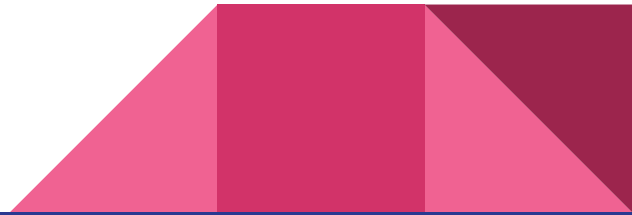
# CASE STUDY 1

Team Agile Presentation

## Case Study

An organization's inventory management department is struggling with frequent stock outs and overstock situations, leading to increased costs and customer dissatisfaction.



# TASK 1- Define the problem or itemize the issues presented in the case study.

**Inventory Management Issues**

1. Frequent Stock Outs: The organisation frequently experiences instances where inventory levels fall below the required level, resulting in an inability to meet customer demands.

1. Overstock Situations: There are also frequent instances of overstocking, where inventory levels exceed the optimal amount, leading to increased holding costs.

1. Increased Costs: Both stock outs and overstock situations contribute to higher operational costs.

1. Customer Dissatisfaction: The inability to consistently meet customer demand and the inefficiencies associated with inventory management lead to customer dissatisfaction

# TASK 2:  Outline the objectives or goals of the business analysis project.

Objectives of the project are to:

- **Evaluate the business need**: Identify the root causes of the  out of stock and overstocking situations
- **Taking advantage of new technologies**: Improve inventory management processes and workflow by implementing an inventory management and stock replenishment system.
- **Make data-driven decisions to manage costs**: Reduce inventory costs associated with poor inventory management.
- **Understand the customer needs**: Enhance customer satisfaction by fulfilling customer orders on time and in full.

# TASK 3 Analyze the case study into SDLC phases (what you will be doing as the BA in this process)

**Phase 1: Ideation / Project Concept**

- Activities: Brainstorming, product concept definition, project management planning, and defining requirements.
- BA Tasks:
  - Conduct brainstorming sessions with key stakeholders to understand the current inventory management issues.
  - Develop a clear project concept that addresses the frequent stock outs and overstock situations.
  - Define high-level requirements and create the User Requirement Specification (URS) document.
  - Outline the project management plan, including timelines, resources, and key milestones.

**Phase 2: Requirements Analysis**

- Activities: Reviewing URS, conducting requirement workshops, and defining functional and technical requirements.
- BA Tasks:
  - Conduct detailed requirement workshops with stakeholders to gather in-depth functional and technical requirements.
  - Review and finalize the URS with stakeholder input.
  - Document functional and technical requirements in detail, ensuring they address the root causes of inventory issues.

# TASK 3 Analyze the case study into SDLC phases (Continued)

**Phase 3: Design**

- Activities: System design using UML, design review, and approval.
- BA Tasks:
  - Collaborate with system architects and designers to create UML diagrams that map out the new inventory management system.
  - Ensure the design incorporates solutions to reduce stock outs and overstock situations.
  - Facilitate design review sessions with stakeholders to get approval on the system design.

**Phase 4: Development**

- Activities: Software development, creating prototypes, and working on the solution.
- BA Tasks:
  - Work closely with the development team to ensure they understand the requirements and design specifications.
  - Oversee the development of prototypes and working solutions, providing continuous feedback to ensure alignment with requirements.
  - Ensure that any adjustments or enhancements are communicated and incorporated during development.

# TASK 3 : Analyze the case study into SDLC phases (Continued)

**Phase 5: Testing**

- Activities: Internal Acceptance Testing (IAT) and User Acceptance Testing (UAT).
- BA Tasks:
  - Develop comprehensive test cases and plans based on the requirements and design specifications.
  - Coordinate and conduct Internal Acceptance Testing to ensure the system functions as intended.
  - Organize User Acceptance Testing with end-users to validate the system's effectiveness in real-world scenarios.
  - Gather and document feedback from UAT, making necessary adjustments.

