

CLOUD MIGRATION

A Project Report

Post Graduation Diploma in Cloud Data Management

By
Rechael Lopes
Abirami Mohanasundram
Mounika Boju
Parth Kalathiya

Under the Esteemed Guidance of

Prof. Hitarth Smart

**DEPARTMENT OF APPLIED COMPUTER SCIENCE AND IT
CONESTOGA COLLEGE**

299 Doon Valley Drive

Kitchener, ON N2G 4M4

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ACKNOWLEDGEMENT

The successful completion of this project would be impossible without the immense help and support that we have received from my faculties. We take pride in presenting our project before you which is a result of dedication both in research and knowledge.

We would like to express our sincere gratitude to **Darryl LeBrun** our Program Coordinator. A special thanks goes to **Prof. Hitarth Smart** our project guide, for his constant support and encouragement. We are grateful for his cooperation and his valuable suggestions.

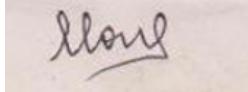
Last but also important gratitude goes to our fellow batchmates who helped and guided us throughout the journey.

DECLARATION

We, Abirami Mohanasundaram, Mounika Boju, Parth Babubhai Kalathiya, and Rechael Vincent Lopes affirm that the attached work is entirely our own, except where the words or ideas of other writers are specifically acknowledged in accordance with accepted APA citation conventions. This project is specifically made for our client BTC Enterprises. We acknowledge that we have revised, edited, and proofread this paper, and we certify that we are the author of this paper. Any assistance we received in its preparation is fully and properly acknowledged and disclosed. We have also cited any sources from which we used data, ideas, theories, or words, whether quoted directly or paraphrased. We further acknowledge that this paper has been prepared by ourselves specifically for this project.

Signatures

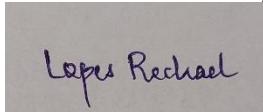
Mounika Boju



Abirami Mohanasundaram



Rechael Vincent Lopes



Parth Babubhai Kalathiya



ABSTRACT

This document highlights the project plan for incorporating the M365 application effectively and efficiently beyond just the basic applications. The plan covers a detailed Work Breakdown Structure with various phases, levels, deliverables, and work packages, Task and Resource Planning, Risks associated with the project, Communication strategy, Quality Control measures, and Scheduling. The document also showcases a Gantt Chart for a better understanding of the processes and timelines. The designed project plan ensures the successful implementation of the M365 platform with reduced risks, downtime, and discrepancies.

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CHAPTER 1: INTRODUCTION



PROJECT PLAN

PART 1

The Team

<i>Name</i>	<i>Role</i>
Mounika Boju	Project Manager
Abirami Mohanasundaram	System Architect
Parth Babubhai Kalathiya	Business Analyst
Rechael Vincent Lopes	Tech Lead

VISIONARY MINDS

299, Doon Valley, Kitchener, ON
+1-456-654-7890
info@visionaryminds.com
www.visionaryminds.com
[@visionaryminds_VM](https://www.linkedin.com/company/visionaryminds-vm)

September, 2024

Dear Client,

We present to you our work that highlights the meticulous process that we will undertake to resolve your pain points. With File Storage, Email, and Communication being the areas of concern, we have designed a solution that tackles these problems by integrating M365 applications into your already existing system.

This document presented to you walks you through our planning and implementation strategy. It covers the Work Breakdown Structure, Task Planning, Resource Planning, Risk Management, Communication Plan, Quality Control, and Scheduling. Our Team has created a high-level and detailed Work Breakdown Structure that highlights the structured approach that we will be implementing. The WBS covers the phases, deliverables within each phase, and tasks/key activities each designed to ensure seamless integration of M365 applications.

- The Task Plan demonstrated how and which tasks would be assigned within the team, the members responsible for the successful completion of each task, the duration of the tasks, and their status.
- Resource Planning includes all the resources that we would be using will the execution of this project which includes all the team members and other individuals who would be directly or indirectly involved in the successful completion of the project.
- Risk Management covers the identification and management of all the risks associated with the project including the known as well as unknown risks and the mitigation strategies.
- Communication Plan includes the various channels of communication that we will use to get in touch with our clients, stakeholders, third parties, etc.
- Quality Control highlights the novel methodologies that we will be using to ensure that the delivery not just meets but exceeds your expectations.

Finally, a Gantt Chart will sum up the tasks associated with the project and the timeline for each task. We are excited to partner with BTC Enterprises and contribute to your continued success.

Sincerely,

The Visionary Minds Team

Work Breakdown Structure

Project Scope:

The Project aims to better utilize the M365 Platform for majorly tackling 3 issues the client is currently facing: Communication, File Storage, and Security. The client's usage of the M365 platform is just limited to OneDrive and basic Office applications like Word and PowerPoint. The idea is to broaden the perspective of the organization by incorporating other applications like Azure Active Directory, SharePoint, Teams, etc. to overcome their pain points.

Goals:

The goal of this project is to achieve a uniform, integrated, and decentralized approach with the best use of M365 applications. Our course of action would be:

Communication: To use a common platform accessible to everyone within the organization. For internal communication we would go with Microsoft Teams and for external communication there is always an option to use Zoom for meetings and other forms of communication alongside Skype.

File Sharing: OneDrive, which the client is already using for file sharing is an excellent option, but our idea is to broaden the platform and use other applications as well like SharePoint.

Security: Security covers two main areas, file security and individual access. For safe file sharing, we suggest connecting to a VPN and using Multi-Factor Authentication, especially for those working remotely. Individual access controls and monitoring would be handled by a group specialized in IAM.

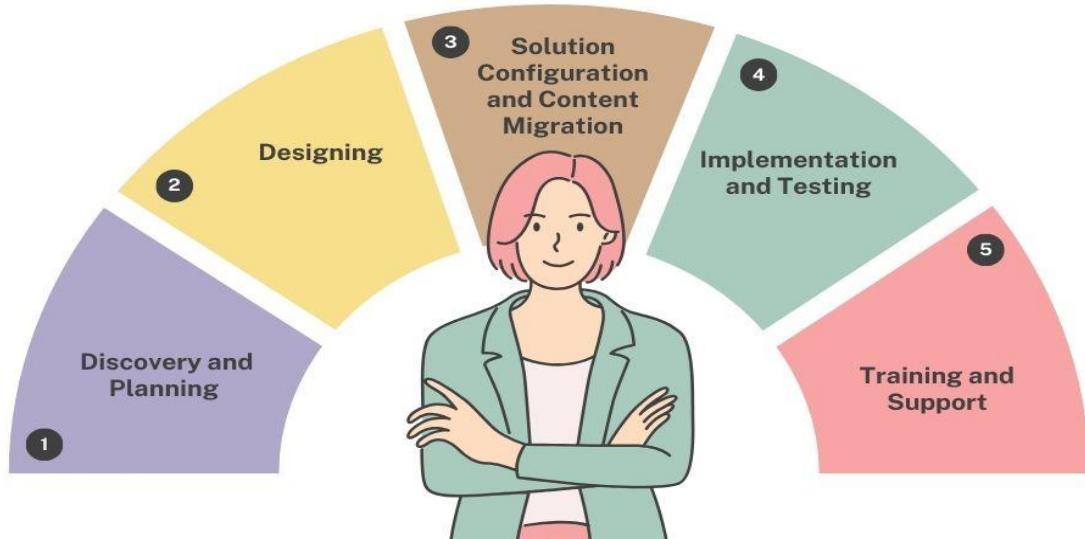
Objectives:

The objective of this project is to efficiently utilize the client's already existing M365 Platform for effective Communication, File storage, and Security beyond just using OneDrive and basic applications.

We will integrate the various applications that the client would be using for better workflow and accessibility through smooth and seamless data migration. The client will be professionally trained to best utilize the platform and applications.

Phases and Control Accounts:

PROJECT PHASES



Our devised Work Breakdown Structure consists of 5 phases:

Phase I: Discovery and Planning

Objective: Develop a comprehensive Project Plan by involving the stakeholders, understanding the client's current environment, gathering requirements, and defining Project Scope.

Key Activities:

- **Project Kick-off Meeting:** Start the project by meeting with clients to understand the project goals and requirements.
- **Identifying Stakeholders:** Identify the stakeholders, decision-makers, and anyone who would be directly or indirectly involved in the project.
- **Create Project Charter:** Create a document that consists of the project scope, goals, objectives, deliverables, roles, and responsibilities of both the client and the team.

- **Infrastructure Assessment:** Understand and examine the client's current IT Infrastructure, technology used, places of improvement, etc.
- **Requirements Gathering and Documentation:** Based on the assessment gather functional and non-functional requirements and document each process.

Phase II: Designing

Objective: Design a detailed system architecture and plan tailored to the BTC enterprise's requirements ensuring effective communication, collaboration, security, and compliance with industry standards.

