# Module Two

# Milestone One

# Grandfield College

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## Organization Analysis

**Problem/Challenge**

Grandfield College currently relies on multiple spreadsheets to manage and track software across the institution. This approach is inefficient, prone to errors, and lacks the necessary functionality to meet the school's growing needs. The primary problems with the current system include:

**Inefficiency and Time-Consuming Processes**

The use of spreadsheets for tracking software installations, licenses, and requests is cumbersome and time-consuming.

**Inaccuracy and Error-Prone Data Management**

Manual data entry increases the risk of errors. Inaccurate records can lead to over-licensing or under-licensing, both of which have financial and legal repercussions.

**Lack of Centralized Data**

With data spread across multiple spreadsheets, there is no centralized repository for software information. This makes it difficult to get a comprehensive view of the software landscape, manage licenses effectively, and generate reports.

**Limited Tracking Capabilities**

The current system lacks the ability to track detailed information about software installations, such as specific machine assignments, user access, and software removal dates.

**Inadequate Request Management**

The process for handling software requests is not integrated with the tracking system. This leads to delays in fulfilling requests and difficulty in assessing software needs and availability.

## Business Requirements

To address these challenges, the software tracking system must meet the following business requirements:

**Centralized Database**

Implement a centralized database to store all software-related information, including licenses, versions, installations, and user assignments.

**Accurate and Automated Data Entry**

Automate data entry processes to reduce errors and ensure accurate, up-to-date records.

**Comprehensive Tracking and Reporting**

Provide robust tracking capabilities for software installations, license compliance, and machine assignments. Generate detailed reports for management and compliance purposes.

**Integrated Request Management**

Integrate the software request process with the tracking system to streamline approvals, fulfillments, and assessments of software needs.

**User-Friendly Interface**

Design an intuitive and user-friendly interface for staff to easily input, update, and retrieve software information.

**Security and Access Control**

Implement security measures to protect sensitive data and ensure only authorized personnel can access and modify the database.

## Limitations of Current Systems

The existing spreadsheet-based system has several limitations:

**Manual Data Entry**

Manual entry is time-consuming and prone to human error.

**Fragmented Data**

Data is fragmented across multiple spreadsheets, making it difficult to obtain a unified view of the software inventory.

**Limited Functionality**

Spreadsheets lack advanced functionalities such as automated tracking, integrated request management, and detailed reporting.

**Scalability Issues**

The current system cannot scale to accommodate the growing number of software licenses, installations, and requests.

**Inadequate Security**

Spreadsheets do not provide robust security features, posing risks to data integrity and confidentiality.

## Impact on Departments and Operations

**Information Technology (IT) Department**

The IT department bears the brunt of inefficiencies in software management. Staff spend excessive time on manual data entry, troubleshooting errors, and managing software requests. This diverts resources from more strategic IT initiatives and projects.

**Administrative and Finance Departments**

Accurate software tracking is crucial for financial planning and budgeting. Inaccurate records can lead to financial mismanagement, such as overspending on unnecessary licenses or facing penalties for under-licensing.

**Faculty and Staff**

Faculty and staff experience delays in software requests and installations due to the cumbersome request process. This impacts their ability to effectively use technology for teaching, research, and administrative tasks.

**Compliance and Legal**

The college risks non-compliance with software licensing agreements, which can result in legal and financial penalties. Accurate tracking is essential to ensure compliance and avoid costly audits.

**Overall Operations**

Inefficiencies in software management affect the overall operational efficiency of the college. Delays, errors, and lack of centralized information hinder effective decision-making and resource allocation.

## References

Conger, S. (2014). Hands-On Database (2nd ed.). Pearson Education (US). https://mbsdirect.vitalsource.com/books/9780133927078