RTS has delivered yet another success for a major food producer and gift basket retailer

Talks began last year with our client who is a major retailer of luxury gift baskets. They cultivate their own organic fruits, produce their own wines and also have an in-house bakery.

Our client has a brick and mortar presence in all the major North American cities as well as an e-commerce store which ensures that their clients get the best quality products.

Based on RTS's experience, our experts were called for a discovery meeting during which the client highlighted three of their major challenges, namely

- They wanted best in class <u>quality control</u> measures in place
- Wished to have an <u>overview of their labor</u> <u>utilization</u> in a single place
- And the calculation of <u>overall labor</u> <u>efficiency</u>

In this day and age of digital transformation, they wanted a solution which would suit the farming and agricultural sector but customized to their needs

- Be <u>automated</u> with minimal manual intervention
- Improve quality based on the quality control data standards stored in SAP QM
- Enable <u>efficient utilization of labor</u> for forecasted jobs
- Deliver the product on time to meet customer expectations





Along with the quality control data, their desire was to have a system that could calculate the number of employees needed to produce the finished item by the required due date.

The RTS team came together to analyze the requirements and chart out the possible solution models, their outcomes, to narrow down on a final and the best resolution.

Solution objectives

- <u>Track and trace</u>: Design an automated system that enables
 the client to keep track of incoming raw materials and final
 product, gift basket quality. In case of defects, the system also
 gives visibility about the batch to which the item belonged
- <u>Visibility and control over shelf life</u>: Since the primary items in each gift basket is perishable, they have a certain predefined lifespan. We designed a system that indicates the shelf life of each product so that an appropriate business decision could be taken. This would ensure that their customer gets the best quality of items in their basket
- <u>Labor management</u>: Reduce or altogether eliminate data entry, reducing the overall throughput time and increase data accuracy. Pictures clicked of the incoming raw material are stored automatically
- Simplification, digitization of assembling line and quality processes to increase the accuracy, decrease production time and delay in delivery
- Easy access to critical information related to quality and labor in real-time

Solution execution

RTS implemented several web apps* (iOS) for mobile tablets based on SAP MII Mobility Solutions with bar code scanning to execute various functionalities.

- <u>Functionality #1</u> captures data and pictures of the raw material quality inspection. With this, they can easily have an overview of the item quality and quantity by simply scanning the barcode. The app also enables them to capture pictures of these products as well as store those in their database for future reference. Another capability of the app is to send a direct notification along with the picture of the product to their supplier if there was a defect in the quality of the item they supplied
- <u>Functionality #2</u> captures quality inspection data of each finished goods for currently ongoing orders. This application allows role-based access, (could be inspectors, supervisors, administrators), to update the workflows for quality inspections. The supervisor and administrators have access to escalate the workflow for any inspections. The application is integrated with SAP ECC and brings the required information on the mobile tablet for a SKU/Order to help the quality inspectors make a quick decision with the pre-defined business validations (for example, Minimum Allowed Variance check, Best In Used By check or documentation check)
- <u>Functionality #3</u> allow supervisors to capture information (start & end time, numbers of operators working, the task at hand, etc.) about the labor working on various orders on the shop floor. The back-end algorithm then analyses and calculates the efficiencies of each worker in each department and presents a real-time report

*the apps could be developed either in iOS or Android environment

End result

After the implementation of the **Manufacturing Intelligence and Integration (MII)** based quality system, our client now has better visibility and control over

- <u>Their quality inspections</u>: The ERP critical information is now available on the tablets that enables quality inspectors to make quick, informed and effective process-based decisions
- <u>Data bank:</u> The company now has detailed and accurate quality and operator performance data for each and every product to optimize operations
- <u>Track and trace</u>: With this new system, they can easily track the efficiency of each employee while calculating the labor required to complete the work within the targeted delivery time

RTS Consulting-Automation Inc. has over 27 years of experience providing control system engineering services and leading software solutions while assisting companies adopt new technologies and achieve Operational Excellence. RTS has been instrumental with large organizations with their "Digital Enterprise" transformation. Our background and expertise in Manufacturing Execution System (MES) implementations, shop floor automation control systems integration (PLC's, SCADA, IOT and Historians) and shop floor asset connectivity gives RTS a strategic advantage when developing and implementing IT/OT solutions for our customers.