Key Activities:

- **System Architecture Design:** Design the new infrastructure for the client that reflects the solution keeping in mind scalability for the future.
- **Determine Security Framework:** Determine the areas that have compromised security protocols and design security gateways especially for file sharing and individual access.
- **Data Flow Mapping:** Understand the current flow of data and design a revised flow that demonstrates how data is intended to flow during and after implementation of the solution.
- **Design Test Cases:** Determine all possible scenarios that need to be tested. Design multiple test cases of each scenario to ensure compatibility.

Phase III: Solution Configuration and Content Migration

Objective: Configure the client's existing system and perform Data Migration with the minimum

downtime possible.

Key Activities:

- **Configure System Directory:** Check the current directory services and make required changes to permission wherever necessary to implement the solution.
- **M365 Configuration:** Understand the existing usage of M365. Configure the environment to meet the requirements and integrate it with the existing usage.
- **Data Migration:** Migrate the existing data to other M365 applications that have been introduced to ensure proper workflow and integration.

Phase IV: Implementation and Testing

Objective: Implement the designed solution and perform thorough testing to identify any issues post-migration and assign permissions.

Key Activities:

- **Solution Implementation:** Deploy the decided solution ensuring seamless integration with the existing system and minimum disruption.
- **Pilot Testing:** Run a patch test of a few features of the new system with a small group of users to identify any issues post-deployment.
- **System Testing:** Once the pilot test is successful, conduct thorough end-to-end testing to determine that the system works at its full capacity.
- **Assign Security Roles and User Permissions:** Based on the changes implemented after the deployment, reassign permission and check the security roles to ensure rightful access to the users.

- **Configure Change Management:** Determine and deploy a change management plan to address any issues that might arise after implementing further changes and updates.
- **Risk Mitigation:** Identify, locate, and manage risks as well as document a mitigation plan for potential risks that might arise in the future.
- **User Acceptance Testing (UAT):** Involve end-user to test the solution, ensure that they can use the platform without any hindrance to their work. Take timely feedback to make any changes required.

Phase V: Training and Support

Objective: Provide training and ongoing support to ensure a smooth transition, adoption, and efficient use of implemented technologies. Gather feedback to ensure the project met its goal and finally sign off.

Key Activities:

- **Training Sessions:** Provide end-user training on efficiently using the newly introduced application through various sessions.
- **Post-implementation System Monitoring:** Monitor the system and the user's work performance to ensure the solution not just meets but exceeds the requirements.
- **Post-implementation Support:** Ensure ongoing support to the users as they are getting adapted to the new system.
- **Handover Client Document:** Formally and officially hand over all the documents to the client including user guide, security protocols, troubleshooting manual, etc.
- **Client and Stakeholder Approvals:** Conduct a final approval from the client and the stakeholders confirming that the project met its goals.

- **Project Sign-off:** Officially conclude the meeting by acknowledging the clients, stakeholders, and everyone involved.

Control Accounts:

Below are the high-level management tools that would be used in the project:

Phase I: Discovery and Planning

Estimated Cost: \$50,000

This includes costs related to:

- Project Planning
- Meetings
- Project Charter Development
- Resource Planning
- Requirements Gathering

Phase II: Designing

Estimated Cost: \$10,000

This includes costs related to designing,

- System Architecture
- Security Architecture
- Risk Assessment
- Data Flow Mapping
- Test Cases

Phase III: Solution Configuration and Content Migration

Estimated Cost: \$25,000

This includes costs related to configuration and migration,

- System Configuration
- Consulting
- Data Migration
- Data Integration
- Downtime Management

Phase IV: Implementation and Testing:

Estimated Cost: \$70,000

This includes related to implementing the solution and testing,

- Software Implementation
- Hardware Implementation
- Pilot Testing
- System Testing
- User Acceptance Testing (UAT)
- Implementing Changes Post Testing
- Risk Identification
- Risk Mitigation

Phase V: Training and Support:

Estimated Cost: \$5,000

This includes costs related to,

- Training Aids
- Trainers

- User Support
- Troubleshooting
- Documentations
- Approvals

Deliverables:

The Deliverables for each phase are:

Phase I: Discovery and Planning

- ✓ **Project Charter:** Documents the project goals, scope, objectives, timelines, and budget.
- ✓ **Infrastructure Assessment Report:** Documents the current IT Infrastructure of the client locating all the pain points and areas of improvement.
- ✓ **Requirements Documentation:** Documents all the requirements of the project including functional and non-functional requirements.

Phase II: Designing

- ✓ **System Architecture Diagram:** Showcases the solution design that is planned to be implemented.
- ✓ **Security Framework Documentation:** Documents all the security points of the solution where security policies will be applied.
- ✓ **Data Flow Diagram:** Show how the data is expected to flow for the designed solution.
- ✓ **Test Cases Design:** Documents all the test cases that would be conducted to test the reliability and functionality of the solution.

Phase III: Solution Configuration and Content Migration

- ✓ **Configured System Components:** Includes details of all the components of the existing system as well as those that are part of the proposed solution.
- ✓ **Data Migration Report:** Documents the data migration process, any issues that occurred, and the resolution plan.

Phase IV: Implementation and Testing

- ✓ **Pilot Test Results:** Summary report of the outcomes of the pilot test.
- ✓ **System Test Results:** Summary report of the outcome of the system test.
- ✓ **Security and Permission Logs:** Document showing the various permissions assigned to the users.
- ✓ **Risk Mitigation Report:** Document identifying the risks, its resolution plan, and future actions
- ✓ **User Acceptance Testing (UAT) Results:** Document summarizing the outcomes of the UAT and user feedback.

Phase V: Training and Support

- ✓ **Training Materials:** Includes manuals, guides, references, etc.
- ✓ **Post-implementation Monitoring Report:** This document highlights the system performance post-implementation of the solution, issues encountered, and their resolution method.
- ✓ **Support Plan:** Document that refers to support beyond the training sessions, contacts for support, issue escalation, etc.

WBS Levels and Work Packages:

WBS consists of 5 Phases each divided into multiple Levels and Sub-levels. Each sub-level then consists of individual Work Packages. Following is the breakdown for all the phases, levels, sub-levels, and work packages.

WORK BREAKDOWN STRUCTURE FOR BTC ENTERPRISE						
Phases	Levels	Levels	Key Activities	Assigned To	Start Date	End Date
1. Discovery and Planning	Cost - \$50,000					
	1.1 Project Initiation	1.1.1	Project Kick-off Meeting	Project Manager	Oct 03, 2024	Oct 03, 2024
		1.1.2	Identifying Stakeholders	Project Manager	Oct 03, 2024	Oct 07, 2024
		1.1.3	Create Project Charter	Business Analyst	Oct 07, 2024	Oct 12, 2024
	1.2 Examination and Elicitation	1.2.1	Infrastructure Assessment	System Architect	Oct 11, 2024	Oct 21, 2024
		1.2.2	Requirements	Business	Oct	Nov

			Gathering	Analyst	21, 2024	01, 2024
2. Designing	Cost - \$10,000					
	2.1 System Analysis	2.1.1	System Architecture Desing	System Architect	Nov 01, 2024	Nov 08, 2024
		2.1.2	Determine Security Framework	Security specialist	Nov 08, 2024	Nov 15, 2024
	2.2 Data Analysis	2.2.1	Data Flow Mapping	System Architect	Nov 15, 2024	Nov 20, 2024
	2.3		Design Test Cases	Quality Assurance Engineer	Nov 20, 2024	Dec 02, 2024
3. Solution Configuration and Content Migration	Cost – \$25,000					
	3.1 System Configuration	3.1.1	Configure System Directory	System Administrator	Dec 02, 2024	Dec 11, 2024
		3.1.2	M365 Configuration	Tech Lead	Dec 11, 2024	Dec 20, 2024

	3.2		Data Migration	Tech Lead	Dec 20, 2024	Jan 09, 2025
4. Implementation and Testing	Cost - \$70,000					
	4.1 System Testing	4.1.1	Pilot Testing	Quality Assurance Engineer	Jan 09, 2025	Jan 20, 2025
		4.1.2	System Testing	Quality Assurance Engineer	Jan 20, 2025	Feb 05, 2025
	4.2 Implementation System Changes	4.2.1	Assign Security Roles and User Permissions	System Administrator	Feb 05, 2025	Feb 17, 2025
		4.2.2	Configure Change Management	Technical Lead	Feb 17, 2025	Feb 24, 2025
		4.2.3	Risk Mitigation	Technical Lead	Feb 24, 2025	Mar 03, 2025
	4.3		User Acceptance Testing (UAT)	Technical Lead and Stakeholders	Mar 03, 2025	Mar 07, 2025

