IS2114 - Business Process Re-engineering

Group 9



MALIBAN BISCUIT MANUFACTORIES (PVT) LIMITED

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01. Company Introduction & Background





Maliban Biscuit Manufactories Ltd. is a leading Sri Lankan company that has established itself as a prominent producer of crackers, cookies, and wafers. Founded in 1954, Maliban has become a household name in Sri Lanka and has successfully expanded its market presence to over 35 countries across five continents. The company's products are available in more than 100,000 retailers throughout Sri Lanka, highlighting its widespread popularity and reach.

The company's manufacturing facility, located in Sri Lanka, is equipped with state-of-art technology and adheres to the highest standards of hygiene and quality. Maliban produces approximately 25 million packs of biscuits each month, ensuring steady supply of its products to meet consumer demand. The facility's commitment to excellence is reflected in its certifications, including ISO 9001, ISO 14001, ISO 22000, and OHSAS 18001, which attest to its adherence to international standards in quality management, environmental responsibility, food safety, and occupational health and safety.

Maliban product portfolio includes its renowned cream cracker, which has cemented the company's position as a leading traditional Sri Lankan cookie brand. Despite facing intense competition from around 40 other biscuit manufacturers in Sri Lanka, including the market position. The company's ability to adapt and innovate has been key to its continued success in a competitive industry.

Under the stewardship of late Chairman Mr.A.G.R. Samaraweera, who has led the company for over 40 years, Maliban has achieved significant milestones and received numerous accolades. The company has been honoured with Sri Lanka's National Quality Award on several occasions, reflecting its commitment to delivering high-quality products and its leadership in the industry.

In addition to its commercial achievements, Maliban is dedicated to corporate social responsibility and sustainable practices. The company actively engages in various initiatives aimed at positively impacting the community to not only business success but also to contributing to societal well-being and sustainable development.

02. Business processes

2.1. Production

Maliban's production process is a meticulously organized sequence designed to ensure that every product meets the company's high standards of quality and consistency. The key stages in this process include mixing, cutting and baking, creaming, and packing. The production journey begins with the mixing stage, where carefully selected ingredients are combined in precise proportions. This stage is crucial as it determines the final quality of the product, with each batch being mixed under strict supervision to maintain uniformity across all products.

After it moves to cutting and baking stage. Here, the dough is shaped using automated cutters that ensure each piece is uniform in size and shape. Then entered to the baking process that is closely monitored to achieve the desired texture and flavour, whether it's the crispiness of cracker or the softness of cookie. For products that require filling, next step is creaming process. Maliban uses high quality creams that are prepared to enhance the flavour profile of the biscuits. The creaming process is also automated to ensure that the filling is evenly distributed, maintaining consistency in taste and appearance.

The final stage is Packing. once the products have cooled and passed quality checks, they are carefully packaged to preserve their freshness and taste. The streamlined production process, from mixing to packing, is a testament to Maliban; commitment to quality and innovation, ensuring that every product uploads the brand's reputation for excellence.

2.2 Sales and Marketing

Maliban employs a multifaceted sales and marketing strategy to bolster its presence and growth. Their sales and strategy includes a broad product range covering biscuits, cookies and savoy snacks, catering to diverse customer preferences. Distribution is achieved through various channels such as supermarkets, retail stores, and convenience shops, alongside a strong export market presence. Also engages in direct sales and partnerships with retail chains to enhance product availability.

In terms of Marketing, Maliban positions itself as a reliable brand known for high-quality and fresh products. Their marketing efforts are reflected through a mix of traditional and digital advertising, including TV commercials, radio spots and online platforms. The company conducts market research to stay along with consumer preferences and industry trends, participates in trade shows, and employs customer engagement initiatives such as loyalty programs to build a strong relationship with their audience.

