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Individual report- Information
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Introduction

The use of information systems is essential for organisations, as it improves operations management and decision-making and enables them to compete in dynamic markets. As organisations grow, they require reliable, well-managed information systems to manage business processes effectively and meet increasing customer demands. Effective information systems also provide accurate data that supports strategic planning and improves overall organisational performance (Beynon-Davies, 2019).

Maldiva Ltd. is a fictional consumer electronics retailer that operates 30 physical stores alongside an e-commerce platform. Although the company has experienced significant sales growth and plans to expand further, its existing information systems are no longer capable of supporting its operations effectively. The business faces various problems, which include inaccurate manual inventory management, ineffective customer relationship management, an unreliable reporting process, inadequate compliance with data regulations such as GDPR, and poor integration between departments. These issues have led to stock inaccuracies, customer complaints, inefficient decisions and increased operational costs.

The purpose of this report is to evaluate the weaknesses of Maldiva Ltd.'s existing information systems, identify the operational problems affecting business performance and recommend suitable information systems. The recommended systems would improve operational efficiency, strengthen data management, enhance decision-making, ensure regulatory compliance, and support the organisation's future growth.

Evaluation of Existing Systems

2.1 Inventory Management System

Maldiva Ltd. currently relies on a manual inventory tracking system, meaning stock records are updated by hand rather than through an automated system. As the business has expanded, this system has become increasingly inefficient and can no longer support its operational needs, reducing operational efficiency and making inventory management more difficult (Beynon-Davies, 2019). The manual process has resulted in stock discrepancies between physical stores and the company's e-commerce platform, leading to customers purchasing products online that are no longer available. As a result, this has caused an increase in customer complaints, cancellations, and refund requests, thus customer dissatisfaction.

In addition, store employees spend significant amounts of time checking and updating stock levels manually, reducing productivity and increasing the likelihood of human error. The inability to have real-time stock data also causes difficulties in detecting overstocks or understocks of certain products, hence poor inventory control and operational cost inefficiencies. Research suggests that inventory management information systems enhance inventory accuracy, decrease manual errors, and allow real-time stock visibility, enabling organisations to make more effective operational decisions (Purwasih and Candana, 2024). Therefore, Maldiva Ltd.'s current inventory management system is limiting operational efficiency and preventing the business from meeting customers' expectations.

2.2 Evaluation of the Customer Relationship Management System (CRM) System

The current customer relationship management (CRM) approach followed by Maldiva Ltd. is ineffective as the data related to customers is present in several disjointed systems instead of being in one consolidated database. As a result, employees are unable to access the complete customer purchase history and provide an effective response to customer queries or complaints. This fragmented approach makes it difficult for the marketing team to design personalised promotional activities, reducing opportunities to strengthen customer loyalty and encourage repeat purchases.

Moreover, the lack of an integrated CRM system can result in inconsistent customer information, communication errors and slower customer service, resulting in reduced customer satisfaction. Prajapat (2024) states that CRM systems improve customer satisfaction and customer retention because of personalised customer interactions and efficient problem-solving. Therefore, Maldiva Ltd.'s current CRM approach is limiting its ability to deliver high-quality customer service and build long-term customer relationships, which may negatively affect the organisation's future growth.

2.3 Manual Reporting

Another issue Maldiva Ltd faces is that sales reports are manually compiled using spreadsheets. This makes it difficult for management to accurately analyse the data, increasing the risk of human error and reducing the reliability of business information. As a result, managers may make decisions based on inaccurate or outdated data, leading to poor forecasting, missed opportunities and reduced revenue. Manual reporting processes are often time-consuming and prone to errors, reducing the accuracy and reliability of financial information (Boyle, 2020). Therefore, Maldiva Ltd.'s current manual reporting approach limits

effective decision-making and negatively impacts the organisation's overall growth and performance.

2.4 Security and GDPR

Maldiva Ltd is not fully compliant with GDPR because its existing information system lacks secure access controls to protect sensitive customer data. This increases the risk of unauthorised access, data breaches and cyber-attacks, making confidential information more vulnerable to security threats. Consequently, the organisation can face legal penalties, financial losses and reputational damage, which may reduce customer trust and satisfaction. Folorunso et al. (2024) state that effective security compliance helps organisations reduce cybersecurity risks and minimise the likelihood of data breaches. Therefore, Maldiva Ltd.'s current security system is ineffective and exposes the organisation to significant legal, financial and operational risks that could hinder its future growth.

