
- ❖ **Processing Module:** It addresses an important requirement of Perishable Goods Industry for meeting Priority Shipments as using this module the user can reschedule the Production plan through user friendly screens.

# Business Solutions for CPG

The composite fills the white space of Sub Daily Production Planning / Scheduling in the Fresh Foods industry

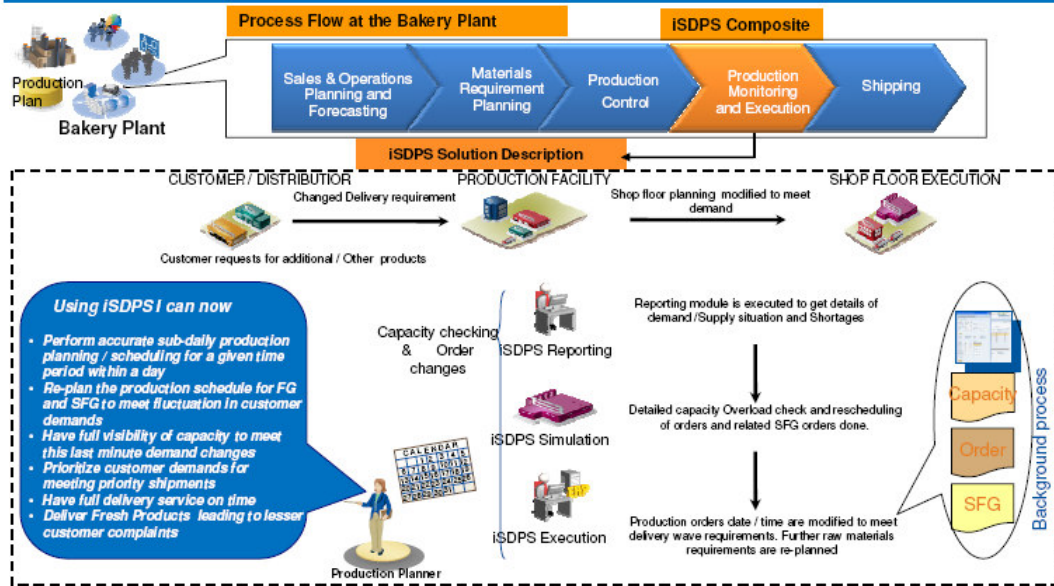


Fig: iSDPS Solution Description

## Business Benefits

- ❖ Increased freshness leads to better customer satisfaction
- ❖ Delivery service on time
- ❖ Full visibility status of current production versus current demand by SKU
- ❖ Reduced transportation and warehousing costs
- ❖ Optimized production resources
- ❖ Better capacity utilization
- ❖ Reduced out of stock at stock point
- ❖ Decrease in average inventories across Stock Items