5. Training and Support	Cost - \$5,000					
5.1 User Training	5.1.1	Training Sessions	Technical Lead	Mar 07, 2025	Mar 11, 2025	
	5.1.2	Post-implementation System Monitoring	System Administrator	Mar 11, 2025	Mar 20, 2025	
	5.1.3	Post-implementation Support	Support Team	Mar 20, 2025	Mar 25, 2025	
	5.2.1	Handover Client Documents	Project Manager	Mar 12, 2025	Mar 17, 2025	
	5.2.2	Client and Stakeholder Approval Meetings	Project Manager	Mar 17, 2025	Mar 25, 2025	
	5.2.3	Project Sign-off	Project Manager	Mar 25, 2025	Mar 25, 2025	

Table 1: WBS in Cloud Migration Project, 2024

Following is the Flow Chart for our devised Work

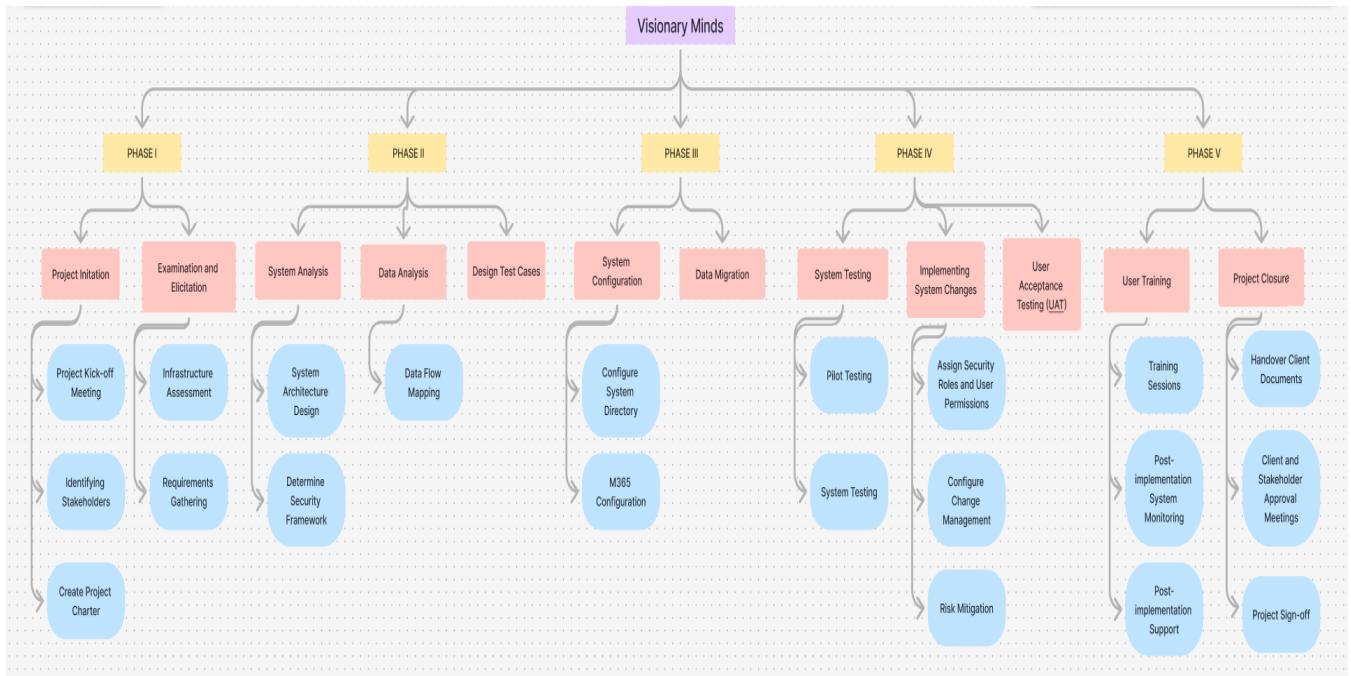


Figure 1: Flow Chart of WBS

CHAPTER 2: SYSTEM ANALYSIS

Task Planning

The project runs from October 3, 2024, to March 25, 2025, involving key stakeholders and resources to ensure timely delivery and stakeholder satisfaction.

Key Points

Project Objectives:

- Deliver a robust system architecture to enhance user experience.

Task Breakdown:

- Each task is organized with IDs, names, durations, start and finish dates, predecessors, resources, work estimates, and status for clear tracking.

Roles and Responsibilities:

- Tasks assigned to specific team members, ensuring accountability and clarity.

Project Timeline:

- Visual representation of the timeline through a Gantt chart, highlighting overlapping tasks and dependencies.

Dependencies:

- Identified relationships between tasks that influence timelines.

Status Tracking:

- Current progress is monitored using a status column, keeping the team informed.

Resource Management:

- Necessary resources for each task listed to support timely completion.

Risk Management:

- Outline of potential risks and strategies for mitigation.

Communication Plan:

- Regular updates and meetings scheduled to ensure stakeholder engagement.

Closure and Evaluation:

- Steps for project closure, including document handover and final project assessments.

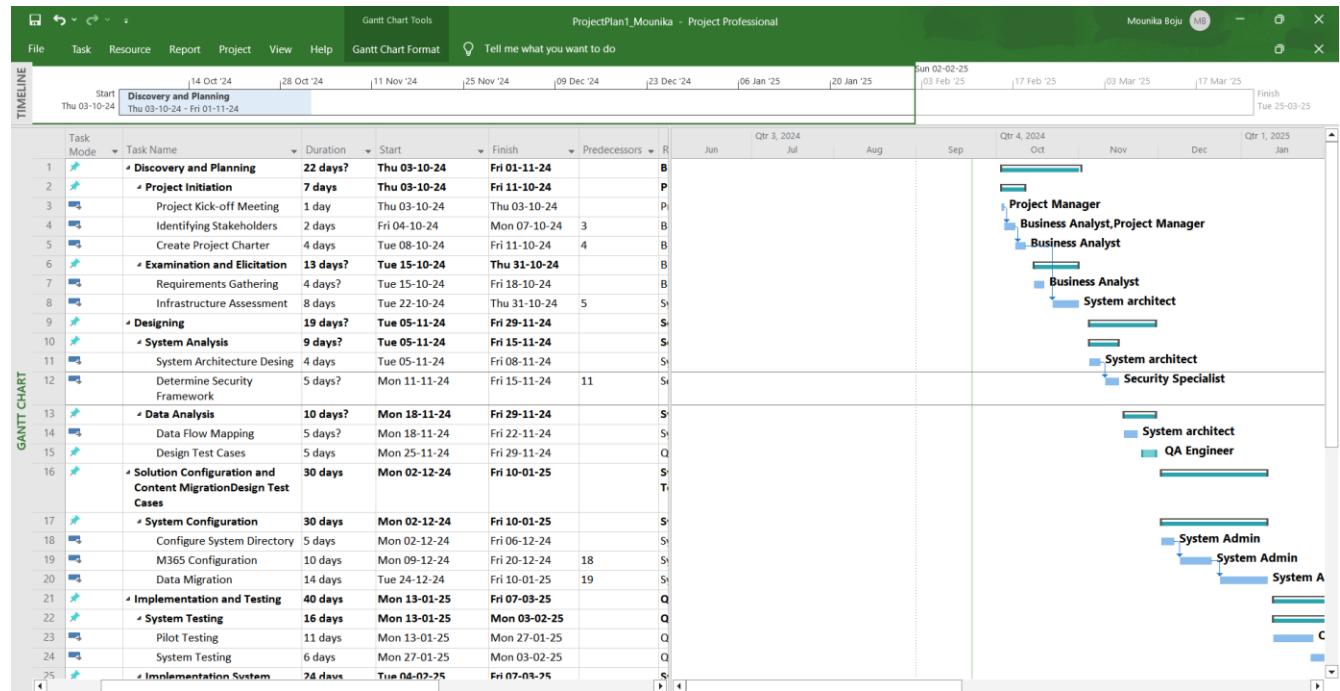


Figure 2: Gantt chart overview

Task Id	Task Name	Duration	Start	Finish	Predecessors	Resource Names	Work	Status
1	Discovery and Planning	22 days?	Thu 03-10-24	Fri 01-11-24		Business Analyst, Project Manager	784 hrs	Completed
2	Project Initiation	7 days	Thu 03-10-24	Fri 11-10-24		Project Manager	128 hrs	Completed
3	Project Kick-off Meeting	1 day	Thu 03-10-24	Thu 03-10-24		Project Manager	8 hrs	Completed
4	Identifying Stakeholders	2 days	Fri 04-10-24	Mon 07-10-24	3	Business Analyst, Project Manager	32 hrs	Completed
5	Create Project Charter	4 days	Tue 08-10-24	Fri 11-10-24	4	Business Analyst	32 hrs	Completed
6	Examination and Elicitation	13 days?	Tue 15-10-24	Thu 31-10-24		Business Analyst, System Architect	304 hrs	Completed
7	Requirements Gathering	4 days?	Tue 15-10-24	Fri 18-10-24		Business Analyst	32 hrs	Completed
8	Infrastructure Assessment	8 days	Tue 22-10-24	Thu 31-10-24	5	System architect	64 hrs	Completed
9	Designing	19 days?	Tue 05-11-24	Fri 29-11-24		Security Specialist, System architect	680 hrs	Yet to Start
10	System Analysis	9 days?	Tue 05-11-24	Fri 15-11-24		Security Specialist, System architect	216 hrs	Yet to Start
11	System Architecture Desing	4 days	Tue 05-11-24	Fri 08-11-24		System architect	32 hrs	Yet to Start

