



SeventhSense Technologies: Effective, end to end and Customizable ERP solutions for Food & Catering and other Service Industries

India is one of the fastest-growing IT services markets in the world. It is also the world's largest sourcing destination, accounting for approximately 52 percent of the US\$ 124-130 billion market. The country's cost competitiveness in providing IT services continues to be its USP in the global sourcing market. The Indian IT and Information Technology enabled Services (ITeS) sectors go hand-in-hand in every aspect. However, the number of IT Services providers has increased very rapidly and selecting one from them is like looking for a needle in a haystack.

To help you select the most suitable IT Services provider, CIOReview presents to you the '20 Most Promising IT Services providers' in India. A distinguished panel comprising of successful and leading CEOs, CIOs, VCs and IT innovators along with CIOReview's editorial board has decided on the top 20 promising companies.

* Source: CIO Review Dec-14



Purlynt® SkyCATS[©] ERP Solution

A Comprehensive Suite of Solutions for the Inflight Catering Industry

The "right – blend" of industry best practices and innovative technologies in One Solution package.



SHARETRAVEL

Airlines Inflight Catering Service is an important touch point of the airlines with their customers. The customers' overall flying experience and Airline brand image are highly influenced by this. Study's conducted by various industry associations have highlighted the fact that passengers consistently rated catering and on board services as a key factor from a list of parameters for them choosing an airline.

With severe competition among Airlines, unstable Fuel prices, static passenger count, airlines flying on the same route increasing - every airline is in fierce competition for the same pie. Airlines which are operating on a low margin are forced to look at avenues for saving every penny possible, to operate the Airline profitably.

Airline Caterers who solely depend on Airlines, its Revenue and its Margin need to constantly reinvent, innovate and provide services at a competitive price despite raise of the input cost. With limited option or flexibility in getting higher price the major focus needs to be to reduce wastage, innovative menu planning, efficient processing, avoid duplication, effective monitoring of cost of each process seam less process integration, etc.

Further, business processes and models differ dependent upon the type of services provided by Airline. It can be Low Cost where the passengers pay for their meals – caterers need to have controls in place to account for the meals sold and unsold and returned. Or it can be VIP or Private Jet where the menu is not pre-set and requires very high level of personal care and touch.

Equipments used right from Kitchen to storage to on-board are expensive, requires regular maintenance and needs to be tracked. Movable assets like Expensive cutleries sent on board might end up in other locations that need to be tracked.

In a way as a de-risk measure and as a lateral integration, Airline caterers are increasingly focusing on Contract catering and the processes and practices for this are different and unique.

All these require an industry specific ERP built on proven sound industry practices and in the flow of specific processes.

SkyCATS is the right solution designed on the latest technology stack with built-in reports and dashboards for Operational Control and Management Information.

SkyCATS has been developed by Catering Industry experts guided by BOA (Board of Advisors) comprising Industry leaders who managed/turned around billion dollar catering majors. The unique processes and methodologies adopted by these leaders that gave Unique advantages form the basis of business logic/rule definition in SkyCATS.

Purlynt SkyCATS works as an integrated ERP or as a Standalone solution with a seamless interface to other ERPs like SAP, Oracle and Microsoft etc., at modular level. Built on a Modular framework and integrated with 20 modules, some of the core modules include Recipe & Menu management, Operations, Assembly, Sales, Procurement and location/job site management with an interface to back-office modules.

Introduction

Purlynt SkyCATS offers a suite of modules that completely integrates all the business process from Recipe & Menu Management to Financial Management & Control for Catering industry.

The Product is scalable and is designed to meet the robust needs of Catering Organizations of all sizes. As business complexities differ from Enterprise to Enterprise, our Solution Architects can customize the Product by offering a combination of modules to meet the customer's specific business requirements.

