

Case Study



Paper &
Pulp

GAIN & CO

Case Study for a Food Packaging Producer

Background



The client produces cardboard-based food packaging and serves industrial and commercial food sector customers worldwide.

The client reached out to Gain & Co in order to gain an overview of their automation opportunities and how they may best proceed in achieving their strategic objectives through automation.

These strategic objectives included:

- Improved competitive advantage
- Increased production efficiency
- Improved safety and working environment

Furthermore, the client was investigating the best possible ways to automate the process of handling stacks of coated cardboard sheets from palletized stacks into edge bender machines.

Gain & Co's Role



Gain & Co's senior engineering team visited the client's factory and conducted a thorough analysis of the processes, in order to describe their benefits and complexities with respect to automation.

Our team created an Automation Index, which helped the client to assess relevant automation projects according to the estimated payback period, the range of solutions available, and estimated overall efficiency improvement potential.

For the selected process - handling stacks of coated cardboard sheets, Gain & Co conducted market research and listed the potential suppliers which had the best prerequisites and experience to provide suitable solutions, and prepared a comprehensive requirement specification.

Gain & Co then conducted a sourcing process to receive and evaluate offers from the identified suppliers, and identify the best solution and offer.

Value Delivered



Our work particularly identified strong benefits achieved by automating the process for the previously manual task of handling stacks of coated cardboard sheets.

The final delivery offered the client a shortlist of the most relevant suppliers for the specific solution and 3 final offers ready for contracting. This brought significant value to the client due to their initial struggle of finding any supplier capable of delivering such a solution.

The business case revealed the potential for reducing man-hours by 80-85% by fully automating the process. Achieving an expected payback period of ~3 years.

One of the most important motivations for the client's considerations about automation was to avoid unilaterally repetitive work for the employees. The offered solution(s) were able to significantly reduce the amount of unilaterally repetitive work and thus improve the safety and working environment.

Case Study



GAIN & CO

Strategic plan for a global manufacturer of steel wheels

Background



The production of the wheels is highly manual, involves many heavy lifts, and the work environment is challenging. This makes it difficult to hire and retain new operators within the production.

The client needed to be prepared for the future, regarding meeting future growth and mitigating the shortage of labor within the industry and therefore reached out to Gain & Co to support their strategic ambition and automation motivation with the focus on:

- Delivery Performance & Quality
- Capacity & Efficiency
- Employee Safety & Environment

The client's desire to utilize automation is to reduce manual tasks, make the workplace more attractive for new employees, increase efficiency to meet future demand, and improve customer experience.

Gain & Co's Role



Gain & Co visited the client's site for 5 days and conducted a thorough analysis of the manufacturing processes in order to describe their benefits and complexities with respect to automation.

As a part of the operations excellence assessment, evaluating the manufacturing layout and operational design was recommended to avoid sub-optimizing by investing in automating waste in the processes and ensuring the factory of the future is designed to deliver on the performance objectives critical to staying competitive in the market.

Gain & Co conducted an Automation Risk Assessment describing the factors likely to influence the timeliness and cost of automation implementation, as well as the likelihood of achieving the automation strategy objectives during operations. These factors were divided into three sections - Operational, Technical, and Organizational risks.

In addition, Gain & Co held a workshop for reviewing the observations, operations excellence, assessment of the risk, and describing the strategy and ambition for automation.

Value Delivered



Our work identified significant potential in automating several core manufacturing processes at the client.

The final delivery offered the client a report with 37 identified opportunities for automation. For each observation, it has been explained why the observed task has automation potential, and it has been scored on multiple parameters.

Based on the collected observations, Gain & Co recommended 11 observations to start the automation journey with.

Additionally, Gain & Co's recommendation to flow optimize the layout in the welding shop to support an equipment-paced line flow has been decided to be part of the client's investment pipeline for the near future.

The estimated productivity improvement potentials ranged from 30-50% improvement to 70-90% improvement on the most impactful projects, with an average expected payback period of ~3 years.

Case Study



Food &
Beverage

GAIN & CO

Strategic plan for a leading speciality bakery manufacturer

Background



The client is a market leader in baking cakes and treats for supermarkets and licensed brands. Recently labor constraints, increasing demand, and focus on cost efficiency have impacted the ability to take larger market shares.

The client reached out to Gain & Co in order to gain an overview of their automation opportunities and how they may best proceed in achieving their strategic objectives through automation.

These strategic objectives included:

- Improved Product Quality & Process Control
- Improved Productivity & Capacity
- Improved Cost Efficiency
- Improved Operational Agility & Responsiveness

Gain & Co's Role



Gain & Co visited 7 UK manufacturing sites of the client and conducted a thorough analysis of the manufacturing processes in each site to describe their benefits and complexities with respect to automation.

Our team created an Automation Index, which helped the client to assess relevant automation projects according to the estimated payback period, the range of solutions available, and estimated overall efficiency improvement potential. Qualitative insights were delivered alongside each key automation project covered in the index offering contextual analysis.

This enabled the management team to further prioritize and sequence the automation opportunities according to key strategic considerations, thus enabling the client to protect and develop further competitive advantages.

Value Delivered



Our work identified significant potential in automating several core manufacturing processes at the client.

The final delivery offered the client a report with 200 automation observations across the 7 UK sites. Each site has received an overview of its key specific automation opportunities.

Local management prioritized 46 automation opportunities, based on the collected observations, of which 14 combinations of opportunities were consolidated at the group-level.

Gain & Co applied a weighted scoring model to further shortlist 7 group-level automation programs for group management evaluation. The estimated productivity improvement potentials among the 7 shortlisted automation programs ranged from 30-50% improvement to 70-90% improvement on the most impactful programs, with an average expected payback period of ~3 years.

Case Study



GAIN & CO

Strategic plan for an international transportation center in the UK

Background



The client reached out to Gain & Co in order to help them identify automation and technology potential in selected public and maintenance areas of the station, with the focus on:

- Improving passenger safety and experience
- Reducing maintenance costs for buildings
- Reducing cost for daily operations
- Reducing the lead time from “possible defect” to “defining the defect”
- Lowering internal errors
- Improving sustainability and recycling

The client needed to be prepared for the future, regarding the quality of the maintenance and service to minimize the otherwise potential increase of the cost. Finally, and not for discussion, is to improve the safety of passengers and employees.

Gain & Co's Role



Gain & Co's senior engineering team visited the client's site for two (2) days and conducted a thorough analysis of several public areas of the station, as well as selected areas of the closed-off utility.

Based on the observations, our team created an Automation Index, which helped the client to assess relevant automation projects according to the estimated payback period, the range of solutions available, and estimated overall efficiency improvement potential. Qualitative insights were delivered alongside each key automation project covered in the index offering contextual analysis.

This enabled the management team to further prioritize and sequence the automation opportunities according to key strategic considerations, thus enabling the client to protect and develop further competitive advantages.

As a part of the strategy roadmap, our team held a summary workshop for assessing the risk, delivering a prioritization and mitigation plan for risk, a high-level potential investment budget, and a recommendation report.

Value Delivered



Our work identified significant potential in automating several processes at the client's site.

The final delivery offered the client a report with twenty-five (25) automation observations divided into seven (7) categories.

Six (6) observations with the highest automation potential were suggested as recommended choices to prioritize.

The identified processes had the potential for reducing the man-hours spent on the task by 40-60%, and the productivity increase by 50%-70% by automating the processes with standard technology.

Additionally, the overall mitigation plan for risk revealed the key benefits gained by the client, such as optimizing the resources spent on the project, consistent supplier engagement, improved supplier commitment, and knowledge spread across the entire team/department.