

Meat processor reduces waste and saves \$800,000+ thanks to Process Mining

Many businesses today have to balance evolving customer needs with a rising number of regulations, which can lead to complex organizational processes.

For example, meat processors need to abide by national standards that regulate both the production of raw materials and the distribution of finished products. This results in highly complex end-to-end processes for businesses.

Improving End-to-end Processes and Reducing Waste

Putting automated digital systems in place can help manage this complexity, but these systems can be challenging to properly implement and analyze. How do you know if they are actually working? Process mining software such as Apromore offers precise insights into new digital processes and can also discover opportunities for improvement.

The Initiative

A joint team of experts from digital-transformation consultancy Leonardo and process mining vendor Apromore partnered with one of APAC's leading meat processors to support their digital transformation initiative and improve their processes. The processor produces and distributes protein products across the entire APAC region. They currently operate six beef processing facilities and three feedlots. They service wholesalers, food services, and retailers, who receive cooked deli items, convenience meals, fresh cuts, and other products. As well as providing consumers with the best possible produce, the business also has goals to create a more sustainable

future for people, communities and the planet. Due to new external and internal requirements, the meat processor recently invested in digital solutions. They wanted to explore real-time performance capabilities together with predictive data feeds to improve decision-making and head towards more agile flow management. They deployed a new automated logistics solution for their cold-storage but found that this actually slowed down the end-to-end turnaround times of several products.

As a result, they were registering an increasing amount of waste in both raw materials and final goods. They also had little transparency of the discrepancies between expected and actual production volumes. With little to no visibility about how raw materials were moving through the production plant, no efficient changes could be made. Consequently, the meat processor chose to implement Apromore's process mining software to find the sources of these bad outcomes and shed light on hidden process issues.

Process analysis

To achieve the best possible results, Leonardo's process mining team collaborated with a data engineer and a business analyst from the customer's side. Since the meat processor wanted to better understand the movement of raw materials through the production plant, the team focused on end-to-end process flows for each product. Firstly, the necessary data was retrieved from the ERP and the manufacturing execution system. The Apromore process mining software then utilized the data to discover the processes automatically. The results showed detailed workflows of how the materials moved from the production plant to the cold storage and ultimately to the customer. Along with the

automatic process discovery, the following features of the software were used to conduct an in-depth analysis of the process flows:

- ★ **Performance mining**
- ★ **Variant analysis**



Results and Benefits

Thanks to the performance mining capability of the Apromore solution, the end-to-end processes have been enriched with performance statistics, making it almost effortless to identify long processing and waiting times, as well as bottlenecks. Bottlenecks are organizational weak-points that result in a delay of subsequent process steps. For the meat processor, those bottleneck tasks were often the reason for inefficient process flows and long processing and waiting times. To decrease the amount of waste produced in each production plant, the teams conducted a comprehensive bottleneck and rework analysis. Additionally, the joint team of experts analyzed the numerous case variants for all 20 product types.

Achieving process excellence

As a result of the in-depth performance and variant analyses, several inefficiencies were

identified and quantified, overcoming the previous lack of visibility of material movements. Thanks to the Apromore process mining software, the meat processor now has a clear understanding of all process flows, meaning they have a much better decision-making foundation. Moreover, the Leonardo team helped to determine the most efficient change actions and to implement those throughout the business.

These improvements resulted in incredible achievements after only three months. The average turnaround time of all products has been improved by 10% and the end-to-end turnaround times for some products has now sped up by up to 30%. With an increase in efficiency also came a significant reduction in waste production. Overall, the meat processor is now saving more than \$800,000 each year!



Turnaround time of some products improved by up to **30%**



Average turnaround time improved by **10%**



Savings worth **\$800K+** per year

Sneak-peek into the future

In addition to the improvement actions, the joint Apromore and Leonardo team has also implemented a predictive dashboard for the meat processor. This offers valuable insights into critical predictions that were previously only accessible through retrospective reports. This allows the meat processor to make data-driven and advanced decisions, which helps them:

- ★ **Optimize their logistics**
- ★ **Predict critical stage completion time**
- ★ **Analyze the process stage performance**
- ★ **Analyze the supplier quality**
- ★ **Compare "Orders planned" with "Orders completed"**

About Apromore

We are a leading provider of process mining solutions and AI-driven business process improvement. Our vision is to democratize process mining by enabling organizations to achieve digital transparency and operational excellence.

Do you want to learn more about process mining and how it can help your organization reduce waste, increase efficiency and save costs? Reach out and start your own journey towards process excellence today!

Contact us