12	Determine Security Framework	5 days?	Mon 11-11-24	Fri 15-11-24	11	Security Specialist	40 hrs	Yet to Start
13	Data Analysis	10 days?	Mon 18-11-24	Fri 29-11-24		System architect	160 hrs	Yet to Start
14	Data Flow Mapping	5 days?	Mon 18-11-24	Fri 22-11-24		System architect	40 hrs	Yet to Start
15	Design Test Cases	5 days	Mon 25-11-24	Fri 29-11-24		QA Engineer	40 hrs	Yet to Start
16	Solution Configuration and Content Migration Design Test Cases	30 days	Mon 02-12-24	Fri 10-01-25		System Admin, Tech Lead	952 hrs	Yet to Start
17	System Configuration	30 days	Mon 02-12-24	Fri 10-01-25		System Admin	472 hrs	Yet to Start
18	Configure System Directory	5 days	Mon 02-12-24	Fri 06-12-24		System Admin	40 hrs	Yet to Start
19	M365 Configuration	10 days	Mon 09-12-24	Fri 20-12-24	18	System Admin	80 hrs	Yet to Start
20	Data Migration	14 days	Tue 24-12-24	Fri 10-01-25	19	System Admin	112 hrs	Yet to Start
21	Implementation and Testing	40 days	Mon 13-01-25	Fri 07-03-25		QA Engineer, Tech Lead	1,480 hrs	Yet to Start
22	System Testing	16 days	Mon 13-01-25	Mon 03-02-25		QA Engineer	264 hrs	Yet to Start

23	Pilot Testing	11 days	Mon 13- 01- 25	Mon 27- 01-25		QA Engineer	88 hrs	Yet to Start
24	System Testing	6 days	Mon 27- 01- 25	Mon 03- 02-25		QA Engineer	48 hrs	Yet to Start
25	Implementation System Changes	24 days	Tue 04- 02- 25	Fri 07- 03-25		System Admin, Tech Lead	576 hrs	Yet to Start
26	Assign Security Roles and User Permissions	9 days	Tue 04- 02- 25	Fri 14- 02-25		System Admin	72 hrs	Yet to Start
27	Configure Change Management	5 days	Mon 17- 02- 25	Fri 21- 02-25		Tech Lead	40 hrs	Yet to Start
28	Risk Mitigation	5 days	Mon 24- 02- 25	Fri 28- 02-25	26	Tech Lead	40 hrs	Yet to Start
29	User Acceptance Testing (UAT)	5 days	Mon 03- 03- 25	Fri 07- 03-25		QA Engineer	40 hrs	Yet to Start
30	Training and Support	12 days?	Mon 10- 03- 25	Tue 25- 03-25		Project Manager, Tech Lead	384 hrs	Yet to Start
31	User Training	6 days	Mon 10- 03- 25	Mon 17- 03-25		Tech Lead	96 hrs	Yet to Start
32	Training Sessions	3 days	Mon 10- 03- 25	Wed 12- 03-25		Tech Lead	24 hrs	Yet to Start
33	Post-implementation System Monitoring	2 days	Thu 13- 03- 25	Fri 14- 03-25	32	Support Team	16 hrs	Yet to Start
34	Post-implementation Support	1 day	Mon 17- 03-	Mon 17- 03-25		Support Team	8 hrs	Yet to Start

			25					
35	Project Closure	6 days?	Tue 18- 03- 25	Tue 25- 03-25	33	Project Manager	96 hrs	Yet to Start
36	Handover Client Documents	3 days?	Tue 18- 03- 25	Thu 20- 03-25		Project Manager	24 hrs	Yet to Start
37	Client and Stakeholder Approval Meetings	2 days?	Thu 20- 03- 25	Fri 21- 03-25		Project Manager	16 hrs	Yet to Start
38	Project Sign-off	1 day?	Tue 25- 03- 25	Tue 25- 03-25	37	Project Manager	8 hrs	Yet to Start

Table 2: Task Planning in Cloud Migration Project, 2024

Resource Planning

Resource Planning



PHASE I: DISCOVERY AND PLANNING

- **Project Kick-Off Meeting:**

Resources (HR): Project Manager (PM), Key Stakeholders, Business Analyst (BA), and Technical Lead.

Resources and tools: communication technologies (Microsoft Teams, Zoom), project management software (Jira, Trello), and meeting materials (presentations, agendas).

Time Allocation: 1-2 days for the initial meeting and alignment.

- **Identifying stakeholders:**

Resources: Project Manager and Business Analyst.

Tools and Resources: Stakeholder analysis and teamwork tools (Google Workspace and Office 365).

Time allocated: 2-3 days for stakeholder identification and analysis.

- **Create a Project Charter:**

Resources: Project Manager and Business Analyst.

Tools and resources: Include file management software (Google Docs, MS Word), as well as project charter templates.

Time allotted: 3-5 days.

- **Infrastructure Assessment:**

Resources: IT Specialist, System Architect, and Technical Lead.

Tools and resources: For infrastructure assessment include network analysis and hardware/software inventory tools.

Time allocation: One week for assessment and reporting.

- **Requirement gathering and documentation:**

Resources: Business Analysts, Technical Leads, and Key Stakeholders.

Tools and resources include requirements management software (Jama, Confluence, and Excel).

Time Allocation: 2-3 weeks, depending on the intricacy.

Deliverables:

Project charter

Infrastructure assessment report.

Requirements documentation

PHASE II: DESIGNING

Objective: Develop the system's architecture, security framework, test cases and key activities, and resource planning including designing the system architecture.

- **Requirement gathering and documentation:**

Resources: Business Analysts, Technical Leads, and Key Stakeholders.

Tools and resources include requirements management software (Jama, Confluence, and Excel).

Time Allocation: 2-3 weeks, depending on the intricacy.

Deliverables:

Project charter

Infrastructure assessment report.

- **Requirements documentation**

Resources: System Architect and Technical Lead.

Tools and resources: Architecture, as well as collaboration platforms.

Time allotted: 2 weeks for full architectural design.

- **Determine the Security Framework:**

Resources: Security Analyst and System Architect.

Tools/Resources: Security guidelines and cybersecurity tools.

Time allocation: a week for security evaluation and framework design.

- **Data Flow Mapping:**

Resources: System Architect and Data Engineer.

Tools and resources for creating data flow graphs.

Time allocation: one week for data flow analysis.

- **Design test cases:**

Resources: QA Lead and Business Analyst.

Tools and resources: Test case management software.

Time allocation: one week for test case design.

Deliverables:

System architecture diagram.

Security framework documentation

Data flow diagrams

Test case designs.

Phase III: Solution Configuration and Content Migration

Objective: Setting up and customize the system directory so that users can properly manage users, groups, and permissions.

- **Configure System Directory**

Resources: Technical Lead, System Administrator, Security Specialist, Program Manager

Tools and Resources: PowerShell, Networking Tools, Active Directory Administrative

Content.

- **M365 Configuration**

Resources: M365 Administrators, Project Manager, Security Specialist

Tools and Resources: M365 Admin Centre, Microsoft Endpoint Manager

- **Data Migration**

Resources: Data Migration Specialist, Database Administrator, Tester

Tools and Resources: SQL Server Management Tool, Security Tools, Monitoring Tools,

Data Validation Tools

PHASE IV: IMPLEMENTATION AND TESTING

Objective: The system must be set up, configured, and thoroughly tested.

- **Setup System Directory**

Resources: System Administrator and Technical Lead.

Active Directory and LDAP are two tools/resources.

Time allotted: One week.

- **Configure databases**

Resources: Database administrators (DBAs) and system administrators.

Database systems (MySQL and SQL Server).

Time Allocation: 1-2 weeks, depending on the database complexity.

- **M365 Configuration**

Resources: System Administrator; IT Specialist.

Tools and resources include Microsoft 365 administration tools.

Time allotted: One week.

- **Data Migration**

Resources: Data Engineer and DBA.

Tools and resources for data migration include AWS Data Migration Service and Azure Data Factory.

Time allocation: 2–3 weeks, depending on data volume.

- **Pilot Testing**

Resources: QA Team and Key Users.

Tools and resources include test environments and automated testing tools (Selenium, JUnit).

Time Allocated: Two weeks.

- **Provide security roles and user permissions.**

Resources: System Administrator, Security Specialist.

Tools/Resources: Active Directory and RBAC tools.

Time allotted: One week.

- **Risk Mitigation**

Resources: Risk Manager and Project Manager.