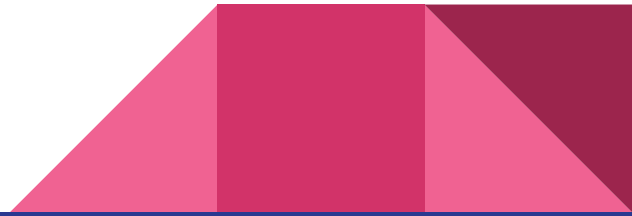
**Phase 6: Deployment**

- Activities: Release/change management, production deployment, and sanity testing.
- BA Tasks:
  - Develop a deployment plan that includes change management strategies to ensure a smooth transition.
  - Oversee the production deployment process, ensuring all components are correctly implemented.
  - Conduct sanity testing post-deployment to confirm that the system is operational and stable.

# TASK 3 : Analyze the case study into SDLC phases (Continued)

**Phase 7: Post Implementation**

- Activities: Monitoring and managing change requests.
- BA Tasks:
  - Monitor the system's performance to ensure it continues to meet the inventory management goals.
  - Collect and analyze data on the system’s impact on reducing stock outs, overstock, and operational costs.
  - Address any change requests or issues that arise post-implementation, ensuring continuous improvement.



## TASK 4: Highlight the techniques to be used throughout the project and where and how they are used.

**1. Root cause analysis:** Conduct a thorough analysis to identify the underlying reasons for the frequent stock outs and overstock situations. This involves examining current inventory management processes, systems, and policies to pinpoint areas of inefficiency or inconsistency.

**2. SWOT analysis**: Evaluate the organization's strengths, weaknesses, opportunities, and threats related to inventory management. This analysis can help identify areas for improvement and potential risks that need to be addressed.

**3. Stakeholder analysis**: Identify key stakeholders involved in inventory management, such as suppliers, customers, and internal departments. Understand their needs, expectations, and roles in the inventory management process to ensure alignment and collaboration.

**4. Process mapping**: Map out the current inventory management processes from procurement to storage to distribution. Identify bottlenecks, redundancies, and inefficiencies in the workflow that may be contributing to stock outs and overstock situations.

# TASK 5: Highlight the stakeholders from the most important to the least important

While all stakeholders are important for a successful business, here's a breakdown of the stakeholders in this case study, prioritized based on their immediate impact on the situation

**Most important**

1. **Customer:**Stockouts directly impact customer satisfaction. Without the desired products, they may take their business elsewhere, leading to lost sales and potential damage to brand reputation.
2. **Procurement Team:** Manage supplier relations to ensure cost-effective supply of inventory.
3. **Suppliers:** Ensure availability, quality and timely delivery to avoid stockouts and overstock situations.
4. **Inventory Management Department:** This department is directly responsible for resolving the stockout and overstock issues. They play a crucial role in implementing solutions and improving inventory management practices.
5. **Warehouse operations Team:** They handle the logistics and warehousing aspects, ensuring efficient storage, handling, and distribution of inventory.
6. **Project Manager:** Directly is responsible for the project plan, scope and key deliverables.
7. **Business Analyst**: Responsible for defining the solution scope, identifying the requirements,risks, assumptions and constraints

# TASK 5: Highlight the stakeholders from the most important to the least important (Contd.)

**Important**

**8. Finance Team:** They play a crucial role, but their impact might be less immediate compared to other stakeholders. The finance team calculate the financial impact of reduced stockouts and overstock situations. They track key metrics like inventory turnover and carrying costs to measure the success of implemented solutions.

**9. IT Department:** Provides the necessary technological support, such as inventory management systems and data analytics tools, to enhance decision-making and operational efficiency.

