**Project Brief**

**Project Title:** Digitalization of Citizen Refrigeration Operations

**Project Manager:** Anusha Nampally

**Date**: 01/02/2025

**1. Project Background**

Citizen Refrigeration faces annual operational inefficiencies costing approximately £110,000 due to excessive paperwork, errors in part ordering, and inefficient scheduling of engineer visits. This project aims to adopt a digital workflow system, automate inventory management, and implement intelligent scheduling tools to streamline operations and improve efficiency.

**Competitive Advantage:**

* Reduce financial losses and optimize resource allocation.
* Enhance customer experience with faster response times.
* Improve competitiveness through modernization.
* Reduce carbon footprint by transitioning to paperless operations.

**2. Project Objectives**

* **Implement IoT-enabled Products**: Integrate IoT sensors into refrigeration units for real-time monitoring and predictive maintenance.  
  *Success KPI: 95% uptime and 99% data accuracy in IoT sensors.*
* **Digitize Manufacturing**: Streamline production processes through automation and digital tracking systems. *Success KPI: 20% reduction in production downtime.*
* **Automate Inventory Management**: Use digital tools to track inventory automatically. *Success KPI: Reduce stockouts by 30%.*
* **Enhance Customer Engagement**: Develop a portal for easier access to support services and product tracking. *Success KPI: Reduce support request response time by 30%.*
* **Data-Driven Decision Making**: Establish analytics capabilities for production, sales, and customer feedback. *Success KPI: Improve forecasting accuracy by 25%.*
* **Improve Supply Chain Management**: Leverage digital solutions for better coordination with suppliers. *Success KPI: Reduce lead times by 15%.*
* **Reduce Paperwork & Administrative Costs**: Transition to digital forms and documentation. *Success KPI: Decrease administrative overhead by 40%.*
* **Enhance Scheduling & Resource Allocation**: Implement automated job scheduling and tracking tools. *Success KPI: Reduce wasted engineer visits by 50%.*

**3. Project Scope**

**In-Scope**:

* Development and implementation of IoT sensors.
* Implementation of an ERP system for manufacturing, inventory, and supply chain management.
* Creation of a customer-facing digital portal.
* Staff training on new digital tools.
* Integration of data analytics tools.
* Warehousing improvements and digital tracking.
* Automated job scheduling and tracking systems.

**Out of Scope**:

* Major redesign of existing refrigeration products.
* Development of new business models (e.g., subscription-based models).
* Post-launch marketing activities (unless related to digital aspects).

**4. Project Approach**

This project will follow a detailed PRINCE2 project management methodology combined with Agile implementation for flexibility and efficiency. The key phases are:

**Step 1: Project Initiation**

* Define the business requirements, project scope, and strategic goals.
* Identify stakeholders and assign roles within the project organization.
* Secure approval and allocate an initial budget.
* Conduct feasibility studies and risk assessments.
* Establish governance frameworks for decision-making.

**Step 2: Project Planning**

* Develop a detailed project plan, including timelines, milestones, and deliverables.
* Break down tasks for IoT integration, ERP implementation, and digitalization phases.
* Assign resources and define responsibilities.
* Identify dependencies and mitigate potential bottlenecks.
* Implement a risk management plan.

**Step 3: Execution & Development**

* Implement IoT-enabled refrigeration units for real-time monitoring.
* Deploy automated inventory management systems.
* Integrate ERP solutions for manufacturing and supply chain tracking.
* Develop and launch the customer-facing digital portal.
* Deploy AI-driven scheduling and tracking solutions.
* Conduct phased rollouts and pilot testing for iterative improvements.

**Step 4: Monitoring & Controlling**

* Continuously track progress using KPIs and reporting dashboards.
* Perform quality control checks at each stage of implementation.
* Address deviations through issue resolution and risk mitigation strategies.
* Gather user feedback and optimize solutions accordingly.

**Step 5: Training & Change Management**

* Conduct employee training programs to ensure adoption of digital tools.
* Establish knowledge-sharing platforms and self-paced training portals.
* Implement support structures to help users adapt to the new systems.
* Manage resistance through clear communication and engagement initiatives.

**Step 6: Project Closure & Handover**

* Perform final system validations and user acceptance testing.
* Conduct a formal review to evaluate project success and document lessons learned.
* Finalize all training materials and transition support to operational teams.
* Ensure post-implementation monitoring for continuous improvement.
* Secure final approval from the Project Board.

