
Proposal to Improve Information Systems at AKPerog Ltd.

Individual Report: Managing Business Information

Student Name: Edis Mjekra
Student Number: 2336012
Module Code: LCLM5004
Lecturer's Name: Dr Amer Kareem



Prifysgol Cymru
Y Drindod Dewi Sant
University of Wales
Trinity Saint David

Introduction

In today's highly competitive retail environment, effective information systems play a critical role in supporting business operations, improving customer satisfaction, and enabling informed decision-making. Companies that rely on outdated or fragmented systems often face inefficiencies that can limit growth and reduce profitability. This report analyses the operational challenges faced by and proposes a modern information system solution to improve overall business performance. (Laudon and Laudon, 2022)

AKPerog Ltd. is a fast-growing consumer electronics retailer operating 30 physical stores alongside an e-commerce platform. Over the past year, the company has experienced a significant increase in sales and is planning further expansion. However, its internal systems have not kept pace with this growth. The organization currently relies on manual and disconnected systems for inventory management, customer data, reporting, and departmental coordination.

The most critical challenges include inaccurate inventory tracking, poor customer relationship management, slow and unreliable decision-making, lack of regulatory compliance with GDPR (European Union, 2016), and weak integration between departments. These issues result in stock shortages, customer dissatisfaction, lost revenue, operational delays, and increased risk of data breaches.

The purpose of this report is to evaluate AKPerog Ltd.'s existing information systems and recommend an appropriate modern solution that will streamline operations, enhance efficiency, improve data accuracy, and support strategic decision-making. The report will also outline an implementation plan and discuss expected benefits.

Evaluation of Existing Systems

Current Information Systems

AKPerog Ltd. currently uses a combination of manual processes and basic standalone software systems across different departments. Inventory levels are tracked manually or using simple spreadsheets, while customer information is stored across multiple disconnected databases. Sales and financial reports are compiled manually, often using outdated data.

Each department operates independently using its own tools. The sales team, finance team, inventory managers, and customer support staff do not share a unified system which creates information silos. As a result, employees are required to manually transfer data between systems, increasing workload and the risk of errors. (O'Brien and Marakas, 2019).

Another important limitation of AKPerog Ltd.'s existing systems is the lack of data standardization. Because different departments collect and store data in different formats, information is often inconsistent and difficult to reconcile. For example, product codes, pricing details, and customer records may differ between systems, leading to confusion and reporting errors. This inconsistency reduces trust in data accuracy and forces employees to spend additional time validating information.

Furthermore, the heavy reliance on spreadsheets creates operational risks. Spreadsheets are prone to human error, accidental deletion, and version control issues. Multiple versions of the same report may exist simultaneously, making it unclear which data is correct. As business continues to grow, these weaknesses will become more severe, making the current systems unsustainable for long-term operations.

Inventory Management Inefficiencies

One of the most serious problems is the manual inventory tracking system. Stock levels in physical stores are not accurately synchronized with the e-commerce platform. This leads to situations where customers place online orders for products that are not actually available. The consequences include order cancellations, refunds, customer complaints, and reputational damage.

Store managers also struggle to identify overstocked and understocked items. Without real-time inventory visibility, the company cannot optimize stock levels, leading to higher holding costs and missing sales opportunities.

Customer Relationship Management Issues

Customer data is fragmented across several systems, making it difficult to track purchase history or customer preferences. This limits the company's ability to provide personalized marketing campaigns or targeted promotions. The marketing team is forced to rely on generic advertising, which is less effective and more expensive.

Customer support staff face additional challenges when handling complaints or returns, as they cannot easily access complete customer records. This leads to longer response times and reduces customer satisfaction. (Peppers and Rogers, 2022).

Decision-Making and Reporting Challenges

AKPerog Ltd.'s management team relies on manually prepared reports generated from spreadsheets. These reports are often inaccurate, outdated, and time-consuming to produce. As a result, decision-making is slow and based on incomplete information.

The lack of real-time data makes it difficult for managers to identify sales trends, forecast demand, or evaluate store performance. This negatively affects strategic planning and limits the company's ability to respond quickly to market changes.

Data Security and Compliance Gaps

The existing systems lack strong access controls and security measures. This increases the risk of unauthorized access to sensitive customer data. Furthermore, AKPerog Ltd. is not fully compliant with data protection regulations such as the General Data Protection Regulation (GDPR). (European Union, 2016)

Non-compliance exposes the company to potential legal penalties, financial losses, and reputational damage. As the business grows and collects more customer data, these risks become increasingly serious.

Lack of System Integration

The absence of integration between departments is a major operational bottleneck. Data must be manually shared between sales, finance, inventory, and customer service teams. This process is inefficient, time-consuming, and prone to human error. It also prevents the organization from gaining a holistic view of its operations.

Recommended Solution

Proposed Information System

To address these challenges, it is recommended that AKPerog Ltd. implement an integrated Enterprise Resource Planning (ERP) system combined with a Customer Relationship Management (CRM) system and Business Intelligence (BI) tools.