Additionally, Maliban gives product development and innovation a lot of weight. To maintain its product line up to date and in line with changing consumer preferences, the company releases new products on a regular basis. Strict quality control procedures back this innovation and guarantee that every product lives up to Maliban's high standards. Furthermore, Maliban's continued success depends on its capacity to adjust to market shifts, such as customers' inclinations towards healthier solutions. In response to the rising demand for wholesome snacks, products with lower sugar content, whole grains, and other health-conscious components have been introduced.

Maliban has embraced digital transformation in addition to conventional sales and marketing strategies to increase its reach and engagement. The business optimises its marketing using data analytics.

2.3 Supply chain Management

Maliban excels in managing its supply chain to ensure efficient production and distribution of its diverse products range. The company employs advanced planning and techniques to forecast demand and optimize inventory, while sourcing high-quality raw materials from trusted suppliers, Their manufacturing process utilizes modern technology and stringent quality control measures.

Maliban manages logistics and transportation to deliver products efficiently to retailers and customers both locally and internationally. Strategis warehousing facilities support smooth storage distribution, and real-time information flow enhances coordination across the supply chain. By integrating various elements of their operations and proactively managing risks, Maliban ensures timely delivery and high customer satisfaction, maintaining cost-efficiency and operational excellence

The management of Maliban's supply chain places equal emphasis on environmental responsibility and sustainability. Through the use of eco-friendly methods throughout its operations, the company is dedicated to lowering its carbon impact. This entails utilising energy-efficient machinery during the manufacturing process, planning transportation routes to optimise fuel usage, and minimising waste through recycling and material disposal that is done responsibly. In order to guarantee that raw materials are procured responsibly and ethically, Maliban also works with suppliers who share their dedication to sustainability. In addition to helping to preserve the environment, these initiatives also appeal to customers who are becoming more environmentally concerned, which enhances Maliban's reputation.

In addition, Maliban consistently makes investments in innovation and technology to improve the effectiveness of its supply chain. The business uses cuttingedge supply chain management software, enabling real-time tracking of inventory levels, production

2.4 Quality Assurance

Maliban's QA department is resposible for maintaining the company's high sstandards of quality. The company is certified to ISO 9001, ISO 14001, ISO 22000 and OHSAS 18001 standards, ensuring that all products meet strict quality, environmental, safety criteria. QA teams are involved in every stage of the production process, from raw material inspection to final product testing. They monitor production lines to ensure that products are manufactured under strict hygienic conditions and meet the required specifications.

The QA department fosters a culture of continuous improvement, regularly reviewing processes and implementing changes to enhance product quality, reduce defects, and ensure customer satisfaction.

Maliban places a significant emphasis on Quality Assurance to maintain the high standards of its products and ensure customer satisfaction. The company employs a comprehensive QA process that begins with the sourcing of raw materials, ensuring that only the highest quality ingredients are used. These materials undergo rogorous testing to meet strict quality benchmarks. before entering the production process. Throughout manufacturing, Maliban implements advanced quality control measures, including automated systems and regular inspections, to monitor every stage of production. This meticulous approach helps in real-time, thereby preventing defects and ensuring consistency across product lines.

Maliban conducts extensive post-production testing to verify that finished products meet both internal and industry standards for safety, taste, and shelf life. The QA team also continuously reviews and updates the company's quality protocols to incorporate the latest industry best practices and technological advancements.

2.5 Finance

Maliban manages its finance process through a robust approach that emphasizes comprehensive financial management, strategic investment, and stringent compliance. The finance team oversees budgeting, cost control, and financial planning to ensure profitability and aligh resources with the company's growth objectives. They handle investment and capital management by evaluating expansion opportunities and capital expenditures while ensuring a satisfactory return on investment.

Compliance with financial regulations and accurate reporting are prioritized to maintain transparency and investor confidence. Risk management is crucial, with the team identifying and mitigating financial risks such as raw material cost fluctuations and currency exchange rates. Additionally, effective cost control measures are implemented to monitor and manage expenses across production and distribution, ensuring efficient resource utilization and financial stability.