The Solution

Purlynt® SkyCATS ERP workflow is seamlessly integrated among various core modules to address key business processes such as Recipe Creation with their nutritional content and calories, facilitating Purchase order, Quote response and supplier comparison, Delivery from Central warehouse to Multiple locations, Accommodation of Contractual and Non Contractual discount prices and back charge, supporting Budget and Forecast process facilitating multiple comparison with actual in multiple currencies, Extensive quality reporting integrated with KPI monitoring.

Purlynt SkyCATS has the following components:

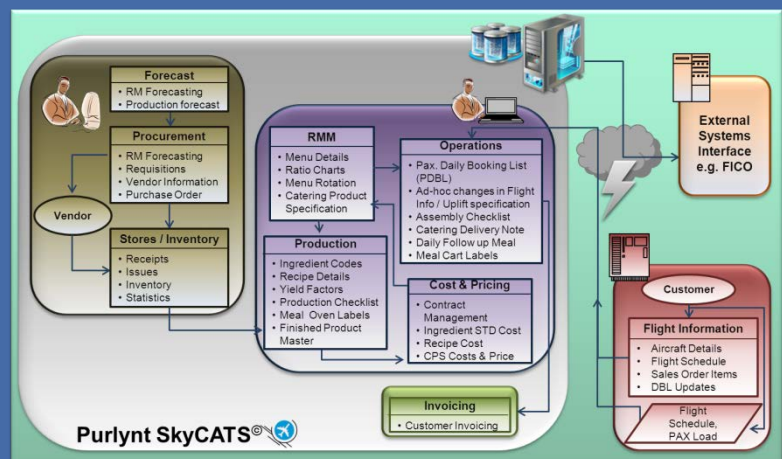
- Sales (Contract Management, Catering Order)
- Recipe, Dish, Menu Management & Costing
- Procurement / Inventory
- Production
- Flight Schedule integration and Meal Ordering System
- Dish Portioning and Plating
- Operation
- Material Requirement Planning
- Quality, Health and Safety Environment
- Equipment Management & Tracking
- Portal to manage orders for VIP/Private Jet Catering
- Handling of LCC catering business

Purlynt® SkyCATS Benefits

The Purlynt SkyCATS offer in-built features to help customers manage their business with ease and convenience.

- Centralized management of recipes for menu planning
- Compliance with HACCP processes for recipe and Critical Control Points (CCPs) within the recipe instructions
- Standardized recipes for nutrition, portion, and cost control
- Sales Contract Management that includes Industry specific services
- Industry compliant Integrated Process Flow in line with the business processes
- Centralized purchasing within the country and across the regions.
- Built in Email and Document Management
- Support of Multi-currency
- Role based Access and User control
- Configurable workflow process
- Built-in Task Manager and Dashboard
- Graphical reports
- Pre-built Analytics specific to Airlines catering industry like Cost per meal, etc..

Schematic Representation of Straight-Through - Process of Core Inflight Catering Processes



2 | Purlynt SkyCATS

Purlynt SkyCATS ERP Features

Purlynt SkyCATS ERP is seamlessly integrated between various core modules to address key business processes such as.

Recipe & Menu Management

It consists of the analytical tools to provide food and beverage management with the decision support to improve profitability. It includes sophisticated and easy to use recipe and menu generation. Recipe costs are updated daily based upon receipt of the ingredient items.

- Recipe Creation and Standardization
- Cookbooks integration, Nutrient Calculation, Recipe Costing
- HACCP (Hazard Analysis Critical Control Point)
- Yield Percentage & Calorie Values
- Menu Creation and Standardization, Menu Rotation
- Menu Costing, Menu planning, Menu Configuration
- Copy, Mass replacement functions, Attach Instruction Videos, Photos
- Determine menu rotations as required by the contract
- Define the time and cycle of rotations
- Send reminder e-mails to the production and planning units prior to changes in rotation
- Create Rotation-Spec relations
- Create Rotation-Uplift relations
- Set rotations as class-based
- Determine rotations in accordance with route and plane parameters
- View previous rotations

Procurement & Inventory

Extensive details of both suppliers and ingredients held for easy access and usage which is related to stores, purchase and central procurement level.