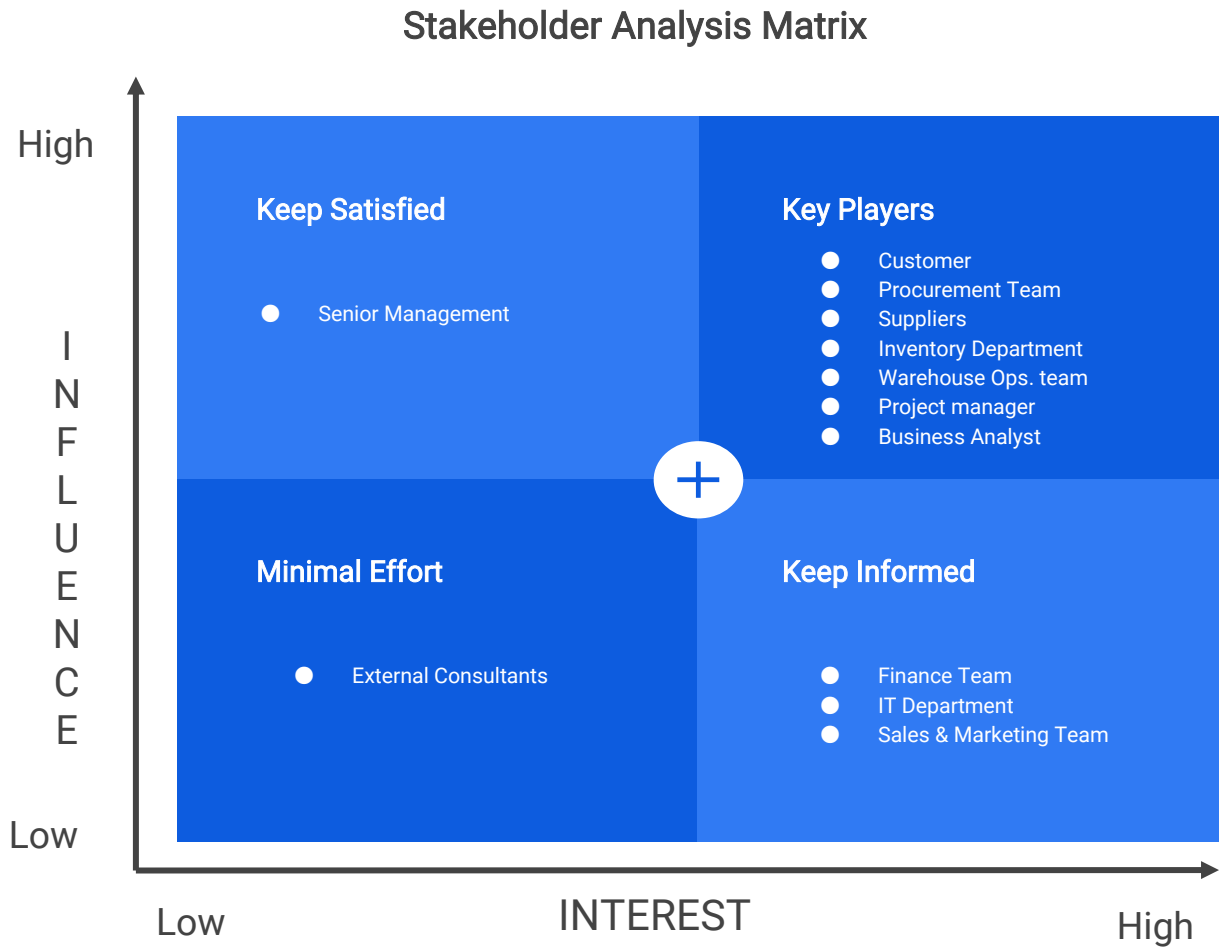
**10. Sales & Marketing Team:**The sales team plays a vital role in improving inventory management, even though they might not be directly responsible for stock levels. Their understanding of customer demand and future trends is vital for accurate forecasting. Collaboration between these departments is key.

**11. Senior Management**: They provide strategic direction, approve budgets, and ensure the project aligns with the overall business objectives.

**Least Important**

**12. External Consultants:** May be consulted on best practices to optimize inventory management processes.

# TASK 5: Highlight the stakeholders from the most important to the least important (Contd.)



# TASK 6 : Summarize the outcomes and benefits achieved as a result of the business analysis project.

## Outcomes & Benefits

As a result of the project, the inventory department experienced the following significant improvements :

- Streamlined workflow, thereby improving operational and process efficiency.
- Inventory accuracy and optimized stock levels which reduced stock out , overstocking situations and waste by 80%.
- Reduction of inventory-related expenses resulting in improved cash flow by 40% for the organization which is being used as  investment in other areas of the business.
- Product availability and timely delivery of customer orders thereby increasing customer satisfaction by 60%
- Inventory management efficiency increasing business competitive edge and quicker response to market demands and trends.