

Assignment 2- Case Study

Task-

The goal of this assignment is for students to research and develop a comprehensive case study on a chosen topic from the list provided. You will need to dive deep into the subject matter, analyze the problem, explore solutions, and present your findings professionally and clearly using a PowerPoint presentation.

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Format-

- 1. **Title Slide:** Introduces the case study, presenters, and date.
- 2. **Executive Summary:** Provides a concise overview of the case. [Or **Context and Business Problem**]
- 3. **Problem Identification:** Details the business problem, industry context, and impact.

- 4. Comparative Analysis: Compares different potential solutions and evaluation criteria. [Or Root Cause Analysis, Solution Exploration, Importance of Innovation]
- 5. Chosen Solution: Explains the selected solution and its rationale.
- 6. **Technical Details:** Breaks down the technical aspects of the solution.
- 7. **Implementation Plan:** Outlines the phased approach, timelines, and responsibilities.
- 8. **Risk Assessment:** Identifies potential risks and mitigation strategies.
- Cost-Benefit Analysis: Evaluates the financial benefits and costs of the solution. [Or Financial or Operational Impact, Risks & Mitigation]
- 10. **Expected Outcomes:** Quantifies the expected results and improvements.
- 11. Case Studies: Provides examples of similar cases or implementations.
- 12. **Conclusion & Recommendations:** Summarizes key findings, recommends next steps, and provides a call to action.

Example Case-

Walmart Supply Chain Woes

Walmart, founded in 1962 by Sam Walton, is one of the largest retail corporations in the world. Known for its "Everyday Low Prices" (EDLP) model, Walmart operates in multiple sectors, including supermarkets, hypermarkets, and e-commerce. Its business model revolves around offering a wide range of products at affordable prices, supported by efficient supply chain management and strategic procurement practices.

Over time, some of the key procurement-related problems Walmart faced include:

- Supplier Management & Negotiation
- Supply Chain Complexity
- Supply Chain Negotiation
- Supplier Dependency

Being a Supply Chain Lead, how will you overcome the above challenges?

Slide 1:

Title: Walmart Supply Chain Woes

Slide 2: Executive Summary

- Walmart is one of the largest global retailers, known for its EDLP model.
- Faces procurement challenges like Supplier Management, Supply Chain Complexity, and Supplier Dependency.
- The goal is to identify how to overcome these supply chain issues.

Slide 3: Problem Identification

Key Problems:

- Supplier Management & Negotiation: Difficulty managing relationships with thousands of suppliers.
- Supply Chain Complexity: Involving international suppliers, logistics, and different types of products.
- Supplier Dependency: Reliance on certain suppliers for critical products.

Slide 4: Comparative Analysis (Solution Exploration)

Potential Solutions:

- Strengthen supplier relationships by diversifying supplier base and introducing automated systems for supplier negotiations.
- Simplify supply chain operations by adopting new technologies like AI for demand forecasting and blockchain for transparency.
- Reduce supplier dependency by creating multiple supplier partnerships and establishing backup suppliers.

Slide 5: Chosen Solution

Selected Solution:

- Streamlining the supplier management process using Al-based procurement systems.
- Adopting blockchain technology to simplify and secure supply chain complexity.
- Creating long-term contracts and strategic partnerships with multiple suppliers to mitigate risks of dependency.

Slide 6: Technical Details

Al for Supplier Management:

- Al to negotiate better deals with suppliers by analyzing historical data.
- Automating demand forecasting using Al algorithms.

Blockchain in Supply Chain:

- Secure, decentralized ledger to track shipments and ensure transparency.
- Real-time updates across the supply chain.

Slide 7: Implementation Plan

Phased Approach:

- **Phase 1**: Pilot Al procurement systems in select regions.
- Phase 2: Roll out blockchain for supply chain tracking in high-risk regions.
- Phase 3: Build strategic partnerships and negotiate contracts with multiple suppliers.
- **Timelines**: 12-18 months for full implementation.
- **Responsibilities**: SCM team, IT department, supplier management team.

Slide 8: Risk Assessment

Risks:

- Resistance to new technologies from suppliers.
- Technical issues in integrating Al and blockchain systems.
- Cybersecurity risks with blockchain.

Mitigation Strategies:

- Supplier training programs on new tech.
- Contingency planning for tech integration challenges.
- Regular security audits and updates.

Slide 9: Cost-Benefit Analysis

Costs:

- Al and blockchain system implementation.
- Supplier training and onboarding.
- Ongoing tech maintenance and updates.

Benefits:

- Reduced procurement costs due to Al negotiations.
- Faster supply chain visibility and reduced delays.

Lower risk of supply shortages from supplier dependency.

Slide 10: Case Studies (Similar Implementations)

Example 1: Amazon's use of Al in supply chain management.

Example 2: Maersk's use of blockchain for global logistics tracking.

Slide 11: Conclusion & Recommendations

Summary: Leveraging AI and blockchain will simplify Walmart's supply chain complexity, strengthen supplier relationships, and reduce dependency risks.

Recommendations:

- Focus on incremental technology adoption.
- Build long-term partnerships with multiple suppliers.
- Continue investing in supply chain innovations for future-proofing.

Ideas

Here are few topics for blockchain presentation:

1. Supply Chain Transparency

- Definition: Blockchain tracks products from production to delivery, ensuring authenticity and reducing fraud.
- Example: Walmart and IBM's Food Trust for food safety tracking.

2. Decentralized Finance (DeFi) & Smart Contracts

- Definition: DeFi eliminates intermediaries in financial transactions, while smart contracts automate agreements.
- Example: Platforms like Aave and Uniswap for decentralized lending and trading.

3. Non-Fungible Tokens (NFTs)

- Definition: NFTs represent unique digital assets (art, music), ensuring ownership and authenticity.
- Example: Platforms like OpenSea for digital art.

4. Blockchain in Healthcare

- Definition: Blockchain securely stores health records, allowing controlled access while maintaining privacy.
- Example: Medicalchain for decentralized health data management.

5. Voting & Digital Identity

- Definition: Blockchain can create secure, transparent voting systems and digital identity verification.
- Example: Estonia's blockchain-based digital identity and e-voting system.

6. Tokenization of Real Assets

- Definition: Blockchain divides ownership of real assets (real estate, art) into tradable tokens.
- Example: RealT for fractional real estate ownership.

7. Blockchain for Sustainability

- Definition: Tracks carbon emissions and trades carbon credits on the blockchain.
- Example: ClimateTrade for carbon offset transactions.

8. Blockchain in Gaming & Metaverse

- Definition: Enables ownership of in-game assets and virtual experiences through NFTs.
- Example: Axie Infinity for blockchain-based gaming.

9.

Intellectual Property Protection

- Definition: Blockchain timestamps and secures ownership of creative works, protecting IP rights.
- Example: Ascribe for IP protection.

10. Cross-border Payments

- Definition: Blockchain offers faster, cheaper, and more secure international payments.
- Example: Ripple for low-cost cross-border transactions.