Tools and resources for risk management include Risk Watch and Cura.

Time Allocation: Continuous activity during implementation.

- **User Acceptance Testing (UAT)**

Resources, including Business Analysts, Key Stakeholders, and the QA Team.

Tools/resources include UAT software and feedback tools.

Time allocation: 1-2 weeks.

Deliverables:

Configure system components.

System testing and UAT reports.

Configure security roles and permissions.

Data migration completion

PHASE V: TRAINING AND SUPPORT

Objective: Ensure that clients are trained, and the system is supported after implementation.

- **Training sessions**

Resources: Trainers and IT support.

Tools and resources: learning management system (LMS), documentation, and instructions.

Time Allocation: 1-2 weeks for various training sessions according to user roles.

- **post-implementation system monitoring**

Resources: IT support and system administrators.

Tools and resources: Monitoring tools.

Time allocation: Ongoing during the early post-implementation period (1-2 months).

- **Post-implementation supports**

Resources: IT Support, and Technical Lead.

Tools and resources: Ticketing systems (such as ServiceNow) and communication channels.

Time Allocation: 1-2 months of continual support.

SUMMARY

Resources: Project Manager, Business Analyst, Technical Lead, System Architect, IT Support Team, QA Team, Database Administrator, Trainers, Risk Manager, and Security Specialist.

Tools/Technology: Project management tools, system architecture tools, test case management software, data migration tools, LMS for training, monitoring tools, and document management software (Google Docs, SharePoint) and collaboration tools.

Time Allocation: Approximately 4-6 months for the entire project, depending on complexity and resources available.

Risk Management



The risk management plan for this project is aimed at identifying, evaluating, and minimizing effective risks to the successful implementation of Microsoft 365 in BTC Enterprises. Every stage of the project planning, implementation, and even after the implementation, has potential risks associated with it. The key risks for this project are:

- **Data Loss During Migration:** Any data transfer from old systems to the new M365 environment, primarily to OneDrive as well as SharePoint solutions, involves a potential data loss or data corruption. The risk of data loss is high in this phase especially when data is transferred in bulk to test system functionality.
- **Security Threats in M365 Setup Processes:** Several challenges are bound to occur when using M365 applications like SharePoint & OneDrive. Security issues arise when configurations are not well done. One of the key focuses while developing an application is good security implementation. This involves Azure settings and security roles for access to data and applications.
- **Time Delays in Testing and Configuration:** The project time may be subjected to extension if there are obstacles throughout the configuration, testing processes, or User Acceptance Testing. Project delays, as well as emerging issues with bugs, performance, or difficulties in the configuration of some M365 tools, may occur.
- **Stakeholder lack of Communication or Incompatibility:** Lack of proper communication or alignment with BTC Enterprises and other contractual partners during the most important project steps such as requirement collection, and integration can lead to dissatisfaction. This may cause project scope changes and impact the overall delivery of a project in the best way.
- **Integration Challenges:** The goal of the project is the connectivity of Microsoft 365 applications with the systems used by BTC Enterprises. Some level of integration incompatibilities between the existing systems and new systems could result in operations delay or system error, particularly in the “M365 Configuration”.

Communication

Communication is one of the crucial parameters for making the project successful. In the case of BTC Enterprises, the plan in question must cover the effective facilitation of communications between the team, other stakeholders, and other external people that may be required throughout the enterprise's project lifecycle. Here's a detailed breakdown of the communication plan based on the information in the provided document:

Internal Team Communication:

The members of the Visionary Minds team will always be on the same page concerning the progress of the project.

- **Tools and Platforms:** Most of the internal team communication will be within the Microsoft Teams platform as well as using MS Project for task assignment and work sharing. The software includes the use of Microsoft Teams for synchronous communication and MS Project for tracking the progress of tasks.
- **Frequency:** To track the team's progress, organizational weekly meetings will be held to evaluate what has been accomplished, potential barriers, and timeline changes if needed. In emergencies, the work will be done through Microsoft Teams, allowing for fast communication via messaging or a call.

Stakeholder Engagement:

One important lesson concerning project misalignment is to always manage expectations and keep the stakeholders informed.

- **Tools and Platforms:** Official communication will be through Microsoft Outlook while virtual meetings will be conducted through Zoom or Microsoft Teams. OneDrive or SharePoint will be used to share all key documents with stakeholders throughout the process to make all important information updated and available to reviewers.
- **Frequency:** Communication will be made to stakeholders to keep them updated on the progress that is achieved monthly on the key areas of the contest, as well as other emerging issues and risks. Stakeholder approval will be after the Infrastructure Assessment and System Architecture Design phases.

Client Communication:

It is a necessity for project managers to frequently engage BTC Enterprises to ascertain that the project goals are in sync with the client.

- **Tools and Platforms:** As for the communication with BTC Enterprises, most of it will include email messages and further using Microsoft Teams where the team will upload all the progress reports, documents, and other deliveries for the client to go through.
- **Frequency:** These actions will involve meeting with the client at least twice a week to discuss project progress and feedback. A Client and Stakeholder Approval Meeting is going to be conducted at the end of each phase in order to confirm the execution of all deliverables.

Writing and Sharing of Papers:

Understanding and Expectations of Changes All project records and documents like WBS, resource usage, risk, and schedules will be created and exchanged through secured means.

- **Tools and Platforms:** This will make document control easy since SharePoint will be used to keep the most current versions of project and business plans and other deliverables usable by BTC Enterprises and all stakeholders. This enables collaborative working and review of significant papers in actual time.

Feedback and Adjustments:

In this context, constant feedback from the client and the internal team is going to be essential to the project's success.

- **Tools and Platforms:** Another assessment method that will be utilized during the project's implementation is feedback meetings where the client and stakeholders give feedback through Zoom or Teams app on the deliverables. Besides, post-implementation, feedback surveys about the project will be conducted in order to evaluate the level of preference.
- **Frequency:** Finding this feedback at the end of each large phase (as seen with the M365 Configuration and Data Migration phases) will be instrumental in making sure the project is on track and fulfilling the needs of the client.

Task and Progress Tracking:

Work assignment and work accomplishment therefore needs to be well coordinated so as to have a clear tracking schedule.

- **Tools and Platforms:** Communications will be handled via Microsoft Teams, it is a fast and efficient way for the team members to communicate and share updates, files, etc.
- **Frequency:** All the tasks will be tracked in the Trello boards, and team members will have to check the boards at least once per day. Weekly newsletters will be aggregated into progress reports which will be presented to the client and stakeholders.

Quality Control

A comprehensive quality control (QC) strategy must be carried out throughout the duration of the project to ensure that the delivery exceeds and meets the client's expectations, in addition to that the solution operates effectively.

Project Planning and Design Overview

- **Requirement Validation:** Ensure that each of the client's demands are well recorded, recognized, and agreed upon. Perform periodic assessments with stakeholders to validate the requirements before proceeding.
- **Design Overviews:** Execute formal design explanations with the client to guarantee that the layout plans correspond with corporate styling, color themes, and standards of design. Gather feedback from clients and make any required modifications to the design before the final approval.

Solution Configuration and Content Migration

- **Deployment Checks:** Perform regular audits during the Azure AD, SharePoint, and OneDrive configuration cycles to ensure that the setup fulfills project requirements and maintains security best practices.
- **Migration Testing:** Create and implement a migration testing plan that includes pilot migrations, data integrity authentication, and post-migration functionality testing. This will help discover difficulties early on and allow for adjustments.

- **Backup and Recovery Verification:** Verify that all important information is backed up before transferring. Verify the recovery process in order to ensure that data can be restored without harm in the scenario of migration failure.

Solution Configuration and Content Migration

- **Configuration Review:** Establish a checklist according to the system design research to check that all settings are recommended that a senior technical team member or a peer check the configurations to find any differences or missing configurations. Perform initial testing to make sure that all configuration environments, such as security roles, user permissions, and process sets, perform as planned.
- **Data Validation:** Evaluate the data mapping documents to make sure that all data categories from the source system transfer appropriately to the target system. Execute data quality checks on the initial data to identify and fix any gaps, repetitions, or errors before migration. After migration, compare the source and the destination systems to ensure data integrity. This involves ensuring that all data is complete, accurate, and consistent in format.
- **Performance Testing:** Simulate client load to make sure that the IT infrastructure can handle the planned number of users and data shifts efficiently. Test the system's behavior in extreme conditions to discover possible limits or breaking points. Ensure that the system can grow effectively to accommodate future content or user growth.

Solution Design and Development

- **Code Assessments:** Utilize external code reviews to ensure that best practices have been followed and that the solution satisfies the highest standards. This will assist in recognizing possible issues early in the development process.
- **Automated Testing:** Develop automated test cases for functional, regression, and security testing. The evaluations will run constantly to identify any issues as soon as they appear.
- **Performance testing:** This is used to confirm that SharePoint and OneDrive can handle the anticipated demand and that the solution operates efficiently under different instances.
- **User Acceptance Testing (UAT):** Collaborate with the client to execute UAT, which includes key staff members testing the system against actual-life situations. Gather responses and make the necessary modifications before the final deployment.