- Item codification compliant for food industry, with subgroups such as Food (under which frozen, beverage etc.), Disposable with client specific customization.
- Tender process module facilitating selection of lowest quoted vendor & configurable conditions such as normalization of credit period
- Monitoring of purchase efficiency by using unique standard costing methodologies
- Automatic Consolidation of food request by DBL basis
- Flexible pricing and cost methods, real time inventory updates, Customer ranking, Discount option

- Purchase order and delivery management
- Multi Delivery Date, Supplier Rating, email of PO to Supplier
- Flexible and Configurable Formula Builder and Calculators
- Historical Views while transacting as well as Reorder Quantity Simulator to assist in raising ROR
- Sticker Printing, Automatic average price calculation on backdated entry, templates for request and reorder request
- Supplier quotes Options – online, offline, Mails or Upload
- Backdated entry with sufficient controls
- Reversal of transactions within unclosed month.
- Bonded warehouse

Material Requirement Planning

Consist of forecast data which is generated by department level and system level and which will be useful for comparison to make necessary decision by central procurement, purchase and stores

- Flexible planning/Forecasting through Recipe & Menu planning or through estimations from kitchens
- In built tolerance limit for wastage of food/factoring the efficiency of chef/yield management
- Linkage of Forecast with purchase department
- Planning for regular production, minimum/re-order quantity.
- Precise planning of quantities of branded items as per customer/contract requirements
- Multiple iteration to revise the planning to optimize the cost

Quality, Health and Safety Environment

QHSE is the common needs of any catering based organization to deliver quality service to the client. It takes care and defines the criteria how the raw material should be moved to production and food product delivered to client.

- Quality Checks Planning and Scheduling
- SWAB Test – for People (Hand) & Equipment, Sampling Test – for Food
- Quality Checks for Raw Material, Recipe, Menu
- Parameterized and Configurable
- Document Management -Electronic Document Repository
- Inspection & Audit Management
 - Audit Planner, Audit Checklist, Template
 - Non Conformity, Root Cause
 - Corrective Action, Preventive Action
 - Complaint Management

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Daily Booking List

Daily booking list is the starting point for operation department, where history of PAX will be get updated based on the booking details from airlines.

- Updating PAX number any time before 6 hours of departure.
- Provision for Extra meals
- Provision for Special / Child Meals and Services

Menu Rotation

- Determine rotations as required by the contract
- Define the time and cycle of rotations
- Send reminder e-mails to the production and planning units prior to changes in rotation
- Create Rotation-Spec relations
- Create Rotation-Uplift relations
- Set rotations as class-based
- View previous rotations

Production

Production environment is nothing but kitchen related operations. Working trigger will be from the daily book list which is happening from airlines side.

- Production Planning and Scheduling
- Production Checklist based on (Estimation or Daily Booking List – Flight Schedule) and Actual Updates
- Prep Sheet based on Production Schedule
- Pull Sheet based on Production Schedule
- Requisition by Department (Kitchen)
- Production planning based on Actuals (Daily Booking List / Catering Order) or by Forecast
- Real time Semi finished Product based Stock Keeping (Stores for Semi Finished)
- Maintenance of Equipment Meter Readings
- Sticker Printing

Operations / Dispatch

Operations encompass the whole gamut of Logistics from interfacing for Flight bookings to Menu Up-liftment to Flights.

- Actual Provisioning
- Delivery Note
- Rooster Planning & Scheduling – Delivery – Vehicle, Staff ...
- Upliftment for Departure or Collection for Arrivals by Dish Tag Sheet
- Arrival / Departure Displays
- In case of any delay, system warns the operation unit by signalization
- Monitor details like which process is completed in how much time, delays and other order information for every flight
- Allows you to follow the orders by receiving "Instant Production Planning"

Dish Portioning & Plating

Once production is done for the particular flight Assembly departments start presenting the food in plats and load the same in food cart. Loading of cart will be based on daily booking list and by class wise.

