

# THE STATE UNIVERSITY OF ZANZIBAR (SUZA)



## DEPARTMENT OF INFORMATION TECHNOLOGY AND COMPUTER SCIENCE TUNGUU MAIN CAMPUS

**COURSE CODE:** INF 1202

**COURSE NAME:** ENTERPRISE RESOURCE PLANNING

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## **REPORT ON OUTFIT COMPANY**

### **1. Introduction of Outfit Company**

Outfit refer to a set of clothes worn together, often chosen for a specific purpose. It includes all the pieces of clothing and accessories that make up a complete look shine, such as shirts, shoes, pants and sometimes accessories like hats, belts or jewelry.

Outfit Company is a design automation software company that provide tools to create, manage and distribute branded content and marketing materials. They focus on helping businesses maintain brand consistency while allowing for customization and scalability.

### **2. The specific benefits of an outfit company for adopting an ERP system.**

- i. **Streamlined Operations:** By integrating processes such as inventory management, order processing, and supply chain management, an ERP system can streamline operations and reduce redundancy, ensuring that the right products are available at the right time.
- ii. **Personalized Customer Experience:** With a unified view of customer data, the company can offer personalized experiences, track customer preferences, manage customer orders efficiently, and enhance overall customer satisfaction..
- iii. **Cost Reduction:** By automating routine tasks and optimizing resource allocation, an ERP system can reduce operational costs, such as labor and inventory carrying costs.
- iv. **Efficient Order Fulfillment:** ERP systems can streamline order processing, from order entry to delivery, ensuring that customers receive their products promptly and accurately, which can lead to improved customer loyalty.

### **3. Vendor Selection Process**

- i. **Needs Assessment:** The first step is to clearly define the company's product and service requirements. This includes factors such as material quality, manufacturing capabilities, lead times, pricing, and any specific certifications or standards the vendor must meet.
- ii. **Vendor Identification:** The company will research and identify potential vendors that can meet their needs. This may involve searching industry directories, attending trade shows, or asking for referrals from other companies in the industry.

- iii. **Request for Information (RFI):** The company will send an RFI to the identified vendors, asking for detailed information about their capabilities, experience, and compliance with the company's requirements.
- iv. **Vendor Evaluation:** The company will thoroughly evaluate the responses from the vendors based on criteria such as Product quality and consistency, Pricing and cost competitiveness, Delivery times and reliability, Financial stability and Customer service and communication.
- v. **Site Visits:** The company may conduct on-site visits to the vendor's facilities to assess their operations, quality control processes, and overall fit with the company's requirements.
- vi. **Vendor Selection:** Based on the evaluation, the company will select the vendor(s) that best meet their criteria and negotiate the final terms of the contract, including pricing, minimum order quantities, lead times, and any other relevant considerations.
- vii. **Pilot Production:** Before placing a large order, the company may request a pilot production run to thoroughly test the vendor's capabilities and the quality of the products.
- viii. **Ongoing Evaluation:** Even after the initial vendor selection, the company will continue to monitor the vendor's performance, quality, and responsiveness to ensure they continue to meet the company's requirements. Periodic audits and site visits may be conducted to maintain quality control.

#### **4. The ERP Acquisition Model is :**

##### **Hybrid Approach:**

- i. The company combines elements of in-house development and COTS or cloud-based solutions.
- ii. They may use a COTS or cloud-based ERP as the core system, while building custom modules or integrations to address specific business needs.
- iii. This approach can provide the benefits of both standardized and tailored functionality.

#### **5. Comparison between open and proprietary ERP software**

Both are lower upfront cost: Open source and proprietary source ERP solution are typically free to download and use.

## 6. The ERP software:

**Microsoft Dynamic 365:** This is the software suitable for our company because is good for small to large business. Also it provides modules for finance, operation, sales and customer service and integrated well with other Microsoft products.

### i. Limitations of Microsoft dynamics 365

Microsoft dynamics 365 is powerful and versatile platform, but like any software it has its limitations. Here are some limitations;

- **Cost:** licensing and implementation costs can be high, particularly to small business and also ongoing cost for support, maintenance and upgrade can add up.
- **Customization and flexibility:** while customizable, significance customizations can be costly and time-consuming also it requires skilled developer familiar with that platform.
- **Update and Upgrade:** Frequent update can sometimes disrupt operation if not managed carefully also customizations may need to be re-evaluate or re-implemented with each major upgrade.
- **User Experience:** Some user finds the interface less intuitive compared to other ERP systems also navigation and usability can be improved, particularly for new users.

### ii. Advantages of Microsoft dynamics 365

Microsoft dynamic 365 ERP offer numerous advantages that make it a Microsoft product enhance productivity and data analysis capabilities. Here are some advantages;

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- **Continuous update and improvements:** regular updates ensure that the system stays current with the latest technological advancements and industry trends.
- **Strong security:** It provides robust security features, including data encryption, role-based access controls, and compliance with industry standard and regulations.
- **Global reach:** Supports multiple language, currencies, and legal entities, making it ideals for multinational companies with global operations.

