WORLD LEADER IN SERVING SCIENCE. ITS MISSION IS TO MAKE THE WORLD HEALTHIER, CLEANER AND SAFER THROUGH A RANGE OF INNOVATIVE PRODUCTS AND SERVICES.

CASE STUDY
The Client

The client is a world leader in serving science. Its mission is to make the world healthier, cleaner and safer through a range of innovative products and services. As a valued partner to the science industry, the client assists its broad client base to accelerate their life sciences research, solve complex analytical problems, improve patient diagnostics and therapies, and increase productivity in laboratories.

This portfolio of market-leading services assists customers to increase their laboratory’s productivity and efficiency with a full suite of highly customisable services. Coupled with the client’s proven solutions and world-class staff, it is able to help customers reach even the most ambitious research goals.

In addition to its 360-degree service portfolio, the client provides a range of industry-leading products as part of its commitment to analytical precision. Its instruments, equipment, software and consumables ensure scientists have the tools they need to conduct advanced research. These products allow scientists to solve highly complex analytical problems in pharmaceutical, biotechnology, academic, government, environmental, industrial and clinical laboratories.

Since March 2020, the client has been closely working with government agencies and researchers to ensure they have priority access to instruments, consumables, safety supplies and other products to develop urgently needed responses to the pandemic.
THE CHALLENGE

As a trusted global leader in supporting science and technology, the client was quickly relied upon to help its customers with their response to the pandemic. With this influx of demands, their manufacturing facility quickly became inundated with requests. The facility began to struggle with executing orders on time, and materials for the supply chain and manufacturing process began to accumulate. As a result, the shop floor became heavily populated with raw materials and an overflow of items obstructed processing spaces. The entire supply chain required multiple materials, and the manufacturing process had conflicting priorities, resulting in the client finding it difficult to assess which process to target first.

As a result of these capacity and storage issues, raw materials were being stocked and stored in a haphazard manner outside the facility. As the team was not tracking the supply of materials from vendors and suppliers, and did not have an advanced shipment notification system, they were unable to properly track and trace components and goods. In addition, materials that were not required for the manufacturing process were being stored in spaces intended for the supply chain. This led to difficulties in searching for required items, lengthening the time taken to complete assembly and representing a significant inefficiency of time.

In addition to its storage issues, the client did not know their exact capacity at the facility for the next day or month. Capacity planning was not adequately recorded, but relied heavily on human resources and judgment. The systems in use were primarily SAP ERP with auxiliary homegrown or Excel systems, with a homegrown manufacturing execution system. However, these systems were not adequately integrated with SAP, and the client needed to make better use of its SAP processes. While the client had installed a PFEP (Plan for Every Part), this process needed improvements, as parts were frequently unavailable when needed.
THE CHALLENGE

Due to the sensitivity of the items being manufactured, there were strict requirements for reporting inspections. This information was being gathered from manual inspections rather than the SAP systems in place.

When it came to record keeping, records were not stored in a centralised place and there was no coordinated system for storing data and sharing information. In order to find data relating to a component, document, inspection status, or item availability, employees had to manually hunt for information, distracting them from more important activities.

While there were a variety of initiatives in place to try and fix these issues, these were neither adequately coordinated nor integrated. This was a key issue. Rather than simply automate each distinct area, the problems raised demanded a holistic approach where improvements to efficiencies had to be matched by a comprehensive and integrated system to overcome these silos.

Finally, the client was not optimising its forecasting. Its production plan was maintained using historic data, and there was no forward planning to anticipate future challenges. The client needed to start making smart decisions that would empower them to be proactive in the face of unforeseen obstacles.
NTT DATA | CASE STUDY

THE SOLUTION

NTT DATA began by setting the scope of the solution by confirming the relevant business processes that needed attention. The plan adopted was completely aligned with the PFEP that was already in place, as well as some of their lean productivity initiatives. Thanks to its deep SAP expertise, NTT DATA had a range of manufacturing best practices and templates for SAP-recommended processes to target improvements and efficiencies. By sharing these with the client, NTT DATA was able to clearly demonstrate the proposed solution and its impact.