A modern cloud-based ERP system would integrate inventory management, sales, finance, and supply chain operations into a single platform. The CRM system would centralize customer data, while BI tools would support real-time reporting and data-driven decision-making. (Davenport, 1998)

In addition to core ERP and CRM functionality, the proposed system should include automation and analytics features to further enhance performance. Automated workflows can support tasks such as order processing, invoicing, stock replenishment, and customer follow-ups. Automation reduces manual effort, improves accuracy, and ensures that processes are completed consistently across all stores.

Advanced analytics embedded within the system would allow AKPerog Ltd. to gain deeper insights into customer behavior, product performance, and seasonal trends. For example,

predictive analytics could help identify which products are likely to sell out during peak periods, enabling proactive inventory planning. These capabilities transform raw data into actionable insights, helping management make faster and more confident decisions that support business growth and competitive advantage.

Popular examples of such solutions include SAP S/4HANA, Microsoft Dynamics 365, and Oracle NetSuite.

Justification for the Recommendation

The recommended integrated system directly addresses AKPerog Ltd.'s operational problems. ERP systems are designed to eliminate data silos by allowing departments to share information in real time. This improves accuracy, efficiency, and coordination across the organization.

From a cost perspective, cloud-based solutions reduce the need for expensive on-site infrastructure and offer flexible subscription pricing. This makes them suitable for a fast-growing company that requires scalability.

In terms of scalability, the system can easily support future expansion, including new stores, increased online sales, and higher transaction volumes. Additional modules can be added as business needs evolve.

Improvements to Operations

The ERP system would provide real-time inventory tracking across all physical stores and the e-commerce platform. This would eliminate stock discrepancies and reduce order cancellations. Automated reordering and stock optimization features would help reduce overstocking and stockouts.

Operational efficiency would improve as manual data entry is reduced and processes are automated. Employees would spend less time on administrative tasks and more time on value-added activities.

Enhanced Data Management

The CRM system would centralize customer information, including purchase history, preferences, and interactions. This would allow the marketing team to create personalized promotions and targeted campaigns, increasing customer engagement and loyalty.

Customer support teams would have immediate access to complete customer records, enabling faster and more effective issue resolution.

Improved Decision-Making

Business Intelligence tools integrated into the ERP system would provide real-time dashboards and automated reports. Managers would be able to monitor sales performance, identify trends, and make data-driven decisions. (Turban, Pollard and Wood, 2018)

Accurate forecasting would help the company plan inventory levels more effectively and respond quickly to changes in demand, improving profitability.

Data Security and Compliance

Modern ERP and CRM systems include advanced security features such as role-based access control, encryption, and audit trails. These features help ensure compliance with GDPR and other data protection regulations.

Improved security reduces the risk of data breaches and strengthens customer trust.

Implementation Plan

Planning and System Selection

The first step is to conduct detailed requirements analysis involving key stakeholders from all departments. This will ensure that the selected system meets the organization's operational and strategic needs.

After defining requirements, AKPerog Ltd. should evaluate and select a suitable ERP and CRM vendor based on functionality, cost, scalability, and support services.

A strong structure should be established to oversee the implementation process. This includes appointing a project manager, defining clear roles and responsibilities, and setting measurable milestones. Regular progress reviews will help ensure the project stays on schedule and within budget.

It is also important to conduct pilot implementation in a small number of stores before rolling out the system company-wide. A pilot phase allows the organization to test system functionality, identify technical or operational issues, and gather user feedback in a controlled environment. Lessons learned from the pilot can then be applied to improve the full deployment, reducing risk and increasing the likelihood of successful implementation. (Monk and Wagner, 2013).

System Design and Configuration

Once selected, the system should be configured to align with existing business processes. This includes setting up inventory workflows, customer data structures, financial reporting, and user access roles.

Data migration from legacy systems must be carefully planned to ensure accuracy and completeness.

Integration with Existing Infrastructure

The new system should be integrated with the e-commerce platform and any remaining legacy applications. This will ensure seamless data flow across all channels.

Testing should be conducted to identify and resolve any technical issues before full deployment.

Training and Change Management

Employee training is critical to successful implementation. Staff should receive role-specific training to ensure they can use the system effectively.

Change management strategies, such as clear communication and ongoing support, will help reduce resistance and encourage user adoption.

Deployment and Monitoring

The system can be deployed in phases, starting with core modules such as inventory and sales, followed by CRM and BI tools. This approach reduces risk and allows adjustments to be made as needed.

After deployment, system performance should be monitored continuously, and feedback should be collected to support ongoing improvement.

Potential Challenges

Potential challenges include employee resistance to change, data migration issues, and temporary disruptions to operations. These risks can be mitigated through proper planning, strong leadership support, and effective training. (Panorama Consulting Group, 2023).

Conclusion

AKPerog Ltd. is experiencing rapid growth but faces significant operational challenges due to outdated and disconnected information systems. Manual inventory tracking, fragmented customer data, slow decision-making, poor system integration, and GDPR compliance risks are limiting the company's performance and future expansion.

This report recommends the implementation of an integrated ERP system supported by CRM and Business Intelligence tools. This solution will streamline operations, improve data accuracy, enhance customer satisfaction, and support informed decision-making. It will also strengthen data security and regulatory compliance.

By following the proposed implementation plan, AKPerog Ltd. can successfully modernize its information systems and position itself for sustainable growth in a competitive retail market.

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