## 7. Risk associated in ERP Implementation:

**Implementing an ERP system is a complex and significant undertaking, and there are various risks involved that organizations need to be aware of and manage effectively. Here are some of the key risks associated with ERP implementation:**

- **Cost Overruns:** ERP projects can be expensive, and costs can quickly escalate due to unanticipated issues, scope changes, or extended timelines.
- **Project Delays:** Implementation projects often take longer than expected due to unforeseen challenges, inadequate planning, or resource constraints.
- **Insufficient Training:** If end-users are not adequately trained, they may struggle to use the system effectively, leading to decreased productivity and user dissatisfaction.
- **Resistance to Change:** Employees may resist adopting new processes and systems, which can hinder the successful implementation and realization of benefits.
- **Scope Creep:** The scope of the project can expand beyond the original plan, leading to increased costs, delays, and complexity.

## **8. . The ERP implementation strategies**

**Successfully implementing an ERP system requires strategic planning and careful execution. Here are some strategies to address ERP implementation problems, manage changes, and mitigate associated risks:**

### **i. Strategies to Overcome ERP Implementation Problems:**

#### **Through Planning and Project Management:**

**Define Clear Objectives:** Establish specific, measurable goals for what the ERP implementation aims to achieve.

**Project Plan:** Develop a detailed project plan with defined phases, milestones, and deadlines.

**Project Management Office (PMO):** Set up a PMO to oversee the implementation, manage resources, and track progress.

**Engage Experienced Implementation Partners:**

**Select Reputable Vendors:** Choose ERP vendors and implementation partners with a proven track record and industry-specific experience.

**Consultants:** Hire experienced consultants to guide the implementation process and provide expertise.

### **ii. Strategies to Overcome Changes:**

Effective Change Management:

Change Management Team: Establish a dedicated team to manage change throughout the implementation.

Communication: Maintain open and transparent communication with all stakeholders about the changes, benefits, and impacts.

Stakeholder Engagement:

Involve Key Stakeholders: Engage key stakeholders from the outset to ensure their buy-in and support.

Feedback Mechanisms: Set up channels for stakeholders to provide feedback and address their concerns.

**iii. To strategies to Overcome Risks Associated:**

Risk Assessment and Mitigation:

Risk Management Plan: Develop a comprehensive risk management plan that identifies potential risks and outlines mitigation strategies.

Regular Risk Reviews: Conduct regular risk assessments and update the risk management plan as needed.

Strong Governance and Oversight:

Steering Committee: Establish a steering committee with senior executives to provide oversight and make critical decisions.

Regular Reporting: Implement regular reporting mechanisms to track progress, issues, and risks.

## **9. The types of ERP Testing you can use**

The ERP testing is crucial to ensure that the system works as intended and meets business requirements. Here are the types of ERP testing typically used:

### **i. Unit Testing**

Objective: Verify that individual components or modules of the ERP system function correctly.

Approach: Test each module independently to ensure it performs its intended function.

Example: Testing a single financial module to ensure it calculates taxes correctly.

### **ii. Integration Testing**

Objective: Ensure that different modules or components of the ERP system work together seamlessly.

Approach: Test interactions between modules to identify any interface issues or data flow problems.

Example: Testing the integration between the inventory management module and the order processing module.

### **iii. Performance Testing**

Objective: Ensure that the ERP system performs well under expected workload conditions.

Approach: Test the system's responsiveness, stability, and scalability under various load conditions.

Example: Simulating peak usage times to test how the system handles high volumes of transactions.

### **iv. Security Testing**

Objective: Identify vulnerabilities and ensure that the ERP system protects data and processes against unauthorized access.

Approach: Test for security flaws, including authentication, authorization, data encryption, and vulnerability scanning.

Example: Testing role-based access controls to ensure users can only access data relevant to their roles.

#### **v. Backup and Recovery Testing**

**Objective:** Ensure that the ERP system's backup and recovery processes work correctly.

**Approach:** Test the ability to back up data and restore it accurately in case of data loss.

**Example:** Performing a simulated data recovery scenario to ensure data can be restored from backups.

Implementing an ERP disaster recovery (DR) plan is crucial for ensuring business continuity in the event of system failures, data breaches, or other disasters. Here's a step-by-step approach to implementing an ERP disaster recovery plan.

nsive ERP testing strategy that includes these various types of testing ensures that the ERP system is robust, secure, and ready for deployment, ultimately contributing to the success of the implementation project.

### **10. How you can imlement ERP disaster recovery planning**

Implementing an ERP disaster recovery (DR) plan is crucial for ensuring business continuity in the event of system failures, data breaches, or other disasters. Here's a step-by-step approach to implementing an ERP disaster recovery plan:

#### **i. Assess Risks and Define Objectives**

**Risk Assessment:** Identify potential threats and vulnerabilities that could impact the ERP system, such as natural disasters, cyberattacks, hardware failures, and human errors.