Technical Training and Support

- **Training Evaluation:** Throughout technical training, assess the effectiveness of the training sessions using feedback surveys and practical evaluations. Ensure that key staff members are comfortable with the new systems.
- **Documentation and Knowledge Transfer:** Deliver extensive documentation and knowledge transfer sessions to ensure that the client's team is fully prepared to manage the system after implementation.

Ongoing Monitoring and Post Deployment Support

- **Post-Implementation Review:** Perform a scheduled post-implementation assessment with the client to evaluate project success and ensure all objectives have been met. Address the remaining relates to and provide recommendations for continued maintenance.
- **Service Level Agreement (SLA) Monitoring:** Create and monitor SLAs in order to ensure that the client receives ongoing support and maintenance as indicated. Monitor performance against SLAs on a regular basis and make any necessary adjustments.

Client Feedback and Continuous Improvement

- **Feedback Cycles:** Establish regular feedback cycles with the client throughout the project to document concerns, proposals, and approvals at every phase. This confirms that the project is in line with the client's evolving demands.
- **Continuous Improvement:** Utilize knowledge learned and feedback from clients to constantly improve the project delivery process, enabling future engagements even more effective.

Scheduling

Project Timeline:

- The project is scheduled to start on October 3, 2024, and finish on March 25, 2025.

Task Schedule:

- Tasks are scheduled with specific start and finish dates; detailing durations as follows:

Discovery and Planning: Oct 3 - Nov 1 (22 days)
Project Initiation: Oct 3 - Oct 11 (7 days)
Designing Phase: Nov 5 - Nov 29 (19 days)
Implementation and Testing: Jan 13 - Mar 7 (40 days)
Project Closure: Mar 18 - Mar 25 (6 days)

Milestones:

Key milestones include:

Project Kick-off Meeting (Oct 3)
Completion of Project Charter (Oct 11)
Design Phase Completion (Nov 29)
UAT Completion (Mar 7)
Project Sign-off (Mar 25)

Resource Allocation:

- Resources are allocated based on task requirements:
- Business Analyst and Project Manager for planning tasks.

- System Architect, and Security Specialist for design tasks.
- QA Engineer and Tech Lead for testing and implementation.

Dependency Management:

- Dependencies are clearly outlined to identify critical paths, ensuring that preceding tasks are completed before starting dependent tasks. For example:
- Creating a Project Charter (Task 5) is dependent on Identifying Stakeholders (Task 4).

Regular Updates:

- The schedule includes regular check-ins to assess task progress and make necessary adjustments.

Flexibility:

- The schedule accommodates flexibility to address unforeseen changes, ensuring that project timelines can be adjusted as needed.

Communication Plan:

- A communication strategy ensures all stakeholders are informed of schedule changes and progress updates, facilitating transparency and collaboration.

Risk Assessment:

- Potential scheduling risks have been identified, with contingency plans established to manage any issues that may arise.

Final Review:

- A final review will be conducted at each milestone to ensure alignment with project objectives and timelines.

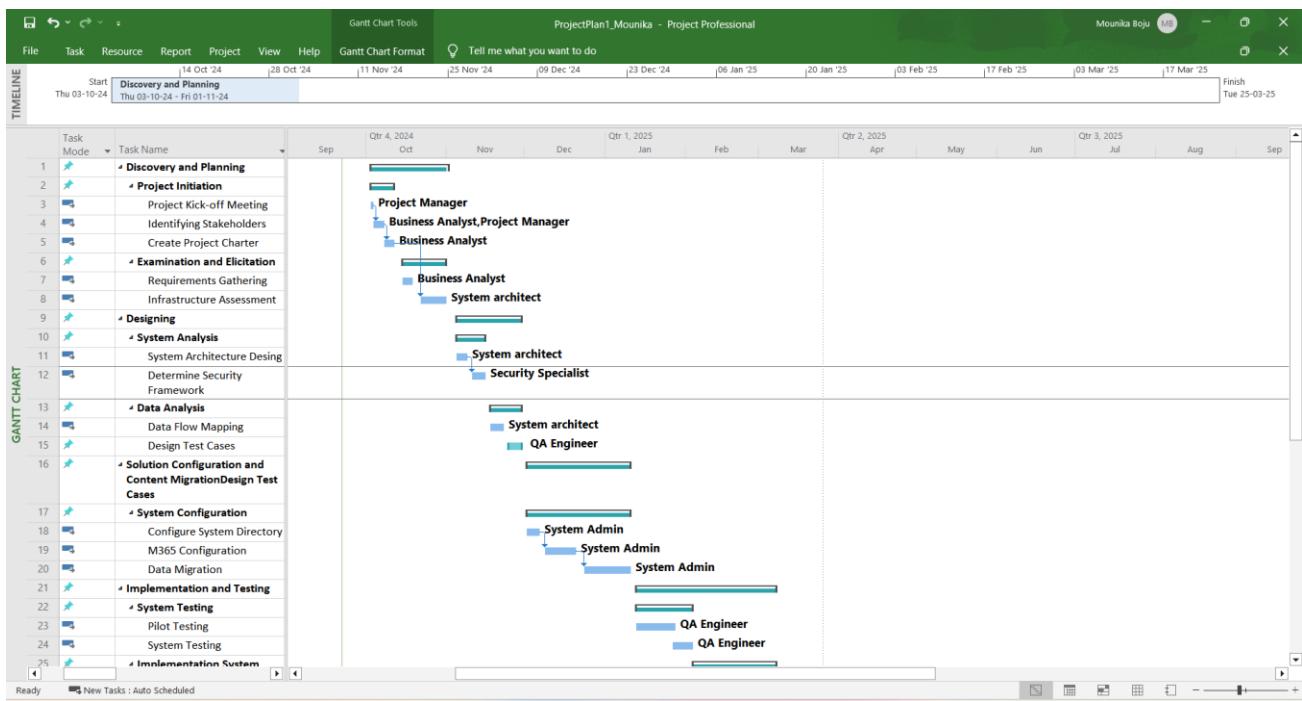


Figure 3: Scheduling Task - Resource Allocation

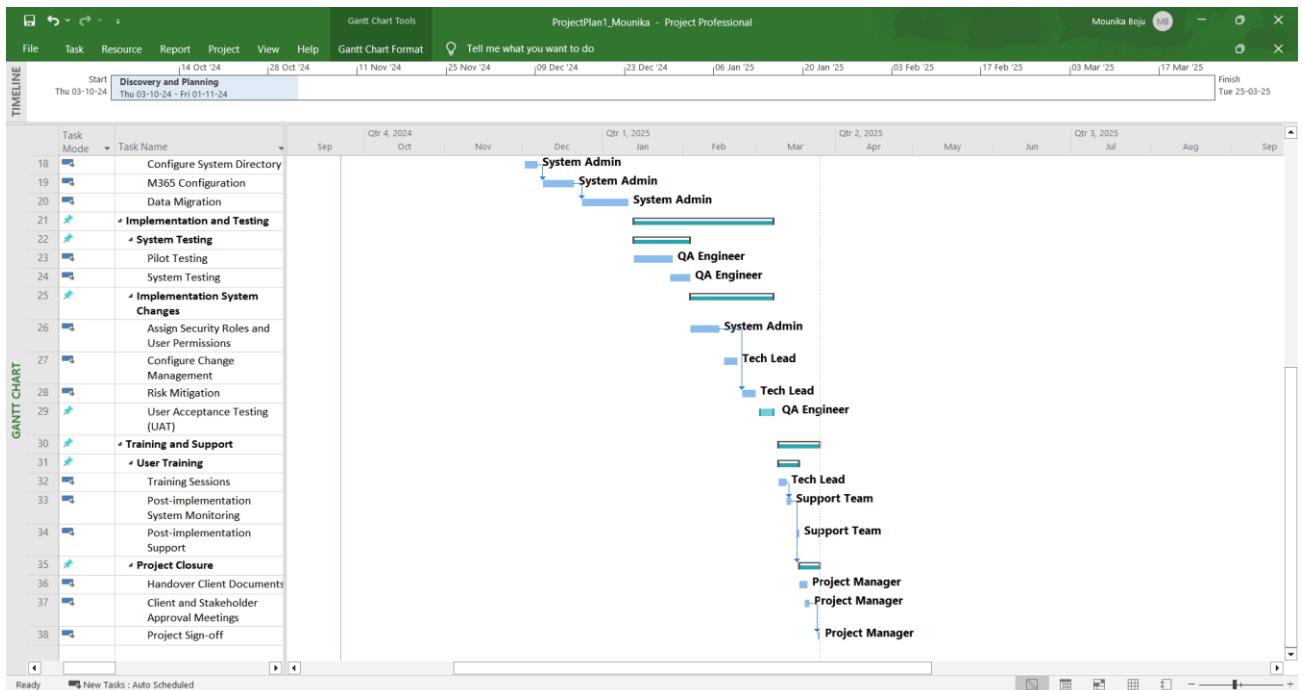


Figure 4: Resource Allocation

CHAPTER 3: SYSTEM DESIGN

Wireframes

Key Sections and Elements:

Home Page:

- **Search Bar:** A prominent search bar for easy navigation.
- **Welcome Message:** A brief welcome message or introduction.
- **Quick Links:** Links to frequently accessed sections like “Help Centre,” “IT Request Form,” “Manuals and User Guides,” etc.