Maliban's financial strategy is deeply intertwined with its commitment to sustainable growth and corporate responsibility. The company actively seeks to balance profitability with ethical considerations by aligning its financial practices with broader social and environmental goals. This includes investing in projects that promote sustainability, such as energy-efficient production methods, eco-friendly packaging, and community development initiatives, By doing so, Maliban not only enhances its reputation as a responsible corporate entity but also strengthens stakeholder trust, contributing to long-term success and ensuring that the company remains competitive in a rapidly evolving market.

03. Selected Business Processes

Supply chain management

The existing supply chain management process at Maliban Biscuit Manufactories encountered several critical issues that adversely affected operational efficiency and product quality. In this process, raw materials were delivered to the warehouse before undergoing Quality Assurance (QA) checks. This sequence led to multiple problems:

- Quality Issues and Delays: Defective or substandard materials often reached the warehouse, where they were only identified during QA checks. If the materials did not meet the required standards, they had to be returned or replaced, causing significant delays. These delays disrupted production schedules and increased lead times.
- Increased Costs: Handling defective materials at the warehouse incurred additional costs. Expenses related to reordering, managing returns, and processing replacements added financial strain. Furthermore, the costs associated with potential production downtime due to quality issues compounded the problem.
- Operational Inefficiencies: The process placed a considerable burden on the warehouse and procurement teams. The need for rework and coordination to manage quality issues introduced inefficiencies and complexity into their workflows. This increased the risk of errors and further delays.
- Inventory Management Challenges: With materials undergoing QA checks only after arriving at the warehouse, maintaining accurate inventory levels became challenging. The presence of substandard materials skewed inventory data, complicating inventory management and planning.
- Supplier Accountability: The existing process did not sufficiently hold suppliers accountable for the quality of the raw materials. As a result, there was less incentive for suppliers to ensure that their materials consistently met quality standards.

These problems underscored the necessity for a redesigned supply chain management process to enhance quality control, reduce delays and costs, and improve overall efficiency.

Sales and Marketing

The process of Sales and Marketing was chosen for re-engineering at Maliban Biscuits Manufactories due to it is playing a critical role in driving the company towards their goals.

By re-engineering this process, we aim to achieve several key improvements:

- Increasing Efficiency: By automating some of processes, we aim to reduce the manual workload. By this company will able to handle higher value orders with more accuracy.
- Enhanced Data Accuracy and Visibility: Implementing a centralized systems, company will provide real-time data access with their customers, improve the accuracy of sales information, and enable better decision-making.
- Improved Customer Satisfaction: Realtime connectivity with the customer can lead to better customer relationships and higher satisfaction levels.
- Strategic Advantage: By utilizing predictive analytics and a structured feedback loop, the marketing and demand planning departments can create more effective strategies. This will help Maliban Biscuits respond more quickly to market demands and stay ahead of competitors.