**Objectives:** Define the primary goals of the disaster recovery plan, such as minimizing downtime, protecting data integrity, and ensuring quick recovery

#### **ii. Develop a Disaster Recovery Team**

**Roles and Responsibilities:** Assign specific roles and responsibilities to team members, including IT staff, system administrators, and business unit leaders.

**Contact Information:** Maintain an updated contact list for all DR team members to ensure quick communication during an emergency.

#### **iii. Create a Detailed Disaster Recovery Plan**

**DRP Document:** Develop a comprehensive disaster recovery plan document that outlines procedures, protocols, and responsibilities.



## Key Components:

Incident Response: Steps to take immediately after a disaster is identified.

Recovery Procedures: Detailed instructions for restoring ERP services, including system reboots, data restoration, and application restart.

Data Backup: Procedures for regular data backups, including frequency, storage locations, and methods.

Failover Strategies: Plans for switching to backup systems or secondary sites if the primary system is compromised.

### **iv. Data Backup Strategy**

Regular Backups: Schedule regular data backups (daily, weekly, monthly) to ensure data is up-to-date.

Offsite Storage: Store backups in multiple locations, including offsite and cloud storage, to protect against localized disasters.

Encryption: Encrypt backup data to ensure security during storage and transmission.

### **v. Implement Redundancy and High Availability**

Redundant Systems: Set up redundant hardware and software systems to take over in case the primary system fails.

High Availability: Configure high availability solutions, such as clustering and load balancing, to minimize downtime.

### **vi. Establish a Communication Plan**

Internal Communication: Develop a communication strategy for notifying internal stakeholders, including employees and management, during a disaster.

External Communication: Plan for communicating with external stakeholders, such as customers, vendors, and regulatory bodies.

### **vii. Test the Disaster Recovery Plan**

Regular Testing: Conduct regular DR tests and drills to ensure that the plan is effective and that team members are familiar with their roles.

Test Scenarios: Simulate various disaster scenarios, including system failures, data breaches, and natural disasters, to test the plan's robustness.

Review and Update: After each test, review the results, identify weaknesses, and update the DR plan accordingly.

#### **viii. Document and Store DR Procedures**

Documentation: Keep detailed documentation of all DR procedures, including step-by-step recovery instructions.

Accessibility: Ensure that the DR plan and related documents are easily accessible to authorized personnel, even in the event of a disaster.

#### **ix. Train Employees**

Awareness Training: Provide regular training sessions for all employees to raise awareness about the DR plan and their roles in it.

Role-Specific Training: Offer specialized training for DR team members to ensure they are proficient in executing their responsibilities.

#### **x. Monitor and Maintain the DR Plan**

Regular Reviews: Periodically review and update the DR plan to account for changes in the ERP system, business processes, and external threats.

Monitoring Tools: Use monitoring tools to track system performance and identify potential issues before they become critical.

Continuous Improvement: Incorporate feedback from tests, drills, and actual incidents to continuously improve the DR plan.

## **11) Conclusion and recommendation**

### **Conclusion**

Implementing an ERP system is a complex but critical endeavor for modern businesses, providing comprehensive integration of business processes and data across the organization. However, the implementation comes with significant challenges and risks, including cost overruns, project delays, and user resistance. Effective strategies for overcoming these issues, such as thorough planning, stakeholder engagement, and robust change management, are essential for a successful ERP deployment.

Equally important is the establishment of a solid ERP disaster recovery plan. This ensures that the business can quickly recover from disruptions, protecting data integrity and minimizing downtime. Key components of a disaster recovery plan include risk assessment, team formation, data backup strategies, redundancy implementation, regular testing, and continuous improvement.

### **Recommendations**

#### **Thorough Planning and Management:**

Develop a detailed project plan with clear objectives, timelines, and milestones.

Establish a Project Management Office (PMO) to oversee the ERP implementation.

#### **Engage and Train Users:**

Involve key stakeholders and end-users early in the process to ensure buy-in and gather valuable feedback.

Provide comprehensive training and continuous support to ensure users are comfortable with the new system.

#### **Regular Testing and Updates:**

Conduct regular tests of the ERP system and disaster recovery plan to identify and rectify issues.

Update the disaster recovery plan periodically to reflect changes in the business environment and technology.

#### **Effective Change Management:**

Implement a robust change management strategy to manage user expectations and reduce resistance. Communicate the benefits of the new system clearly and consistently to all stakeholders

**Focus on Data Integrity and Security:**

Ensure regular data backups and offsite storage to protect against data loss. Implement strong security measures, including encryption and access controls, to safeguard data.

**Leverage Expert Support:**

Engage experienced consultants and implementation partners to guide the project and provide expertise. Utilize vendor support and resources to ensure the ERP system is configured and optimized correctly.

**Monitor and Maintain:**

Use monitoring tools to keep track of system performance and identify potential issues before they escalate. Maintain a culture of continuous improvement, incorporating feedback from tests and real-world incidents into the ERP system and disaster recovery plan.

By following these recommendations, organizations can navigate the complexities of ERP implementation and establish a resilient disaster recovery plan, ultimately enhancing operational efficiency, data integrity, and business continuity.