**ROI**

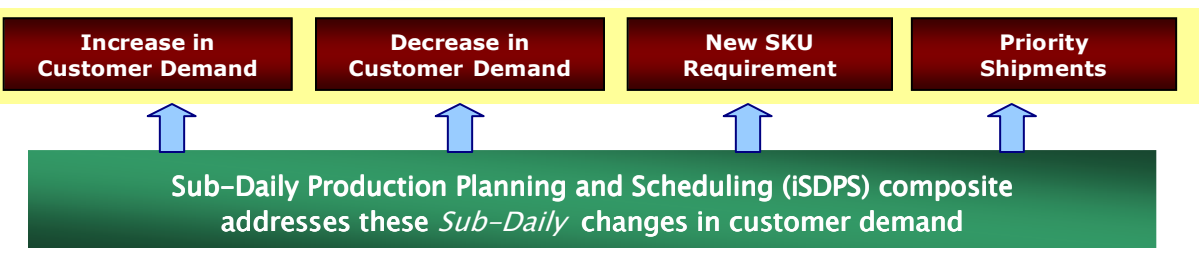
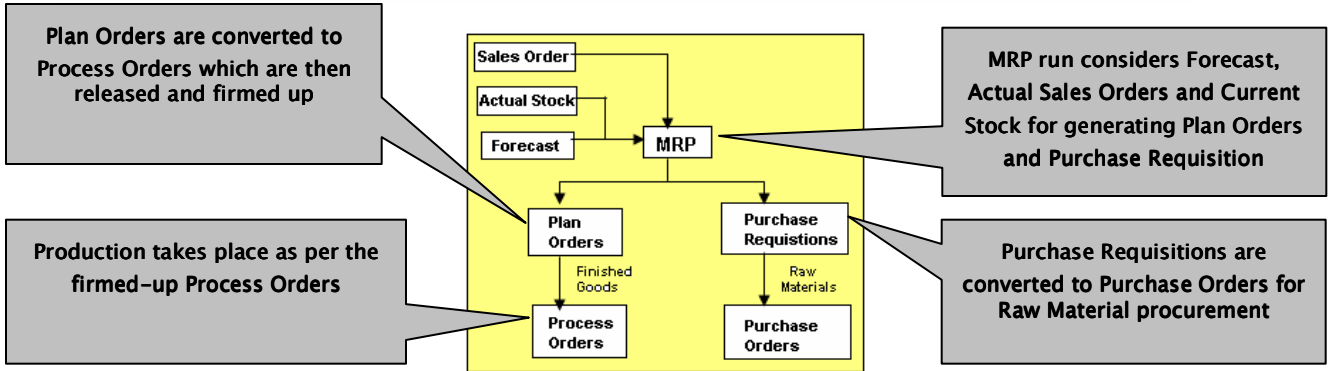
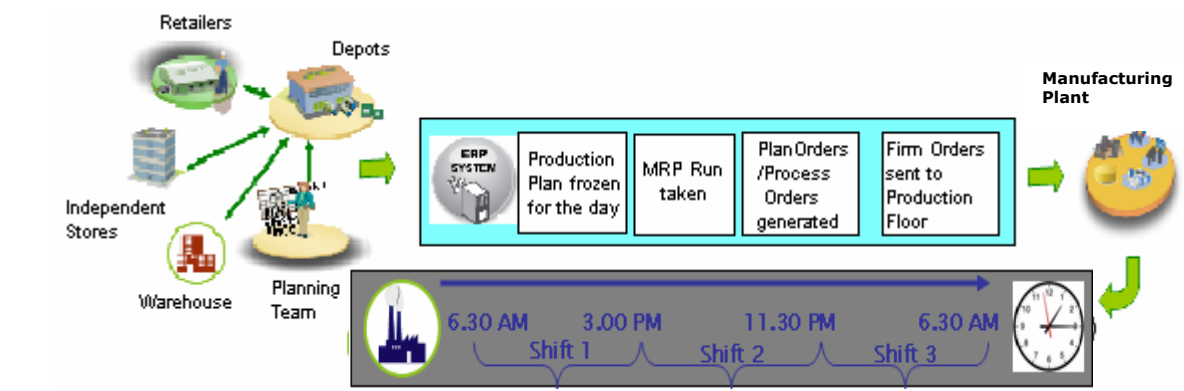
❖ **Total Cost of Ownership : \$ 816,000**

❖ **Savings per year : \$ 630,000**

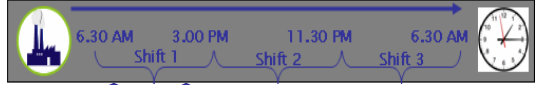
**Return on Investment in 1.3 years**

Illustration for Mid-size Fresh Foods Company  
Revenue: USD 1-3 B

## Business Scenarios covered by iSDPS



**Scenario 1: Increase in Customer Demand (SKU 1)**  
6.30 AM: 100 units  
9.30 AM: 110 units




Process Order for SKU1-100    Increase in Demand by 10 units

**Demand Increases by 10 units at 9.30 AM**

Without ISDPS	With ISDPS	Business Benefits
<ul style="list-style-type: none"> <li>❖ Re-Run MRP at 9.35 AM to plan for extra demand</li> <li>❖ New Plan / Process order for 10 units created</li> <li>❖ New Process order scheduled at different time</li> </ul>	<ul style="list-style-type: none"> <li>❖ Update the firm-ed-up existing Process order with 10 units</li> <li>❖ Demand and Supply elements overview in a single screen</li> <li>❖ Simulation of Capacity and Material availability to meet the increased demand</li> </ul>	<ul style="list-style-type: none"> <li>❖ Less Brand change overs on Production floor</li> <li>❖ Consistent Product Quality</li> <li>❖ Reduced raw material wastages</li> <li>❖ Increased machine efficiency</li> <li>❖ Reduced Set-up time on the machines</li> </ul>