04. AS - IS Diagrams

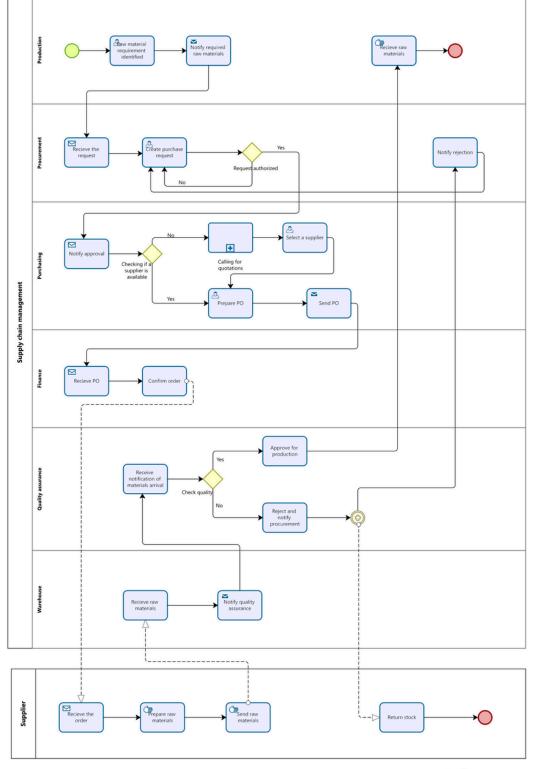
Supply chain management

In the Supply Chain Management process for Maliban Biscuit Manufactories, the process begins when the production team identifies the need for raw materials to manufacture biscuits. Once this need is established, the production team notifies the procurement department about the required raw materials.

The procurement team receives this request and creates a purchase request. If the request is authorized, it moves forward to the purchasing department. Here, the purchasing team first checks if a suitable supplier is available. If a supplier is available, they notify the approval of the purchase. If not, they proceed to call for quotations from potential suppliers. Once a supplier is selected, the purchasing team prepares a Purchase Order (PO) and sends it to the supplier. The supplier receives the order, prepares the raw materials, and sends them to Maliban Biscuit Manufactories.

Upon arrival, the warehouse team receives the raw materials and notifies the quality assurance department. The quality assurance team then checks the quality of the materials. If the materials meet the required standards, they are approved for production and handed over to the production department. If the materials fail to meet the standards, they are rejected, and the procurement department is notified. The rejected materials are then returned to the supplier.

This process ensures that Maliban Biscuit Manufactories consistently receives high-quality raw materials for their production needs, maintaining the standard of their products.

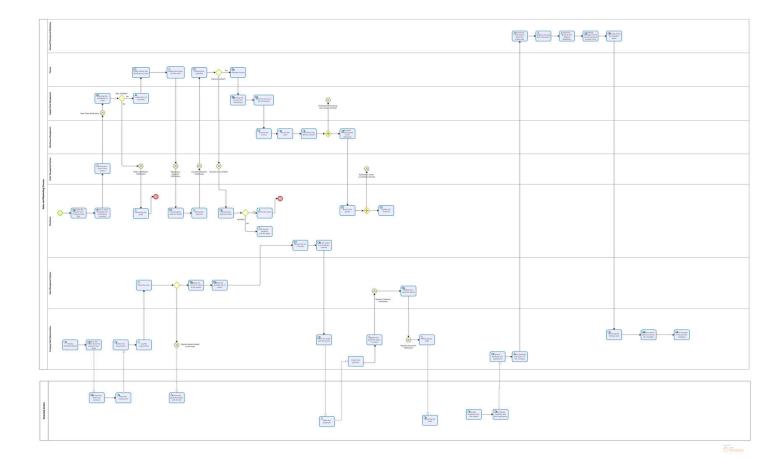




Sales and Marketing

The Sales and Marketing process at Maliban Biscuits Manufactories begins with regional distributors placing orders through an ordering system. These orders are then checked for product availability via the Supply Chain Management system. If all products are available, an order confirmation is sent to the distributor, and the order proceeds to the Finance department. The Finance department sends payment notifications to the distributor, and if the distributor makes the payment, an invoice is generated, and order processing begins. If payment is not made, the order is canceled, and a notification is sent to the distributor. Order is processed by the warehouse which is managed by an warehouse management system. Once the order is processed, order will be dispatched from the warehouse. Then the delivery vehicles will deliver the products to the related distributor. That concludes some of the steps in the process of Sales and Marketing.

Once orders are confirmed and payments are processed, sales representatives visit individual outlets to collect orders and record the outlets' specific requirements and feedback. After collecting the orders, delivery vehicles provided by the distributor are dispatched to fulfill them. This process also involves gathering feedback from the outlets about market trends and customer preferences. This feedback is relayed to the marketing and demand planning departments, which use it to develop marketing strategies. These strategies are then communicated back to the sales representatives, who implement them during their interactions with outlets.

