

The Plex Smart Manufacturing Platform Customer Journey

■ Drivers leading to the Smart Manufacturing Platform investment

INTERVIEWED ORGANIZATION

Forrester interviewed a Plex Smart Manufacturing Platform customer with the following characteristics: less than \$300 million revenue, 450 employees, and 420 Plex users.

The customer organization benefits from their implementation and use of the cloud-based Plex Smart Manufacturing Platform, as it harmonizes each step of the manufacturing process from inventory, to production runs, to fulfillment. Plex tracks each step on a transaction basis to account for raw material inputs, manufacturing outputs, and machinery, time, and people resources used during production. With the cloud-based capability that Plex provides, the customer organization did not have to rely on IT staff to either build or run the operation. This was important as the platform expanded through acquisition.

KEY CHALLENGES

The customer organization had an overall need to transition to a more modern solution. Their existing production control system was antiquated, highly customized, and no longer supportable, which led to a host of business challenges.

The customer struggled with common challenges, including:

- **Stockpiled inventory to not run out of stock and miss production deadlines.** Balancing lean inventory and sufficient stock to meet production

“The inventory management capabilities brought by Plex have been a huge, huge win for us.”

VP of IT and ERP, food manufacturer

requirements, and not tie up unnecessary budget in a timely manner, was an ongoing challenge. This was particularly the case as the existing system did not have a forecast capability. Projections were developed from a straight-line sales history to build inventory. With this limited accuracy, the customer commonly kept too much inventory on hand to ensure order commitments and customer retention.

- **Poor visibility within the end-to-end manufacturing process.** Without a capability to readily generate transaction data within the end-to-end manufacturing process, there was significant effort required to track the bookends of raw materials in and finished goods out. This included line production recording by paper record and an inability to create useable data. In all, a significant effort in people resources was needed to create operational intelligence, but it did provide timely or widely visible intelligence for the customer organization.
- **A lack of visible production data allowed manufacturing inefficiencies to run unchecked.** The inability to discern production errors until later in the process led to wasted inventory, delays in production, and more extensive fixes in both machinery and service delivery. This resulted in customer service interventions to reorder schedules for pressing customer need as well as expedited shipping to help keep orders on time. With limited visibility to an end-to-end, and holistic view of performance, the warehousing, manufacturing, maintenance, and customer service components of the organization operated in siloes.

USE CASE DESCRIPTION

The customer organization first implemented the Plex Smart Manufacturing Platform in 2017; it followed up

with addition of the forecast application, Plex DemandCaster Supply Chain Planning, in 2019.

The end-to-end implementation took approximately one year, this included: the development of EDI trading partners, three months for training, and a one-month post-live phase for process modification and assessment. Additionally, the team acquired hardware (UI screens and printing equipment) and developed new SOPs, which opened the door for cross-departmental changes and improvements.

Training on Plex also included sessions and communication across departments. This, coupled with the creation of new SOPs indicating how the job is done, initiated conversations on the process of manufacturing, change, and improvement across departments. As Plex provides visibility of the end-to-end manufacturing process to all users, the interdependencies between manufacturing, maintenance, and customer service are finally showcased. In sum, the training and post-live phase for Plex implementation served to break down silos between departments.

Plex's digital, transactional model enabled the customer organization to understand the manufacturing process in granular detail, from inventory to finished product. This not only identified and filled in important operational intelligence holes, but it also allowed technical resources to move to more valuable analytical tasks.

The addition of DemandCaster allowed the customer organization to quantify the raw material

requirements for projected production to shipment timing, to ensure adequate supply and accurate timelines. By directly apportioning inventory to manufacturing, the customer organization permitted analysis of production line efficiency, identified production errors and machine variances to be fixed early in the process, and significantly reduced waste. In many ways, this helped sow the seeds for growth.

With greater operating efficiency, the customer organization was able to increase production some 250% with largely the same plant size and people resources. There were significantly reduced costs in IT management, inventory, and production. Its cost basis for production also fell 50%.

As the cost basis to production was also now understood in granular detail, this provided an understanding of how to price opportunities with existing and new customers, to win additional business.

“Plex gives us the ability to look at things in a different way to plan for the future and improve upon it with insights we didn't have.”

– VP of IT and ERP, food manufacturer