System Integration Final Project - Week 9-10 Deliverables

Group Members:

Allister, Christopher, Imam, Ryufath

Scenario:

A mid-sized company is facing challenges in coordinating its operational systems, including inventory management, customer relationship management (CRM), and financial systems. The company's management has tasked your team with designing and integrating a solution that links these systems into a seamless, efficient process to improve data flow, decision-making, and overall efficiency.

System Requirements

Business Needs
- Integration of Inventory management, customer relationship management (CRM), and financial systems to enhance data sharing between the systems and automation.
- Improve communication between departments by enabling real-time data exchange.
- Ensure the solution supports scalability for business growth and future system expansion.

Key Integration Goals
- Streamlined data flow across departments.
- Elimination of manual data entry between systems.
- Increased visibility into company-wide operations for improved decision-making.

Critical Systems to Integrate

The following critical systems are necessary to support the needs and requirements for the company:
- Inventory Management System
    - Track product quantities, stock levels, order management, and supplier information.
    - Track tools and other assets.
    - Record supplies quantity, entry and exit records that are necessary for productions.

- - Record when products or supplies enter and exit the inventory along with the purpose.
  - Customer Relationship Management (CRM)
    - Manages customer data, sales, marketing activities, and customer support interactions.
  - Financial System
    - Handles accounting, payroll, and budgeting.
    - Generate daily financial reports.
  - Integration Focus:
    - Enable inventory system updates from CRM when sales are closed.
    - Synchronize customer data across CRM and financial systems for accurate billing.
    - Automate financial transactions triggered by stock movements in the inventory system.
  - Feedback Loops:
    - Support the strategic planning and change that could support the continuity of the company.
    - The system's outputs will then be used as concurring inputs.

These critical systems will be integrated through a live cloud computing solution to support seamless scalability and productivity in one computing system.

Key Performance Metrics

- Improved Data Consistency
  - Ensure that data shared between systems is consistent (i.e., customer details, order status, stock levels, etc.).
- Reduced Operational Delays
  - Reduce the time for critical updates (Reduce time for data needed to inventory CRM, CRM to finance by 50%).
- Automation Levels
  - Achieve 80-90% automation in data exchanges between inventory, CRM, and finance.
- Data Accuracy
  - Reduce data entry errors by 90% through integration to ensure fewer discrepancies in customer orders and financial reports.