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1.Introduction

Maldiva Ltd.is a rapidly growing fictional consumer electronics retailer operating 30 physical stores alongside an e-commerce platform. The organisation has experience significant sales growth during the past year and intends to extend further. However, its existing information system are no longer capable of effectively supporting the scale and complexity of its operations. The company currently relies on manual inventory tracking, disconnected customer relationship management (CRM) systems, spreadsheets for reporting and separate departmental software. These limitations have created operational inefficiencies, inaccurate information, delays in decision-making and increased risks relating to data protection.

One of the most significant problems is the manual management of inventory. Differences between physical store stock and online stock frequently result in customers purchasing products online that are unavailable. This creates customer complaints, refunds and potential reputational damage. Managers also experience difficulties identifying overstocked and understocked products, which can result in unnecessary costs and lost sales.

Customer information represents another importance challenge. Customer records are distributed across disconnected systems, preventing employees from obtaining a complete view of customer purchasing behaviour. Consequently, the marketing team has limited ability to provide personalised promotions, while customer support may struggle to access accurate purchase histories when dealing with complaints.

Furthermore, management information is produced manually using spreadsheets. This increases the likelihood of errors and means managers do not have reliable real-time information for sales analysis and forecasting. Finally, the lack of integration between sales, finance and inventory creates unnecessary duplication because employees have to manually transfer information between departments.

Therefore, this proposal recommends that Maldiva Ltd. Implement an integrated cloud-based Enterprise Resource Planning (ERP) system, incorporating inventory management, CRM, e-commerce integration, finance, business integration and enhanced cybersecurity controls. ERP systems are designed to connect different functional areas through a shared information environment, while successful implementation depends on organisational fit, management support, training and effective change management (Hong and Kim, 2002; Ngai, Law and Wat, 2008).

2. Evaluation of Existing Systems

2.1 Inventory Management

Maldiva Ltd.'s. Currently manual inventory systems is unsuitable for a retailer with 30 physical stores and an online sales channel. Employees manually record and transfer inventory databased means that the e-commerce platform may display products as available even when they are out of stock.

This problem affected both operational efficiency and customer satisfaction. An integrated ERP system cloud connects point-of-sale (POS) systems, warehouses, stores and the e-commerce platform. When a product is sold in physical store, the inventory quantity would automatically be updated. Similarly, an online purchase would immediately reduce the available stock.

The proposed system cloud also establishes automatic reorder points. When inventory reaches a predetermined level, the system cloud generates an alert or purchase request. This would reduce the likelihood of stock shortages while preventing excessive inventory. Integration would therefore allow Maldiva Ltd, to make better use of its inventory and reduce unnecessary financial losses.

2.2 Customer Relationship Management.

The existing CRM environment is fragmental because multiple disconnected systems. As a result, employees cannot easily access a complete customer history.

An integrated CRM module would create a centralised customer record containing relevant information such as previous purchases, enquiries, complaints relevant information such as previous purchases, enquiries, complaints and marketing preferences. This would enable customer service employees to understand the customer service employees to understand the customer's history before responding to an enquiry.

The marketing department cloud also uses customer information to identify purchasing patterns and develop more relevant campaigns. However, this information must be managed responsibly. The information commissioner's office states that personal data should be accurate, relevant and limited to what is necessary for its propose (ICO, 2026).

Consequently, CRM integration could improve customers service and marketing effectiveness while simultaneously supporting better data governance.

2.3 Reporting and Decision-Making

Another major weakness is the company's dependence on manually prepared spreadsheets. Although spreadsheets can be useful for small-scale analysis, they become increasingly problematic when an organisation processes large volumes of data from numerous stores and an online platform.

Manual reporting creates risks of data-entry errors, duplicated information and outdated reports. Managers may therefore make decisions based on information that does not accurately represent current business performance.

The recommended ERP system should include a Business Intelligence dashboard. Management would be able to view indicator levels, best-selling products, store performance and online sales. Instead of waiting for employees to manually compile reports, decision-makers could access information from a central database.

This would support faster and more evidence-based decision-making. For example, if sales of a particular product increased significantly, management could identify the trend and adjust inventory or purchasing decisions accordingly.

2.4 Data Protection and Cybersecurity

Maldiva Ltd. also faces an important information-security problem. Customer information is currently stored across disconnected systems and the company is not fully compliant with data protection requirements. Unauthorised access could result in financial loss, reputational damage and regulatory consequences.