**Key Milestones & Timeline:**

1. IoT Sensor Pilot Deployment – [Month X]
2. ERP System Phase 1 Implementation – [Month X+2]
3. Customer Portal Beta Release – [Month X+4]
4. Full Digital System Deployment – [Month X+6]

**5. Project Organization Structure**

**Project Board**

Executive: [Insert name]

Senior User: [Insert name], Customer Relations Lead

Senior Supplier: [Insert name], IT Systems Lead

**Project Team**

Project Manager: Anusha Nampally

IoT Lead: [Insert name]

ERP System Lead: [Insert name]

Customer Portal Lead: [Insert name]

Data Analytics Lead: [Insert name]

Training and Support Lead: [Insert name]

**6. Business Case**

Citizen Refrigeration (C.R.) faces operational inefficiencies, costing the company approximately £110,000 annually due to excessive paperwork, errors in part ordering, and inefficient scheduling. The proposed digital transformation project includes implementing a digital workflow system, automated inventory management, and intelligent scheduling tools to enhance productivity and customer satisfaction.

**Investment & Savings:**

* Total Investment: £75,000
* Annual Savings: £93,000
* Payback Period: 10 months
* ROI (Year 1): 24%
* ROI (Year 2+): 124%

**Expected Benefits:**

* Reduce operational costs and improve productivity.
* Enhance service quality with faster response times and error-free operations.
* Free staff to focus on high-value tasks.
* Position the company as an industry leader.
* Improve environmental sustainability through digitalization.

**7. Risk Management**

|  |  |  |  |
| --- | --- | --- | --- |
| **Risk** | **Likelihood** | **Impact** | **Mitigation Strategy** |
| Escalating operational costs | High | High | Implement digital workflow solutions to cut inefficiencies. |
| Customer dissatisfaction | High | High | Improve response times with automation and self-service portals. |
| Customer dissatisfaction | High | High | Improve response times with automation and self-service portals. |
| Cybersecurity threats | Medium | High | Implement ISO 27001-compliant security measures. |
| Cost overruns | Medium | High | Closely monitor implementation costs and have contingency plans. |
| Vendor delays | Medium | High | Identify alternative suppliers for key digital components. |
| Uncertain ROI realization | Medium | Medium | Continuously assess and optimize digital processes post-launch. |

**8. Quality Expectations**

* IoT systems must be reliable, secure, and provide accurate real-time data.
* ERP integration must ensure seamless coordination between manufacturing, inventory, and customer operations.
* Customer portal must be user-friendly, accessible, and provide real-time support and order tracking.
* Digitalized workflow should reduce errors by at least 40% and improve process efficiency.
* All implemented systems must comply with relevant industry standards, including ISO 27001 for data security.
* Rigorous testing and validation processes must be in place for all deployed solutions.

**9. Project Constraints**

* **Budget**: The project must be delivered within a budget of £ 110,000.
* **Time**: The digitalization process must be completed by [Insert Date].
* **Resources**: Availability of skilled IT professionals, engineers, and staff to manage digital transformation.
* **Vendor Dependence**: The project timeline may be impacted by the availability and reliability of external technology vendors.

**10**. **Project Deliverables**

* **IoT-Enabled Refrigeration Units**: Fully functional IoT devices integrated into existing refrigeration units.
* **ERP System**: A fully implemented and tested ERP system for managing production, inventory, and supply chain.
* **Customer Portal**: A user-friendly portal providing product data, real-time monitoring, and support services.
* **Data Analytics Framework**: A set of tools and dashboards for performance monitoring and decision support.
* **Training Materials**: Documentation and training sessions for staff to adapt to new systems.

**11. Approval**

The project will proceed once the following approvals are secured:

* **Approval of the Project Brief from the Project Board.**
* **Final Business Case approval from senior management.**

**Signatures:**

* **Project Manager:** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_
* **Project Executive:** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_
* **Senior Supplier:** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_
* **Senior User:** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_

**Summary**

This PRINCE2 Project Brief aligns with the Citizen Refrigeration Business Case, ensuring operational efficiency and financial feasibility. The integration of detailed step-by-step project execution, KPIs, risk prioritization, financial projections, governance structures, and quality assurance enhances project viability and long-term success.