Internal Resources:

- **Training Materials:** Access to training documents and resources.
- **Backup and Recovery:** Information and tools for data backup and recovery.
- **Project Updates:** Updates on ongoing projects.
- **Knowledge Base:** A repository of articles and FAQs.
- **Incident/Problem Records:** Logs and records of incidents and problems.
- **Software and Hardware Updates:** Information on the latest updates.

External Resources:

- **Help & Support:** Links to support resources and contact information.
- **Organization Chart:** A visual representation of the organizational structure.
- **Reports:** Access to various reports.
- **LMS Courses:** Links to Learning Management System courses.
- **Onboarding Checklist:** A checklist for new employees.

- **New User Access:** Information on how new users can gain access to the system.

Manuals & Guides:

- **Manuals:** Detailed user manuals.
- **Guides:** Step-by-step guides for various processes.

Ticketing System:

- **Track Ticket:** A feature to track the status of submitted tickets.
- **Reopen Ticket:** Option to reopen closed tickets.
- **Contact Service Desk:** Contact information for the service desk.

User Profile:

- **FAQs:** Frequently asked questions.
- **Submit Incident/Problem:** Form to submit new incidents or problems.
- **Contact Support:** Contact information for support.

Miscellaneous:

- **Pet Food Guide:** Possibly a placeholder or an example section.
- **Account and Billing:** Information on account management and billing.
- **Shopping Intelligence:** Insights and data related to shopping.
- **Product Maintenance:** Information on maintaining products.
- **Grooming Tips:** Tips and advice on grooming.
- **Office Workshop:** Information on office workshops.

- **Training Manual:** Access to training manuals.
- **Security:** Information on security protocols.
- **Recently Added:** Recently added guides and links.
- **Software Training Compliance:** Information on software training compliance.

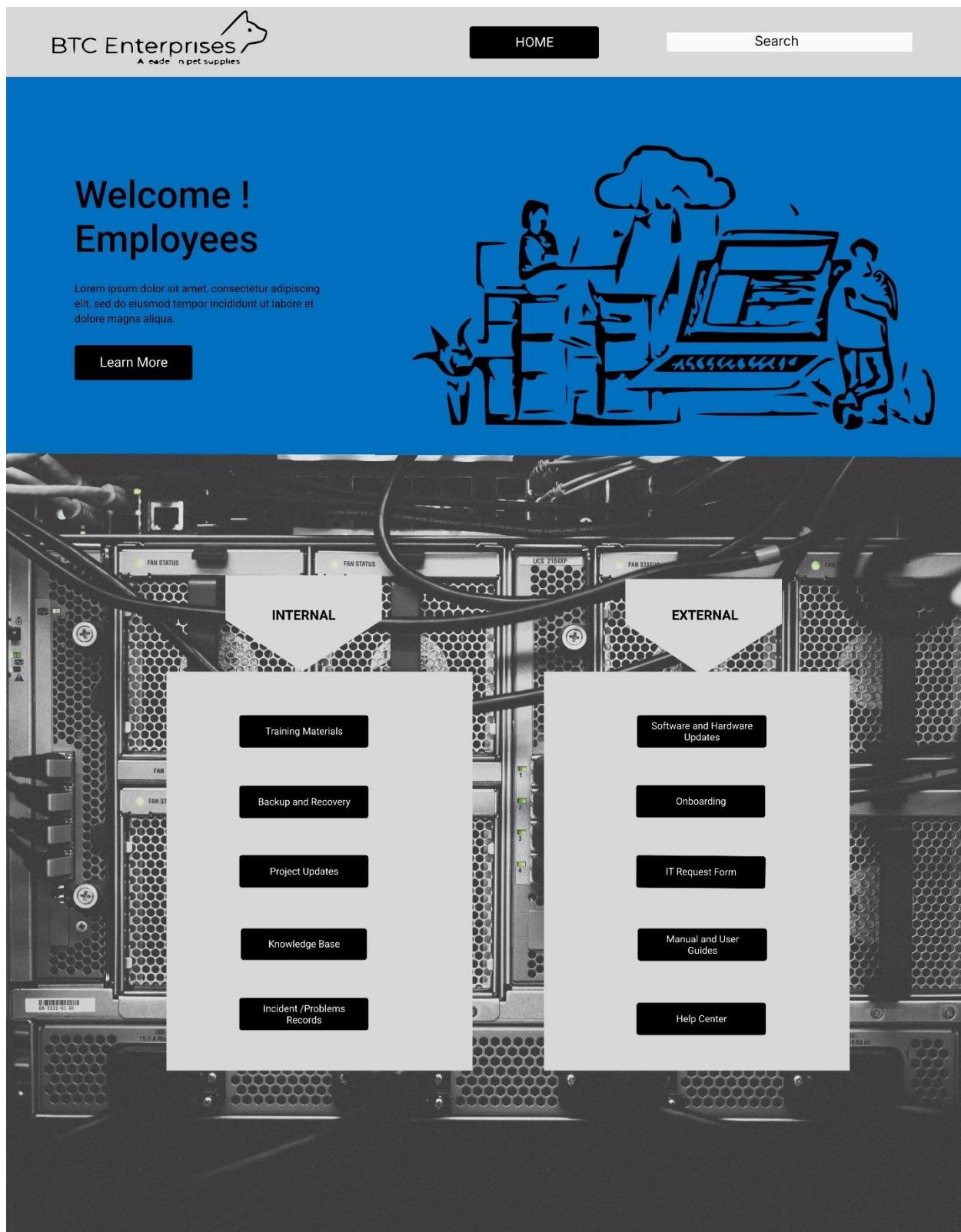


Figure 5: Home page IT department

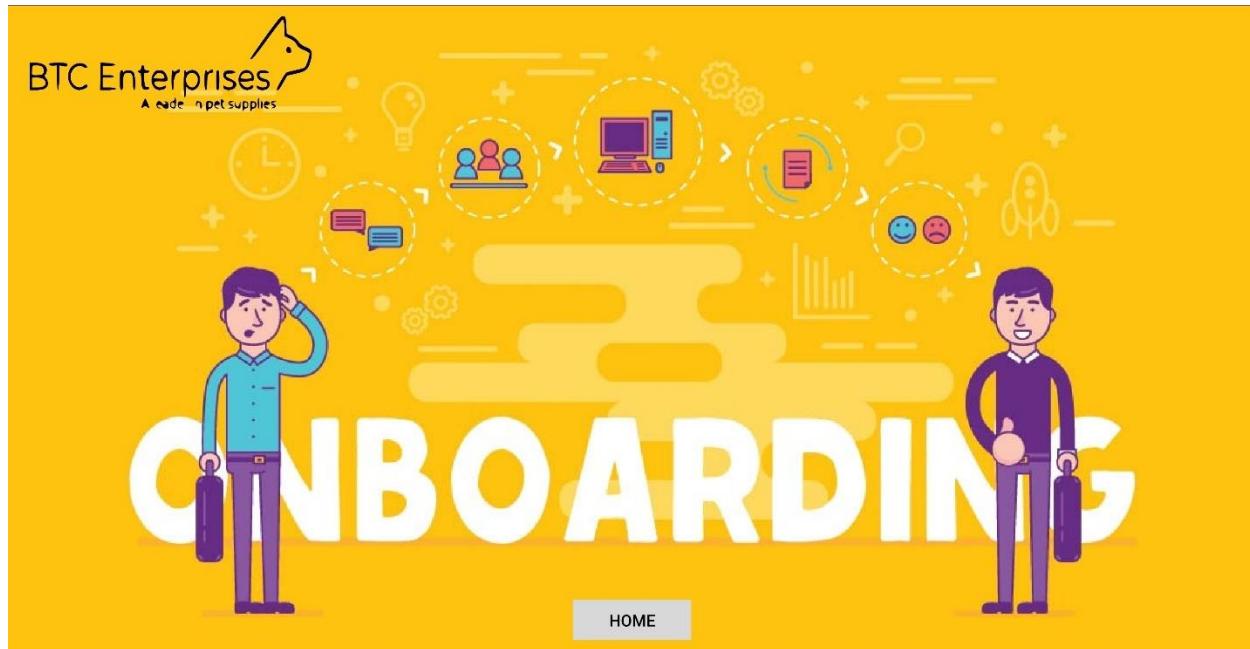


Figure 6: Onboarding Page IT department



Manuals & Guides

Lore ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.