- Pre-Assembly Checklist
- Assembly Planning and Scheduling
- Assembly Checklist based on (Daily Booking List – Flight Schedule) and Actual Updates
- Requisition by Department (Assembly Line)
- Real time Finished Product based Stock Keeping (Stores for Finished Product)

Flight Schedule

Flight Schedule & Ordering system deals with the schedule of flights which is given by Airlines to catering to specify the menus according to flying sector and class.

- Interface to Airlines Flight Schedule for manual entry
- Configurable interface for either real time or batch update
- Provision for Multi Format Uploads – CSV, Excel, XML
- Define the route and the number of flight legs
- Select and change the configuration of the flights

2 Purlynt SkyCATS

Key Salient Features

Catering Order

Provides full and comprehensive support for the creation of Catering orders depends upon the menu cycles. Menu cycles can be any number of weeks in duration. Users can specify start and end dates for each menu cycle or choose to create a rolling cycle that continues indefinitely.

- Contract Management facilitating end-to-end process from Customer enquiry to contract creation
- Configurable services – Meal Rotation, ratio chart etc.
- Complete tracking of Contract status, Expiry & Amendments of Contract
- Facility to track and highlight the cumulative orders value with Annual contract value
- Consolidation of multiple contracts to one customer invoice

Catering Order (Private/Royal/Charter flights and Outlets/Lounges)

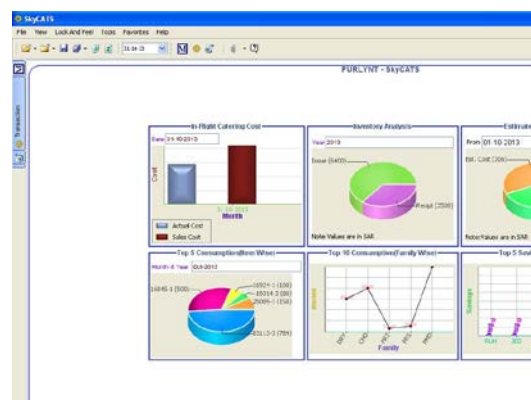
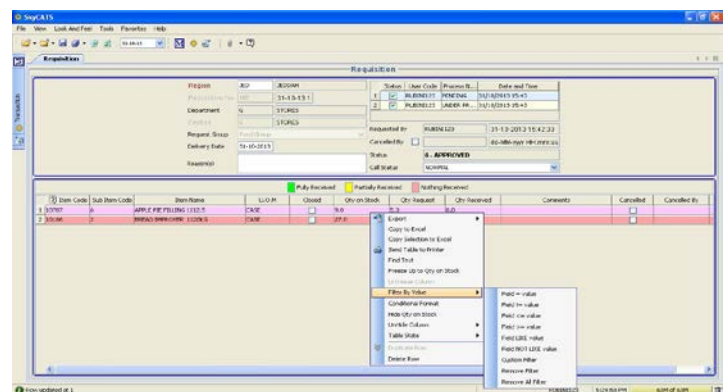
- Selection of pre-built menu with alternative plating selection.
- Specification of extra charges based on food and non-food
- Integration of payment gateway
- Option to give credit limit based customers.
- Workflow process in each stage of operation, production and dispatch

Sales (Customer Contracts, Catering Order)

- Customer Contracts
- Provision to Specify the Menu, Menu Rotation, Cycles by Customer, Sector, Flight ...
- Caterer's Service Rating (Points, Penalty)
- Individual Invoicing or consolidated Invoicing by User
- Cession Pricing
- Calculate costs based on production time of products and semi-finished products

- Fully web based
- User friendly user interface
 - MS Excel like functions
 - Windows like Short cut keys
- Alerts & Notification – Proactive and Reactive Notification.
- Console / Approver's queue
- Dashboard
- Electronic Document Management
- Parameterized Approval workflow
- Security
 - User role based access
 - Protocol option of HTTP or secure (HTTPS)
- Excel based upload / import
- Built in e-Mail system
- Comprehensive reporting engine
 - Parameterized multi format reporting
 - Scheduler based Emailing (Report as attachment) to senior management
 - User driven report template / layout

Sample representation of User Interface:



3 Purlynt SkyCATS

With the implementation of ERP, the expectation of each Organization is to have the following benefits in place:

CONTROLS: Process Streamline, Workflow with seamless integration, Uniform Process on best recognized business process, Standard Validation, etc.