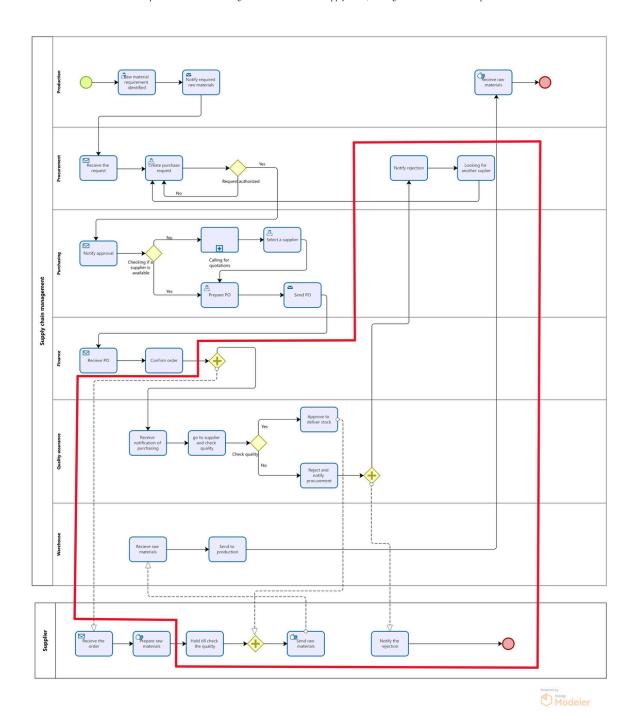


Production

05. TO - BE Diagrams

Supply chain management

In the redesigned supply chain management process, the supplier takes on a more proactive role in ensuring the quality of raw materials. Unlike the original process where the procurement team would place an order and the warehouse would receive materials before the Quality Assurance (QA) team conducted any checks, the new process requires the supplier to prepare the materials and hold them until they pass QA inspection. This shift means that the QA team now checks the materials at the supplier's location before they are dispatched to the warehouse. By ensuring that only materials meeting the required standards are sent to the warehouse, the new process reduces the risk of delays caused by receiving substandard materials and eliminates the need for repeated orders. This redesign streamlines the entire supply chain, making it more efficient and responsive.



06. Improvements achieved by the process redesign

Supply chain management

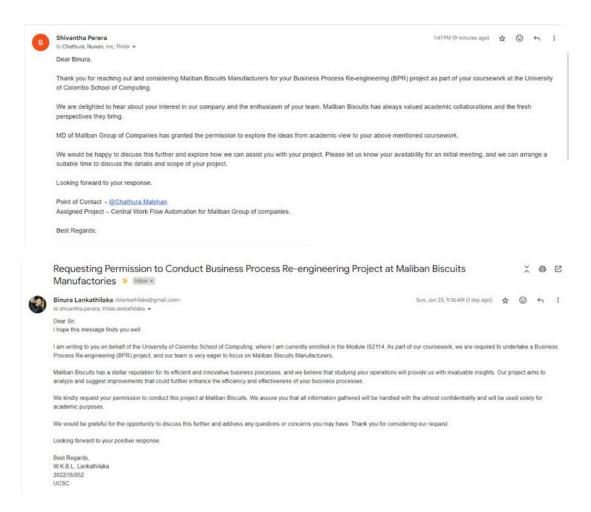
- Enhanced Quality Control: By shifting the QA checks to the supplier's location, the process ensures that only high-quality materials are sent to the warehouse. This reduces the risk of accepting substandard materials, which can lead to production delays and increased costs.
- Reduced Delays: The new process minimizes the time wasted on returning or replacing defective materials. Since materials are only sent to the warehouse after passing quality checks, there is a smoother flow of goods, leading to faster production cycles.
- Improved Supplier Accountability: The supplier is now more accountable for the quality of the raw materials they provide. This encourages suppliers to adhere to higher quality standards, knowing that their materials will be inspected before acceptance.
- Streamlined Workflow: The process eliminates the need for the warehouse to act as an intermediary between the supplier and the QA team. This reduces complexity and potential bottlenecks, leading to a more streamlined and efficient workflow.
- Cost Efficiency: By catching quality issues earlier in the supply chain, the company can avoid the costs associated with processing, storing, and returning defective materials.

