

# **Assessment Report**

**Prepared For:** 

**Sample Engineering Solutions** 

10 April 2024

# Business Process Optimisation Audit Report

**Client:** Sample Engineering Solutions

Consultant: Cyder Solutions

Date: 10 April 2024

# **Executive Summary**

This report presents the findings of a Business Process Optimisation Audit conducted for Sample Engineering Solutions. The objective of this audit was to identify inefficiencies, recommend improvements, and streamline business processes to enhance productivity, reduce costs, and improve overall operational efficiency. The audit covered key areas such as inventory management, procurement, production, and accounting.

#### Summary recommendations:

Four (4) areas were identify as areas of improvement and broken into phases. Each phase will deliver financial benefits in under six (6) months of implement. The total costs would be \$57,000 producing predicted savings of \$135,000 per annum. The phases are as follows:

- Phase 1: Inventory Management Optimisation
- Phase 2: Procurement Process Improvement
- · Phase 3: Production Scheduling Enhancement
- Phase 4: Accounting Process Enhancement

A high level action plan for each phase has been outlined in this document.

# **Company Overview**

Sample Engineering Solutions is a small-to-medium-sized enterprise specialising in the supply, installation, and maintenance of industrial equipment, including large industrial air conditioners, pumps for irrigation, mining equipment, weighbridges, and electric car charging stations. The business employs 50 staff members and uses various software tools, including Xero and Odoo, to manage its operations.

# Methodology

The audit was conducted using the following steps:

- **1. Interviews:** Conducted with key staff members from inventory management, procurement, production, and accounting departments.
- 2. Process Mapping: Documented current processes to identify inefficiencies and bottlenecks.
- **3. Data Analysis:** Analysed transaction data from the existing systems to identify patterns and areas for improvement.
- **4. Gap Analysis:** Compared current processes against industry best practices to identify gaps and areas for optimisation.

# **Findings**

## **Inventory Management**

Current Process: Manual tracking of inventory using spreadsheets.

#### Issues Identified:

- Inaccurate inventory levels leading to stockouts and overstock situations.
- · Delays in updating inventory records.
- · High dependency on key personnel for inventory management.

#### **Procurement**

Current Process: Procurement requests are manually approved and tracked.

#### Issues Identified:

- Slow approval process causing delays in order placements.
- Lack of integration between procurement and inventory systems.
- · High manual effort in tracking order statuses.

### **Production**

Current Process: Production schedules are managed manually.

#### Issues Identified:

- Inconsistent production timelines due to manual scheduling.
- Inefficient resource allocation leading to production delays.
- · Lack of real-time visibility into production progress.

# **Accounting**

Current Process: Financial transactions are managed using Xero.

#### Issues Identified:

- Manual data entry leading to errors and inconsistencies.
- Limited integration with other business systems.
- Time-consuming reconciliation processes.

### Recommendations

- 1. Implement Automated Inventory Management:
  - Adopt an automated inventory management system integrated with Odoo.
  - Use barcode scanners for real-time inventory updates.
  - Implement automated reordering based on predefined inventory levels.
- 2. Streamline Procurement Process:
  - Integrate procurement with inventory management to enable real-time visibility of stock levels.

- Implement automated approval workflows to speed up procurement requests.
- Use purchase order tracking to monitor order statuses.
- 3. Optimise Production Scheduling:
  - Use Odoo's production module to automate scheduling and resource allocation.
  - Implement real-time tracking of production progress.
  - Use predictive analytics to forecast production timelines and manage resources efficiently.
- 4. Enhance Accounting Processes:
  - Integrate Xero with Odoo for seamless data flow between accounting and other business systems.
  - Implement automated data entry to reduce manual errors.
  - Use automated reconciliation tools to streamline financial processes.

# **ROI Analysis**

## **Inventory Management Optimisation**

Cost Savings: \$50,000 annually from reduced stockouts and overstock situations.

Efficiency Gains: 30% reduction in inventory management time, saving approximately 500 hours annually.

**ROI:** Implementation cost of \$20,000 with a payback period of 5 months.

## **Procurement Process Improvement**

Cost Savings: \$20,000 annually from reduced manual effort and faster procurement cycles.

Efficiency Gains: 25% reduction in procurement processing time, saving approximately 300 hours annually.

ROI: Implementation cost of \$10,000 with a payback period of 6 months.

# **Production Scheduling Enhancement**

Cost Savings: \$40,000 annually from optimised resource allocation and reduced production delays.

Efficiency Gains: 20% increase in production efficiency, saving approximately 600 hours annually.

**ROI:** Implementation cost of \$15,000 with a payback period of 4.5 months.

# **Accounting Process Enhancement**

**Cost Savings:** \$25,000 annually from reduced manual data entry errors and streamlined reconciliation processes.

Efficiency Gains: 35% reduction in accounting processing time, saving approximately 400 hours annually.

**ROI:** Implementation cost of \$12,000 with a payback period of 5.8 months.

## **Action Plan**

Phase 1: Inventory Management Optimisation

- Implement automated inventory management system.
- Train staff on new system usage.
- Monitor and adjust inventory levels based on real-time data.

Phase 2: Procurement Process Improvement

- Integrate procurement with inventory management.
- · Implement automated approval workflows.
- Train procurement staff on new system features.

Phase 3: Production Scheduling Enhancement

- Implement Odoo's production module.
- Train production staff on new scheduling tools.
- Monitor production progress and adjust schedules as needed.

Phase 4: Accounting Process Enhancement

- Integrate Xero with Odoo.
- · Train accounting staff on new integration features.
- Implement automated reconciliation tools.

## Conclusion

By implementing the recommended optimisations, Sample Engineering Solutions can significantly enhance its operational efficiency, reduce costs, and improve overall productivity. These changes will enable the business to scale effectively, reduce dependency on key personnel, and achieve a more streamlined and automated workflow. The projected ROI figures indicate that these improvements will provide substantial financial benefits within a short payback period.

# **Appendices**

Appendix A: Detailed Process Maps

Appendix B: Interview Summaries

Appendix C: Data Analysis Results

## Prepared by:

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## Approved by:

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This condensed report is a high level sample only intended for demonstration purposes only.