The proposed system should therefore incorporate role-based access controls, multi-factor authentication, encryption, audit logs, secure backups and regular security monitoring. The ICO states that organisations processing personal data must implement appropriate technical and organisational measures based on the risk involved.

The NIST Cybersecurity Framework (CSF) 2.0 can also provide a useful structure for identifying, protecting, detecting, responding to and recovering from cybersecurity risks (Pascoe, Quinn and Scarfone, 2024).

3. Recommended Solution

3.1 Integrated Cloud-Based ERP System

The recommended solution for Maldiva Ltd. is an integrated cloud-based ERP platform with CRM, inventory management, finance, e-commerce integration and Business Intelligence capabilities.

The proposed architecture can be represented as:

Physical Stores/POS+E-commerce-Central ERP Database-
Inventory+CRM+Finance-BI Dashboards-Management Decisions.

The key advantage is that departments would no longer operate independently. Instead, information would be entered once and made available to authorised users across the organisation.

Cloud computing is particularly appropriate because it provides on-demand access to shared computing resources to be rapidly provisioned when required (Mell and Grance, 2011).

For a growing company such as Maldiva Ltd., scalability is particularly important. As the company opens additional stores or increases online sales, the system should be able to support additional users, transactions and data without requiring a complete replacement of infrastructure.

Current Problem	Proposed ERP Solution	Expected Benefit
Manual inventory records	Real-time inventory management	Fewer stock discrepancies
Online orders for unavailable products	E-commerce/ERP integration	Fewer cancellations and refunds
Overstock and understock	Automatic inventory alerts	Better stock control
Disconnected customer records	Integrated CRM	Improved customer services
Manual spreadsheets	BI dashboards	Faster decision-making
Separate departmental systems	Central ERP database	Improved communication
Unauthorised access	Role-based access and MFA	Improved security
Limited scalability	Cloud infrastructure	Easier future expansion

This would therefore improve operational efficiency, information accuracy, customer satisfaction and management decision-making.

3.3 Cost and Scalability

Although implementation of an ERP system would involve significant initial costs, including software licence, implementation, data migration, training and consultancy, the investment should be assessed against the long-term operational benefits.

Maldiva Ltd. should avoid developing a completely new system internally because this could increase development time, cost and technical risk. A configurable commercial cloud ERP solution would provide established functionality while allowing the organisation to customise selected processes.

Cloud development can also reduce the requirement of Maldiva Ltd. to purchase and maintain extensive physical server infrastructure. However, cloud adoption still

requires careful consideration of security, privacy, supplier dependency and implementation risks (Badger et al., 2012).

Most importantly the system should be scalable. If Maldiva Ltd. Expands from 30 stores to 50 or 60 stores, the information system should be capable of supporting the additional locations.

4. Implementation Plan

Implementation should be conducted gradually rather than attempting to replace all existing systems simultaneously. ERP research highlights the importance of strategic alignment, project management, top-management support, training communication and change management (Ngai, Law and Wat, 2008; Ram, Corkindale and Wu, 2013).

Phase 1- Requirements Analysis

The first stage should identify the precise requirement of each department. Representatives from sales, finance, inventory, marketing, customer service and IT should participate.

The company should document existing processes and identify where information is currently duplicated or manually transferred. This will allow the ERP configuration to be based on actual business requirements rather than assumptions.

Phase 2-System and Supplier Selection

Maldiva Ltd. Should evaluate potential ERP supplier using criteria including:

- Functionality;
- Total cost of ownership;
- Scalability;
- Cybersecurity;
- Data protection;
- Supplier reputation;
- Technical support;
- Ease of use;
- Customisation options.

The selected system should be capable of integration with the company's existing e-commerce platform and POS systems.

Phase 3- Data Cleansing and Migration Before transferring information to the new system, existing customer, inventory and financial data should be reviewed and cleaned.

Duplicate customer records should be removed, incorrect information corrected and obsolete information deleted where appropriate. This is particularly important because data accuracy is a fundamental data-protection requirement (ICO, 2026).

Phase 4- Integration and Testing

The ERP should then be integrated with the e-commerce platform POS systems and financial processes.

Testing should take place before the system become fully operational. Test scenarios should include online purchases, stock returns, funding updates and customer-services enquiries.

A pilot implementation should initially be introduced in a small number of stores. Problems can then be identified and corrected before the system is rolled out across all 30 stores.

Phase 5- Employee Training Employee

Employee training is essential. Staff should understand not only how to operate the system, but also why the new system is being introduced.

Training should be tailored to different roles. For example, inventory employees need detailed training on stock management, while managers require training on dashboards and reporting.