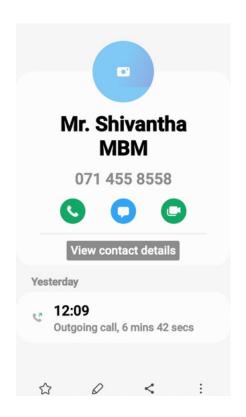
 This leads to overall cost savings.
- Better Inventory Management: Since only quality-approved materials are sent to the warehouse, inventory levels are more accurate and reflective of materials ready for use, improving inventory management and planning.

Overall, the redesign leads to a more efficient, reliable, and cost-effective supply chain management process.

07. Possible changes due to redesign

08. Evidence for process discovery





09. References

- [1] "Maliban Biscuit Manufactories," Maliban Biscuit, [Online]. Available: https://malibanbiscuit.com/. [Accessed: 20-Aug-2024].
 [2] "Maliban Biscuit," Facebook, [Online]. Available: https://www.facebook.com/malibanbiscuits.lk?mibextid=kFxxJD. [Accessed: 20-Aug-2024].
 [3] "Maliban Biscuit," Instagram, [Online]. Available: <a href="https://www.instagram.com/malibanbiscuits?igsh=MWljaDgyYW91N3FjOA=="https://www.instagram.com/malibanbiscuits?igsh=MWljaDgyYW91N3FjOA==="https://www.instagram.com/malibanbiscuits?igsh=MWljaDgyYW91N3FjOA==="https://www.instagram.com/malibanbiscuits?igsh=MWljaDgyYW91N3FjOA==="https://www.instagram.com/malibanbiscuits?igsh=MWljaDgyYW91N3FjOA==="https://www.instagram.com/malibanbiscuits?igsh=MWljaDgyYW91N3FjOA==="https://www.instagram.com/malibanbiscuits?igsh=MWljaDgyYW91N3FjOA==="https://www.instagram.com/malibanbiscuits?igsh=MWljaDgyYW91N3FjOA==="https://www.instagram.com/malibanbiscuits?igsh=MWljaDgyYW91N3FjOA==="https://www.instagram.com/malibanbiscuits?igsh=MWljaDgyYW91N3FjOA==="https://www.instagram.com/malibanbiscuits?igsh=MWljaDgyYW91N3FjOA==="https://www.instagram.com/malibanbiscuits?igsh=MWljaDgyYW91N3FjOA==="https://www.instagram.com/malibanbiscuits?igsh=MWljaDgyYW91N3FjOA==="https://www.instagram.com/malibanbiscuits?igsh=MWljaDgyYW91N3FjOA==="https://www.instagram.com/malibanbiscuits?igsh=MWljaDgyYW91N3FjOA==="https://www.instagram.com/malibanbiscuits?igsh=MWljaDgyYW91N3FjOA==="https://www.instagram.com/malibanbiscuits?igsh=MWljaDgyYW91N3FjOA==="https://www.instagram.com/malibanbiscuits?igsh=MWljaDgyYW91N3FjOA==="https://www.instagram.com/malibanbiscuits?igsh="https://www.instagram.com/malibanbiscuits?igsh="https://www.instagram.com/malibanbiscuits?igsh="https://www.instagram.com/malibanbiscuits?igsh="https://www.instagram.com/malibanbiscuits?igsh="https://www.instagram.com/malibanbiscuits?igsh="https://www.instagram.com/malibanbiscuits?igsh="https://www.instagra