EFFICIENCY: Improved Work-flow efficiency, better planning for reduced inventory cost, ageing analysis on the outstanding for better collection efficiency, procurement efficiency through optimizing order quantity and vendor performance, man-power efficiency through optimum planning, etc.

COMPLIANCE: Statutory, Industry Standards, Contractual, Legal, etc.

REPORTS: Control reports, Operational information and Management Information.

DASHBOARDS: Finance, Operational Commercial & Sales, CXOs, etc.

Purlynt SkyCATS built specifically for catering industry caters to the expectation and has been designed in line with the Catering business process.

System is designed in such a way to have the wherewithal to analyze the efficiencies of the independent logical business processes of Catering Industry like Recipe Menu Management, Operations/Production Management, Billing and Realization, etc. and to ensure that inefficiency in one area is not covered/hidden by efficiency in another area.

Some of the industry standards like Standard Costing, Standard Pricing, etc. are part of the processes.

As an output of processing of information, Purlynt has various Operational and MIS reports that would give visibility to Operational Managers and Executive team for tactical planning and quick decision making.

Some of the key features of SkyCATS that give business benefits and efficiency of operations in different logical business process areas are illustrated here:

SkyCATS Key Business Benefits:

CONTROLS: Procurement has built-in workflow mechanism configured for all major transactions like Reorder Request, Purchase Order, GRN, Inter Unit Transfer, Follow-through Roll-back for reverse action etc.

Inventory has Finance Freeze, Accounting of Complimentary items, QHSE check while raising GRN, Supplier Evaluation, etc. **RMM** has Ingredient average price computations, Recipe/Menu/Dish approval mechanism, publishing of pattern through work-flow, etc.

SEAMLESS INTEGRATION: Being modular in nature with each logical business process designed as module, the integration among modules eliminates duplication of activities – PO items will be picked up from Reorder and GRN items will be picked up from PO – all these enabled through built-in link. Procurement ingredient items are linked with RMM to create Recipe / Menu/ Dish. Menu list from DBL is linked to Recipe that has ingredients details there by creates materials requirement details to create material request by Production. Forecast function of Production enables procurement action. Test results of FPM in QHSE ensure the quality of food before upload to aircraft.

EFFICIENCY: Procurement Efficiency is enabled through consolidation of material requests and an integrated tendering process. **Billing and Realization** efficiency is enabled through integration of contract terms and services delivered resulting in automated billing with ageing analysis for effective realization.

Operational efficiency is enabled through planning for ingredients through Menu-planning and wastage monitoring and control. **Man-power** efficiency is enabled through man-power cost allocation to the project level.

COMPLIANCE: Supports QHSE – Swap Test, Hand Test, Sampling Test, First Expiry First Out, HACCAP, etc.

REPORTS: Month closing including RM711, Item movement, DBL (Daily booking list), CDN (Catering Delivery Note), Traffic System – high level activity by flight, Sticker Printing to identify expiry details, Item Price, etc.

DASHBOARDS: Built-in dashboards for Procurement / Inventory, Operations, Sales and Finance.