2.5 System Integration

Another issue facing Maldiva Ltd. is the lack of integration between its information systems. Departments such as sales, finance and inventory use different software systems that do not interact effectively with each other. As a result, employees are required to manually transfer and re-enter data between systems, increasing the likelihood of human error and duplicated or inconsistent information. Furthermore, poor communication between departments delays the sharing of important business information, reducing productivity and making it more difficult for managers to make timely and informed decisions. Enterprise information systems integrate different functions, allowing information to flow efficiently across departments and improving organisational efficiency (Tambovcevs, 2022). Therefore, the lack of integration of systems at Maldiva Ltd. reduces operational efficiency, increases operational costs and restricts organisational performance.

Recommendations

3.1 Recommendation: Inventory Management System

To address the inventory management issue identified, Maldiva Ltd. should implement an Inventory Management System (IMIS). This system would automatically update stock levels, provide real-time inventory information and record inventory electronically, reducing the need for manual stock management. As a result, the organisation would be able to minimise stock discrepancies, improve inventory accuracy and enable managers to monitor stock levels more

effectively. The implementation of an IMIS would also improve operational efficiency by reducing the time spent on manual stock checks, leading to lower operating costs and more informed decision-making. Moreover, accurate inventory records would reduce cancelled orders and improve customer satisfaction by ensuring products are available when required. Research has shown that inventory management information systems automate stock management, reduce manual errors, prevent overstocking and stock shortages, and reduce inventory costs (Madamidola et al., 2024). As a result, by implementing an IMIS system Maldiva Ltd. would be able to manage inventory more efficiently, improve customer service and support the organisation's future growth.

3.2 Customer Relationship Management (CRM)

To address the customer relationship management issues identified, Maldiva Ltd. should implement a Customer Relationship Management (CRM) system. A CRM system centralises customer information, including purchase history, preferences and interactions, enabling personalised marketing and more effective customer service. It also records customer interactions and keeps everything in one database. This enables employees to access customer information quickly, improving operational efficiency and the quality of customer service. This would enable Maldiva Ltd. to improve efficiency because staff would be able to see customer history, making it easier to resolve complaints faster. Also, the system would be able to track customer preferences, making marketing more personalised, so customer satisfaction would be improved. Implementing a CRM system would increase customer loyalty, encourage repeat purchases, improve sales performance and enhance overall operational efficiency. Research by Dwivedi et al. (2024) found that CRM systems improve customer satisfaction, loyalty and retention by supporting personalised customer interactions and strengthening customer relationships. Therefore, implementing a CRM system would strengthen customer relationships and support Maldiva Ltd.'s long-term growth.

3.3 Recommendation for Reporting Challenge: Business Intelligence (BI)

Maldiva Ltd. should adopt a Business Intelligence (BI) system to resolve its identified manual reporting challenges. A BI system collects, integrates and analyses data from multiple sources to produce reports, dashboards and real-time tracking of key metrics. The implementation of the BI system will minimise the company's dependence on manual spreadsheets, reduce the risk of human error, and give managers reliable and up-to-date information for improved decision-making. In addition, the system would enable management to monitor real-time sales trends, identify business patterns and make informed decisions that improve operational

efficiency and increase revenue. As Eboigbe et al. (2023) state, business intelligence systems help organisations to analyse large amounts of data to aid better decision-making and strategic planning. Furthermore, real-time analytics dashboards provide timely business insights that improve operational efficiency and support data-driven decision-making (Frempong et al., 2022). Therefore, implementing a Business Intelligence system would improve the accuracy and efficiency of Maldiva Ltd.'s reporting processes while supporting better strategic decision-making.

3.4 Security

To strengthen information security and ensure compliance with data protection legislation, Maldiva Ltd. should implement data encryption and regular GDPR compliance monitoring. Data encryption converts sensitive information into a secure format accessible only to authorised users, helping protect confidential business and customer data. Regular GDPR compliance monitoring ensures that the organisation continues to meet data protection requirements through ongoing reviews of its security policies and data management practices. These measures would help Maldiva Ltd. protect customer information, reduce unauthorised access and minimise the risk of cyber-attacks and data breaches. As a result, the organisation would strengthen customer trust, avoid potential legal penalties and protect its reputation. Data encryption protects sensitive business information by reducing the risk of unauthorised access and data breaches while helping organisations comply with data protection regulations such as GDPR (Reza et al., 2023). Furthermore, regular GDPR monitoring and data governance practices help organisations maintain compliance, ensure sensitive information is only accessible to authorised users and support ongoing data security (Frempong et al., 2022). Therefore, these measures would strengthen Maldiva Ltd.'s data security and ensure ongoing GDPR compliance.

3.5 Enterprise Resource Planning (ERP) System

To address integration issues across departments, it is recommended that Maldiva Ltd. adopt an Enterprise Resource Planning (ERP) system. An ERP system integrates key business functions, such as sales, finance and inventory management, into a single centralised database. This enables departments to share real-time information, improving communication and reducing errors caused by separate systems and duplicated data. As a result, staff members will have access to consistent and correct information more easily. Moreover, the system would support the future growth of the business by improving coordination across the organisation. According to AlMuhayfith and Shaiti (2020), research findings indicate that ERP systems increase efficiency by integrating business processes and information across

departments. Therefore, implementing an ERP system would strengthen organisational performance and efficiency.

