
Report Format: Process Reengineering Using Data Analytics – Coffee Serving Setup

Objective:

Analyze the current coffee-serving process, propose new KPIs, and recommend how technology can reengineer the process to achieve these KPIs.

1. Title Page

- Report title
 - Student name(s)
 - Course & instructor
 - Date
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2. Executive Summary (½ page)

- Brief overview of the current process
 - Key issues identified
 - Proposed KPIs (e.g., minimize waiting time, minimize total time in café)
 - High-level recommendations for reengineering with technology
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3. Introduction

- Purpose of the report
 - Importance of process analysis and reengineering in service settings
 - Context: Why optimizing a coffee-serving process matters (customer satisfaction, efficiency, cost, etc.)
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4. Current Process Analysis (As-Is)

- **Description of current process** (step-by-step flow, roles involved)
 - **Process map/diagram** (e.g., customer arrives → orders → pays → waits → receives coffee → exits)
 - **Data/observation summary** (waiting times, bottlenecks, inefficiencies)
 - **Current KPIs** (what is measured today, such as average service time or queue length)
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5. KPI Reframing

- Define new KPIs based on desired outcomes (e.g., minimize waiting time, maximize customer turnover, minimize staff idle time)
 - Explain why these KPIs are more relevant for business goals
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6. Technology Impact Analysis

- **Digital ordering systems** (e.g., mobile pre-order apps, self-service kiosks) – impact on queue times and accuracy
 - **Automation tools** (e.g., smart coffee machines, robotic baristas) – impact on speed and consistency
 - **Data analytics dashboards** (tracking customer flow, peak times, inventory usage) – impact on decision-making
 - **AI/ML predictive tools** (predict demand, adjust staffing) – impact on efficiency and planning
 - For each technology, describe:
 - *How it changes the process flow*
 - *Which KPIs it improves*
 - *Challenges or costs of implementation*
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7. Proposed Reengineered Process (To-Be)

- Present a redesigned process map (before vs. after technology)
 - Highlight how bottlenecks are resolved
 - Show alignment between technology solutions and KPIs
 - Show process flow document
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8. Managerial Recommendations

- Summarize top 3–4 recommendations for management
 - Emphasize feasibility, impact, and alignment with KPIs
 - Suggest quick wins (e.g., digital queue management) vs. long-term changes (e.g., full automation)
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9. Conclusion

- Reinforce the importance of reengineering with technology
 - Summarize expected outcomes (shorter waiting times, improved customer satisfaction, efficiency gains)
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10. References

- Cite any articles, cases, or examples of technology in coffee shops or similar service processes
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Presentation Deliverable (Optional)

Alongside the report, prepare a **5–7 slide presentation** including:

1. Current process overview
2. Key problems and current KPIs
3. New KPIs
4. Technology-driven solutions
5. Redesigned process
6. Recommendations & conclusion