Research identifies user training and top-management support as important factors in successful ERP implementation. (AboAbdo Aldhoiena and Al-Amrib, 2017; Brafdly, 2008).

Phase 6- Full Deployment

After successful pilot testing, the systems can be introduced throughout the organisation. A phase rollout would reduce the risk of major operational disruption.

Existing systems should initially remain available as backup during the transition. Once the ERP has been proven reliable, obsolete system can gradually be retired.

Phase 7- Monitoring and Continuous Improvement

Implementation should not be considered complete when the software goes live. Management should monitor performance using Key Performance Indicators:

- Inventory accuracy;
- Number of stockouts;
- Number of customer complaints;
- Order fulfilment time;
- Refund rates;

- Sales growth;
- System availability;
- Employee adoption
- Cybersecurity incidents.

The results should be reviewed regularly so that the organisation can identify future improvements.

4.1 Potential implementation challenges

Several risk must be managed

Employee resistance is major possibility because employees who are comfortable with existing processes may be reluctant to change. Communication, training and management support can reduce this risk.

Data mitigation problem cloud result in incorrect customer or inventory records being transferred to the new system. Data cleansing and testing should therefore occur before mitigation.

Implementation cost cloud exceed the original budget if excessive customisation is requested. Maldiva Ltd. Should priorities essential functionality and avoid unnecessary modifications.

Business desorption is another potential problem. A phase implementation and pilot programme would reduce this risk.

Finally, cybersecurity and data protection must be considered throughout the project.

5. Conclusion

Maldiva Ltd. existing information systems are increasingly unsuitable for its expending retail and e-commerce operations. Manual inventory management, fragmented CRM information, spreadsheet-based reporting, poor department integration and weaknesses in data security are creating operational inefficiencies and limiting the company's ability to make effective decisions.

This proposed system would reduce inventory discrepancies, improve online order accuracy, enhance customer service, support personalised marketing and provide management with faster access to reliable business information. Cloud deployment would additionally provide the scalability required for future expansion.

However, successful implementation depends on more than selecting appropriate software. Maldiva Ltd. Must ensure effective project management, employee training, data cleansing, testing, cybersecurity and change management. ERP research demonstrates that management support, training, organisational fit and

project management are important factors in implementation success (Hong and Kim, 2002; Ram, Corkindale and Wu, 2013).

Overall, the proposed integrated information system would provide Maliva Ltd. With stronger technological fondation for continued growth. It would transform information from a fragmented operational resource into a strategic asset that supports efficiency, customer satisfaction, security and evidence-based decision-making.

References

1. AboAbdo, S., Aldhoeina, A. and Al-Amrib, H. (2017) 'Implementing enterprise resource planning ERP system in a large construction company in KSA', *International Journal of Technology, Policy and Management*, 17(3), pp. 205-222.
2. Badger, M., Grance T., Patt-Corner, R. and Voas, J (2012) *Cloud Computing Synopsis and Recommendations*. NIST Special Publication 800-146. Gaithersburg, MD: National Institute of Standards and Technology.
3. Bradely, J. (2008) 'Management based critical success factors in the implementation of Enterprises Resources Planning systems', *International Journal of Accounting Information Systems*, 9(3), pp. 175-200.
4. Hong, K.K and Kim, Y.G. (2002) 'The critical success factors for ERP implementation: an organisation fit perspective', *Information & Management* 40(1), pp. 25-40.
5. Information Commissioner's Office (ICO) (2026) *A guide to the data protection principles*. Available through the ICO's official data-security guidance.
6. Information Commissioner's Office (ICO) (2026) *Security outcomes*.
7. Mell. P and Grance, T. (2011) *The NIST Definition of Cloud Computing*. NIST Special Publication 800-145. Gaithersburg, M: National Institute of Standards and Technology.
8. Ngai, E.W.T., Law, C.C.H. and Wat, F.K.T. (2008) 'Examining the critical success factors in the adoption of enterprise resource planning', *Computers in Industry*, 5(6), pp. 548-564.
9. Pascoe, C., Quinn, S and Scarfone. K. (2024) *The NIST Cybersecurity Framework (CSF) 2.0 NIST Cybersecurity White Paper 29*. Gaithersburg, MD: National Institute of Standards and Technology.
10. Ram, J., Corkindale, D. and Wu, M.L (2013) 'Implementation critical success factors (CSFs) for ERP: Do they contribute to implementation success and post-implementation performance?'. *International Journal of Production Economics*, 144(1), pp. 157-174.