When NTT DATA joined the project, the client urgently needed support and was struggling to get organised. This meant that the team had to gain access to their systems in record time, without impacting on the client’s existing demands. The manufacturing site was already overwhelmed with tasks, and NTT DATA had to quickly gain a global view of the various initiatives to take charge and efficiently assess needs. This exacerbated the difficulties of the project’s initial stages. It was critical that NTT DATA establish a highly organised and rigid structure to ensure the solution could be devised in the allotted time. Demonstrating its ability to quickly get to speed with the project specifications, by day two of the project NTT DATA had already explained to the client where they would be by the project’s final day.

The solution took a bifold approach by splitting the process into two parts. The first part addressed sales & operations planning, including forecasting, manufacturing, processes and quality. The second part focused on procurement, logistics, and processes that NTT DATA was improving (including PFEP). Throughout the process, NTT DATA helped the client optimise their existing SAP tools by identifying additional functionalities. For example, the team helped the client make better use of AvailableToPromise (ATP) to enable the teams to more efficiently schedule activities and ensure they have all the parts ready for manufacturing.

NTT DATA held daily scrum meetings with the client’s global team to ensure the solution was fully aligned with its activities around the world. This was a challenge logistically as it required strong coordination across a variety of time zones. Work and review sessions were also organised, with care taken not to disrupt the client’s workloads and ensure milestones were fully transparent.
THE SOLUTION

To narrow down on each area, the client elected one representative per business process. NTT DATA held daily scrum meetings with them to fully understand the processes that were already in place. This included: forecasting and procurement, sales and operations planning, manufacturing planning, scheduling, routing, quality, internal logistics activities and third-party logistics activities. The team obtained a comprehensive understanding of the existing state of affairs using Microsoft Teams, documenting all bottlenecks, pain points and issues in a collaborative manner.

Additionally, NTT DATA held a weekly briefing with the Head of Manufacturing at the facility and the CIO to brief them of that week’s progress. This close coordination was key to the project’s success.

To improve each process area, NTT DATA applied its signature best practice solution. For each of the issues identified, NTT DATA reviewed SAP best practices to provide targeted recommendations. The team then classified these actions according to the effort required and the potential benefits of each. To help the client optimise their efforts moving forward, activities were prioritised as:

- low hanging fruits (easy-to-implement with quick results);
- golden nuggets (fairly easy-to-implement and moderately quick results);
- deep sea pearls (more time needed to implement but better results); and
- stone soup (no matter the effort, any improvement is limited and not worth it).

Finally, NTT DATA helped the team to develop reliable measures of performance to continue tracking their manufacturing, quality and procurement processes as well as critical KPIs.
The project is currently in its implementation phase, and NTT DATA has provided a clear roadmap of several impactful initiatives. These have been grouped by:

- Initiatives requiring configuration in R/3 (ECC).
- Initiatives requiring web development.
- Dashboard initiatives requiring Power BI, Tableau, QlikView, BO or similar.
- Track & Trace initiatives requiring an RF gun, barcode or RFID tags integrated with SAP to perform transactions like MIGO, STRs, and more.
- Ticketing initiatives requiring a ticketing application to capture events, communicate through the workflow to the role assigned, and record responses.

NTT DATA is a trusted advisor in customers' SAP decisions.
WHY NTT DATA

The project involved client teams from nearly 250 locations, and as a result they needed a trusted global partner. With an array of internal initiatives to try and rectify the issues, the client was pleased by NTT DATA’s holistic approach to integrating efforts and driving efficiencies. What’s more, NTT DATA’s signature tried-and-tested SAP best practice solutions can be quickly deployed with minimum customisation, rapidly resolving the issues outlined within the strict time frame established.

NTT DATA’s long-standing relationship with the client was also a key factor in its selection. Having completed a number of projects with NTT DATA, the client trusted its approach and was confident in its team’s abilities.

The teams themselves are world-class, seasoned consultants with a no-nonsense approach that have extensive knowledge of industry KPIs and benchmarks. NTT DATA understands that training is an ongoing process and ensures our consultants continuously improve their skill set by staying at the forefront of technological changes. Finally, they understand the trade-off between technology and methodology, IT and business strategy, and apply each in the right proportions to help clients move forward quickly with certainty and visibility.
WHAT’S NEXT

The project is now in its implementation phase. These new processes significantly improve order execution and delivery, reducing costs and the total time taken in the supply chain. This is a key competitive advantage to the client as it moves forward, distinguishing this already world-class client from its competitors.