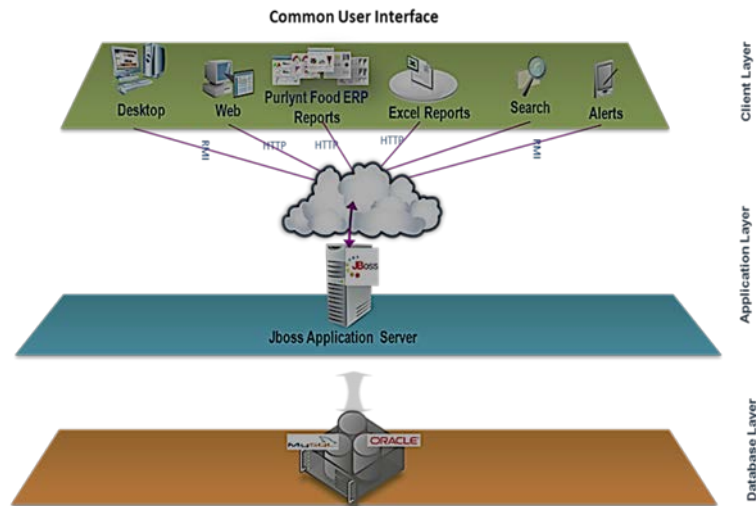
SkyCATS design is modular in nature and each of these modules can work independently. Any single module can be implemented initially and depending on business requirements other modules can be implemented / integrated at a later date depending upon the requirements

4 Purlynt SkyCATS

Reporting Capabilities

Purlynt SkyCATS is inbuilt with 100+ standard reports for addressing the reporting requirement of various stakeholders like CFO, CEO, Chefs, operational managers and functional managers. The engine enables User defined Templates / Layout & Multi-Format.

Ease of use	<ul style="list-style-type: none"> • Coherent and integrated product • Windows look & feel • Very easy data navigation
Product architecture	<ul style="list-style-type: none"> • 3-Tier Web Enabled Architecture • Platform Independent • MS SQL Server/ Oracle Database
Configurations	<ul style="list-style-type: none"> • Customizable • Multiple Search Option • Multiple Email Alerts Option • SQL Field Link • In Built Document Management
MS Office Reporting	<ul style="list-style-type: none"> • Excel, Word
Interfaces	<ul style="list-style-type: none"> • Flat files, XML , ODBC



Technical Overview

Technical details of solution

- Scalable Platform & Architecture
- Platform Independent
- SOA Compliant
- J2EE Architecture with reusable components for customization
- Support for Open Source

5 | Case Study

About a Leading Airline Catering Company:

A Billion \$ Airline Catering Company based out of middle East with over 3500 employees geographically spread. It provides world class In-flight services round the clock to ensure timely and quality services. The customer supplies a volume of 85,000 meals per day. Average daily capacity across all units is to cater for around 107 flights.

Objective:

The customer expanded their business aggressively over the past few years and were using legacy AS/400 systems at individual locations and were in need of a robust system to handle its Airlines Catering business.

Challenges:

- Each location having separate legacy system and working in isolation.
- Multiple suppliers supplying multiple items to multiple locations.
- Duplication of data across systems/regions.
- Changes made in Purchase orders not accessible in all regions on real time basis.
- High Inventory carrying cost.
- Manual Sales Accounting, Cost tracking for menu.
- Non Integration of RMM with production & Planning.
- Delayed reporting resulted in delayed decision making.
- Handling of ad-hoc meals, charter, royal flight, etc.
- Lack of Controls and Issues such as Pilferages of stock.
- Time consuming month end inventory process.

Benefits:

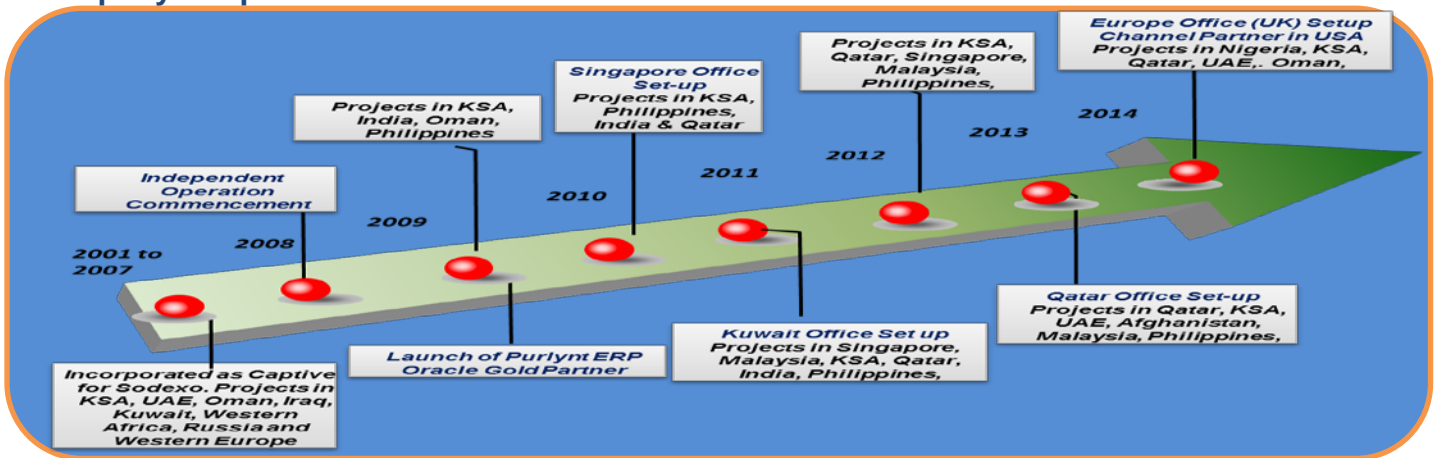
- Exponentially High IT Cost Savings
 - ✓ Transition from a high cost IT platform (AS/400) to an economical open technology, scalable and web-enabled Java solution.
 - ✓ From disparate & manual systems to a completely integrated system centrally hosted for all regions. Maintenance of 7 servers got reduced to Single (1) Server.

- Purchase Efficiency & Savings improved by Centralizing Procurement for Class 'A' Items year-on-year – Saved 0.5 M USD p.a.
- Information transparency across the supply chain.
- Operational efficiency - Standard Templates, Processes flow, Notifications, Dashboard and avoiding duplicate transactions.
- Extending Integration to Barcode Devices with system has resulted in minimum 2 man days savings for the Month End Stock taking i.e. bought down to 3 Hours.
- Enabled month close within one day as Financial closure process time bought down to under 5 Man Hours from 5 Man Days.
- Store Discrepancy and Shrinkage reduced to less than 5% during month close stock taking.
- Improved Automation & Enabled the client to scale up operations whereby from around 110 users today there are over 780+ Users actively utilizing the system.
- Reduce the wastage from 1100 Kg to 150 Kg per day in production.
- Traffic control system facilitates the dispatch department for real time data integration to avoid late delivery of catering orders.
- Costing simulator as a tool for menu planning & sales department helps in deriving within short time appropriate costing and pricing details thereby reducing the Onboarding of a Client or new requests.
- Auto Routing & Auto Fill Options for easing Production and Operation Department Scheduling and Updates.
- Improved information access (140+ Reports). Generation of MIS / Finance related reports on real time basis, without any external interface consolidation methodologies.
- Improved process management by Day to day inventory, A/C Closing, Cycle change.

About SeventhSense Technologies

SeventhSense Technologies (7thsense) providing leading edge IT solutions to Fortune 500 Corporations. Our mission is to enhance the competitive position of our clients by equipping them with state-of-the-art IT solutions and continuously providing them with value-added services and support. SeventhSense Technologies has become a global leader in business software, serving customers worldwide with over 5000 business users spread across hundreds of locations. These customers include both large enterprises and midsize companies. Along the way, SeventhSense Technologies has accumulated a unique knowledge base of best business practices, including both cross-industry and industry specific practices in Catering Vertical. The SeventhSense Technologies tradition of leadership continues with a new generation of software that gives your company unprecedented speed and flexibility to improve your bottom line by improving planning across your enterprise.

Company Snapshot:



Strategic Partnerships



Pursuing Excellence in Every Step!!!

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