

Q.1. Case Study - I (Brightmouth college).

Ans:

main stages of the project are.

1. Project Initiation:

- Define the project objective, scope and constraints.
- Establish a project team, including key stakeholders and subject matter experts.
- Develop a project plan so that can be completed within the deadlines and budgets.

2. Requirement Gathering:

- Identify the specific payroll needs and requirements of the college.
- Document existing payroll processes and systems.
- Define the data format and information needed for payroll processing.

3. Software Acquisition:

- Purchase the chosen off-the-shelf payroll software.
- Ensure proper licensing and compliance.

4. Data Migration and Integration

- Extract existing payroll data from the local government's systems.

- Transform and migrate data into the new payroll software.
- Integrate the payroll software with other college systems if necessary.

5. Testing and Quality Assurance:

- Conduct thorough testing to ensure the payroll system functions accurately.

6. Training and documentation

- Train college staff responsible for payroll processing on how to use the new software.

7. Validation:

- Validate the accuracy and consistency of results between the two systems.

8. Deployment:

- Ensure all necessary data and configurations are in place.
- Monitor the initial payroll run for any issues.

9. Review:

- Evaluate the performance of the new payroll system.
- Address any post-implementation issues.

⇒ The main differences in this project compared to developing software from scratch are:

1. Development time:

Developing custom software can take a considerable amount of time, whereas implementing an off-the-shelf solution is typically quicker.

2. Cost:

Developing custom software can be more expensive due to development and maintenance costs. Off-the-shelf software usually has a fixed price.

3. Support and updates:

Off-the-shelf software comes with vendor support and regular updates, reducing the burden of ongoing maintenance and development.

Case-study - 2. (Software House)

The main steps are following through which the project manager of the organization would carry out the feasibility study.

1. Project Initiation:

- Define the purpose and objective of the feasibility study.
- Identify the stakeholders and key team members responsible for the study.
- Establish a timeline and budget for conducting the study.

2. Scope Definition

- Clearly define the scope of the project, including the specification, requirement of Brightmouth College.

3. Technical Feasibility

- Examine the technical aspects of customizing the existing product.

4. Financial Feasibility

- Estimate the costs associated with customizing the existing software.

5. Operational Feasibility:

- Analyze how the customized payroll package will fit into the college's existing operations.
- Evaluate whether the college has the necessary resources and expertise to use and maintain the customized software.

6. Risk Assessment:

- Identify potential risks and challenges associated with the customization project.
- Develop risk mitigation strategies to address these challenges.

7. Alternative Solution Analysis:

Compare the pros and cons of each approach.

8. Feasibility Report:

Present the report to the software house's management and relevant stakeholders.

9. Recommendations:

If recommended, outline the project plan, timeline and budget.

10. Approval:

Obtain approval from the software house management.

Q3. Case-Study -03.

Q4. → An operating system on a computer is typically considered an informative system or a general-purpose system rather than an embedded system.

- Informative system:

An OS provides a user-friendly interface and manages hardware resource to enable users to run various applications and performs a wide range of tasks on a computer.

- Embedded system:

In contrast, embedded systems are specialized computer systems with dedicated functions and are often built into specific devices or equipment. They are designed to perform specific tasks.

→ Project implementing an independent payroll system at Brightmouth College is objective driven or product driven depends on the primary focus and outcome of the project.

- Object - driven Project

If the primary focus of the project is to achieve specific objectives or goals such as improving payroll accuracy, efficiency or compliance. It would be considered an objective-driven project. In this case, the project's success is measured by meeting these objectives.

- Product - driven project

on other hand, if the primary emphasis is on delivering a specific product such as the customized payroll software itself and the success of the project is primarily judged by the quality and functionality of the product delivered, it would be considered a product-driven project.

Case-study-04: (Paul Duggan)

Ans. Paul Duggan, the manager of a software development can be seen responding to various management responsibilities throughout his day as follows.

1. Planning

Paul's initial responsibility is related to planning when he drafts a document 'bidding' for staff based on the work planned for his section for the next year.

2. Organizing:

During the meeting with the group manager about staffing requirements, Paul is involved in organizing his team's staff needs for the upcoming year.

3. Directing:

In the meeting with his senior staff about the important project.

4. Coordinating:

Co-ordinating efforts to transfer another team member and arranging for a temporary replacement is another aspect of Paul's role.

5. Controlling:

Throughout the day, Paul is responsible for controlling various aspects of his section from staffing needs to project timelines, to ensure that everything is on track and within the defined parameters.

6. Staffing:

Paul's initial meeting with the group managers is focused on staffing requirements for the coming year.

7. Decision Making:

Paul's decision to transfer another team member to the important project and to bring a temporary replacement is a critical decision to ensure project continuity and resource allocation.

8. Problem Solving:

Dealing with the unexpected road accident of one of his programming staff and arranging for a replacement involves problem-solving to address the immediate challenges his section faces.

Case-study. 05 (Software house).

- Solⁿ as the main stakeholders for the training course project are
1. Client
The organization that commissioned the customized order processing system and is interested in ensuring its effective use.
 2. Software house
The organization responsible for developing and delivering the training.
 3. End-users:
The individuals who will use the customized order processing system.
 4. Trainers:
The individuals responsible for conducting the training courses.
 5. Facility management.
Responsible for providing training rooms and computer facilities.

ng. b) Objective of training course project are

- i) Design and create comprehensive training materials.
- ii) Develop and agree upon a training course timetable.
- iii) Schedule training course dates.
- iv) Identify and notify participants for each training course.
- v) Ensure availability of appropriate rooms and computer facilities for training.

ng. c) Measure of Effectiveness of the objectives.

- 1) Training material.
 - Measure: completion of training materials.
 - Effectiveness: High quality training.

2) Timetable:

- Measure: Timetable with agreement with key stakeholders.

- Effectiveness: A finalized timetable that accommodates the needs of both trainers and participants.

3) Course Date

- measure: → confirmation of course dates.
- Effectiveness:
defined date that align participants availability and training resource.

4) Facilities

- measure:
Availability and readiness of training facilities.
- Effectiveness:
properly equipped rooms and computer facilities that meet training requirements

mid. sub-objective and responsible stakeholders

1) Training materials

- sub-objective
 - i) develop training manual
 - ii) create multimedia presentation
- Responsible stakeholder:
Trainers and instructional design team.

2) Timetable

- sub-objective
collaborate with trainees to determine availability.

- Responsible stakeholder:
training coordinator.

3 > course dates:

- Sub-objective:
coordination with participants to
determine availability of date.

- Responsible-stakeholder:
Training coordinator.

4 > Facilities:

- Sub-objective
Reserve appropriate rooms and
computer labs.

- Responsible stakeholder:
Facility Management.