**Scenario 1: Increase in Customer Demand (SKU 2)**  
4.30 PM: 100 units  
6.00 PM: 90 units

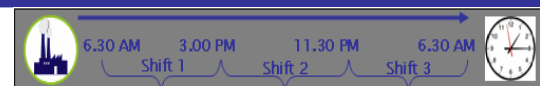


Process Order for SKU1-100    Decrease in Demand by 10 units

**Demand decreases by 10 units at 6.00 PM**

Without ISDPS	With ISDPS	Business Benefits
<ul style="list-style-type: none"> <li>❖ Running of MRP at 6.15PM will not make any changes to firm-ed-up Process Order of 100 units</li> <li>❖ Reduction of Demand by 10 units not addressed in Production floor</li> </ul>	<ul style="list-style-type: none"> <li>❖ Update the firm-ed-up existing Process order with reduced quantity of 10 units</li> <li>❖ Overview of Demand and Supply elements in one single screen</li> </ul>	<ul style="list-style-type: none"> <li>❖ Produce what is required</li> <li>❖ Re-planning SFG based on FG reduced demand helps in reduced WIP storage costs</li> <li>❖ Reduced working capital</li> <li>❖ Reduced Product wastages</li> </ul>

**Scenario 3: Priority Shipments**

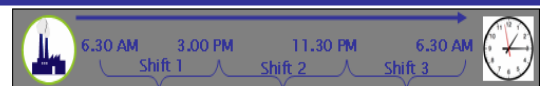


SKU1-Urgent Shipment required by 2PM    SKU1-Scheduled Shipment at 4PM

**Priority Shipment at 2PM instead of 4PM**

Without ISDPS	With ISDPS	Business Benefits
<ul style="list-style-type: none"> <li>❖ Running of MRP will not make any schedule changes to firm-ed-up Process Order</li> <li>❖ Priority shipments will not be addressed in the Production floor</li> </ul>	<ul style="list-style-type: none"> <li>❖ Update firm-ed-up existing Process order with the changed shipment schedule</li> <li>❖ Overview of Demand and Supply elements in a single screen</li> </ul>	<ul style="list-style-type: none"> <li>❖ Meeting customer requirements</li> <li>❖ Customer satisfaction</li> <li>❖ Easy way of rescheduling production on the floor</li> </ul>

**Scenario 4: New SKU Requirement**



Sudden requirement of a Product from the Market

**New Product Requirement from the Market**

Without ISDPS	With ISDPS	Business Benefits
<ul style="list-style-type: none"> <li>❖ Creation of Plan / Process orders cumbersome</li> <li>❖ Difficult to get the real time information of the new requirement</li> </ul>	<ul style="list-style-type: none"> <li>❖ Easy way of creating and scheduling Process orders for new requirement</li> <li>❖ Demand and Supply elements overview in a single screen</li> <li>❖ Simulation of Capacity and Material availability</li> </ul>	<ul style="list-style-type: none"> <li>❖ Meeting customer's new requirements</li> <li>❖ Customer satisfaction</li> <li>❖ Improves Product Brand image</li> </ul>

## The Composite Solution

### Enables

- ❖ Ability to view Production data on a Single screen and across all sites
- ❖ Simulation of Production runs with Real-time data against constraints of material availability, production process and capacity utilization

### Quickens

- ❖ Re-planning of production based on late demand changes

## Eliminates

- ❖ Use of spreadsheets for Sub-daily planning
- ❖ Manual consolidation of Excel data into ERP

## The Road Ahead...

The solution can be leveraged for all the industries manufacturing goods with short shelf life. The solution viability is being analyzed for industries like Florist Industry, industries involved in Fruits & Vegetables Extract Production & the Dairy Industry.