4.1 Implementation Steps

To successfully implement the recommended systems, Maldiva Ltd. should follow a structured implementation plan. The organisation should first assess its existing systems and identify the business requirements for each new solution. The next step would be to select the right software to ensure that the new system conforms to the needs of the organisation and its future growth. Once selected, the new systems should be installed and configured, followed by the secure migration of the existing customer, sales and inventory data into the new platforms. Before the system is fully introduced, testing should be conducted to address and resolve any technical issues. During the implementation, Maldiva Ltd. may face challenges such as employee resistance, temporary disruption to operations and data migration issues. These risks can be minimised through effective planning, staff training, clear communication and ongoing testing (Mahmood et al., 2020).

4.2 Staff Training and System Integration

Before implementing the new systems, Maldiva Ltd. should provide comprehensive training to all staff members who will use them. This will ensure that staff understand how to use the new systems effectively and minimise errors during daily operations. It is also essential to integrate the new systems with the organisation's existing processes to ensure that the information flows efficiently between departments. Providing adequate training and system integration will improve user confidence, increase productivity and support a smoother transition to the new systems. According to Hart et al. (2019), effective employee training enhances users' ability to apply knowledge in practice.

Conclusion

To conclude, Maldiva Ltd.'s current information systems are limiting operational efficiency, decision-making, customer service and data security. Implementing an Inventory Management System, Customer Relationship System, Business Intelligence System, and Enterprise Resource Planning System together with data encryption and GDPR compliance measures would improve business performance, enhance customer satisfaction, strengthen data security and support informed decision-making. Overall, these systems will allow Maldiva Ltd. to be more efficient while supporting future business growth and long-term competitiveness.

Reference List

- AlMuhayfith, S. and Shaiti, H., 2020. The impact of enterprise resource planning on business performance: With the discussion on its relationship with open innovation. *Journal of Open Innovation: Technology, Market, and Complexity*, 6(3), p.87.
- Beynon-Davies, P., 2019. *Business information systems*. Bloomsbury Publishing.
- Boyle, M., 2020. The Real Costs of Manual Accounting. *Strategic Finance*, 102(3), pp.47-53.
- Dwivedi, R.K., Lohmor Choudhary, S., Dixit, R.S., Sahiba, Z. and Naik, S., 2024, September. The customer loyalty vs. customer retention: The impact of customer relationship management on customer satisfaction. In *Web Intelligence* (Vol. 22, No. 3, pp. 425-442). Sage UK: London, England: SAGE Publications.
- Eboigbe, E.O., Farayola, O.A., Olatoye, F.O., Nnabugwu, O.C. and Daraojimba, C., 2023. Business intelligence transformation through AI and data analytics. *Engineering Science & Technology Journal*, 4(5), pp.285-307.
- Frempong, D., Akinboboye, O., Okoli, I., Afrihyia, E., Umar, M.O., Umana, A.U., Appoh, M. and Omolayo, O., 2022. Real-time analytics dashboards for decision-making using Tableau in public sector and business intelligence applications. *Journal of Frontiers in Multidisciplinary Research*, 3(2), pp.65-80.
- Hart, S.L., Steinheider, B. and Hoffmeister, V.E., 2019. Team-based learning and training transfer: A case study of training for the implementation of enterprise resources planning software. *International Journal of Training and Development*, 23(2), pp.135-152.
- Madamidola, O.A., Daramola, O.A., Akintola, K.G. and Adeboje, O.T., 2024. A Review of existing inventory management systems. *International Journal of Research in Engineering and Science (IJRES)*, 12(9), pp.40-50.
- Mahmood, F., Khan, A.Z. and Bokhari, R.H., 2020. ERP issues and challenges: a research synthesis. *Kybernetes*, 49(3), pp.629-659.
- Prajapat, S.B., 2024. The impact of CRM systems on customer satisfaction and retention. *Edumania-An International Multidisciplinary Journal*, 2(04), pp.75-85.
- Purwasih, R. and Candana, D.M., 2024. Development of inventory management information system in a retail company. *Jurnal Sains Informatika Terapan*, 3(2), pp.133-137.
- Reza, J., Ali, K.Y., Rakibuzzaman, M., Islam, M.S. and Alam, M.A., 2023. Investigating data encryption technologies in securing business information systems. *World J. Adv. Res. Rev.*, 17(1), pp.1355-1362.
- Tambovcevs, A., 2022. ERP system implementation: benefits and economic effectiveness. *International Journal of Systems Applications, Engineering & Development*, 16, pp.14-20.