[Learn More](#)



[Search](#)

[Home](#)



Figure 7: Manual and User Guide page



IT Request

Lore ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.

[Learn More](#)



[Home](#)

[Track Ticket](#)

[Reopen Ticket](#)

[Ticket Status](#)

[Contact Service Desk](#)

IT Service Ticket

Please provide the details of the problem

Name

First Name:

Last Name:

E-mail

ex: myname@example.com

example@example.com

Department

Computer ID

Upload Screenshot

Upload a File
Drag and drop files here

Describe the Problem

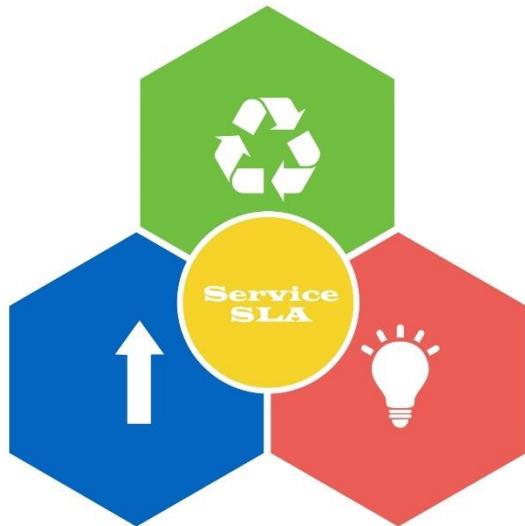
Type here...

[Submit](#)

Figure 8: IT Request Track Form

[Home](#)[FAQs](#)[Submit
Incident/
Problem](#)[Contact
Support](#)[User Profile](#)

Figure 9: Incident Management Tracking page



Hardware Support



- Overview
- Requirements
- Update Process
- Update Strategy
- Update Installation

Figure 10: Hardware support



Home

What Can We Help You With?

Type in a keyword to get an answer to your question.

Start typing here

Quick Links



Pet Food Guide



Account and
Billing



Grooming
Tips



Shopping
Intelligence



Product
Maintenance

Figure 11: Knowledge Base



Home

Reach Our Team

We love questions and feedback - and we're always happy to help!
Here are some ways to contact us.

Talk to Sales

Chat with our sales team to discover how our product can work best for you.



01 632 960 985

Contact Customer Support

We are waiting to help you and your team - so don't hesitate to reach out!

[CONTACT SUPPORT](#)



Membership

Discover exclusive benefits and special offers for Members. Learn how to get your membership card.



Payments

Resolve payment concerns. Learn more about secure transactions and the methods we support.



Shopping

Browse through our shopping guide for instructions on how to find the perfect products for your needs.



My Account

Manage your account effectively. Learn how to personalize settings and update your information.



Shipping & Returns

Learn about shipping methods and policies. Check out delivery rates for supported countries.



Retail Stores

Learn more about our stores. Find locations, hours, and exclusive in-store offers near you.

Figure 12: Reach Out Team

Project Updates

Project Stats



Calendar



Meetings

Monday, February 21

All Day	Microsoft Viva training
---------	-------------------------

Tuesday, February 22

All Day	SharePoint team site requirements
All Day	Product strategy for 2022

Wednesday, February 23

All Day	Team-building workshop
---------	------------------------

Project Tasks

To-Do	In Progress	Done
+ Add task	+ Add task	+ Add task
<input type="radio"/> Create a structure for SharePoint Templates: UX Pros and Cons  Sabina Saetgareeva	<input type="radio"/> Design Landing Page  Sabina Saetgareeva	<input type="radio"/> Project Plan  Sabina Saetgareeva
<input type="radio"/> Write "5 great sharepoint sites" article 	<input type="radio"/> A/B Test Campaign Message 	<input type="radio"/> Content Map 

Figure 13: Internal Project Updates

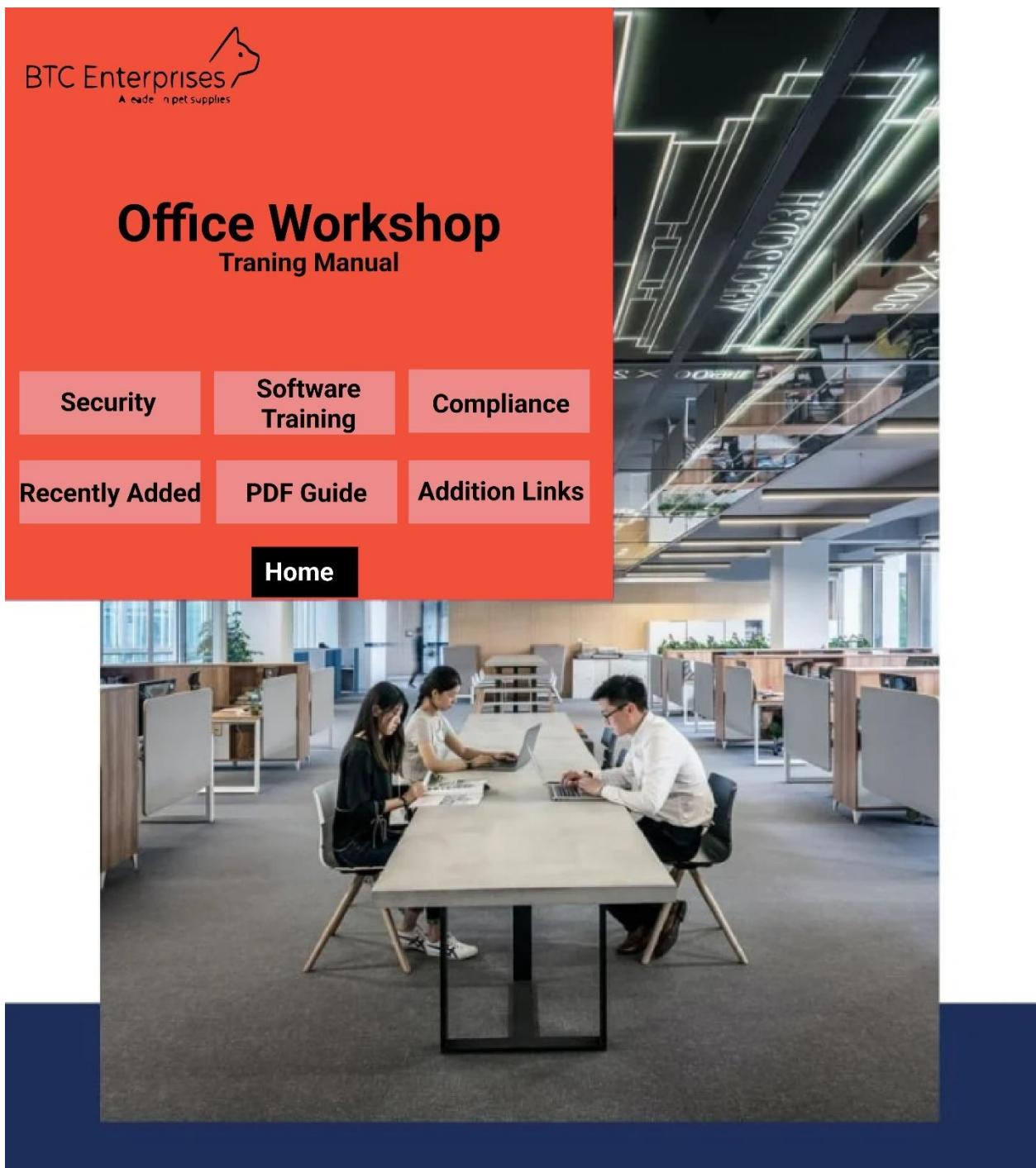


Figure 14: Workshop Update Page

Backup and Recovery

Home



Disaster
recovery
flowchart



Keep a
disaster
recovery
team



Incident
management
procedure



Damage
assessment
form



Figure 25: Backup and Recovery page

Prototypes

Prototyping Overview

- Prototypes are incomplete or working versions of a product, system, or service under development.
- They evaluate the feasibility and practicality of an idea with minimal commitment to the next stages of development.
- Examples include low fidelity (hand-drawn posters and sketches), high fidelity (complex models with interactivity and simulation), Minimum Viable Product (MVP), and clickable templates.
- Prototyping aims to test ideas, collect feedback, reduce risk, and update and improve.
- The layout of a page includes headers, footers, navigation menus, content areas, and call-to-action buttons.
- User flow describes the user's journey through the website or application.
- Functionality specifies possible interactions, such as clicking links to navigate between pages, filling out forms to submit requests, or searching for information.

How this template works:

- Website Layout and Structure Overview
 - Layout outlines different parts of the page, including headers, footers, navigation menus, content areas, and call-to-action buttons.
 - User flow describes the user's journey through the website or application.
 - Functionality specifies possible interactions like page navigation, form submission, and information search.

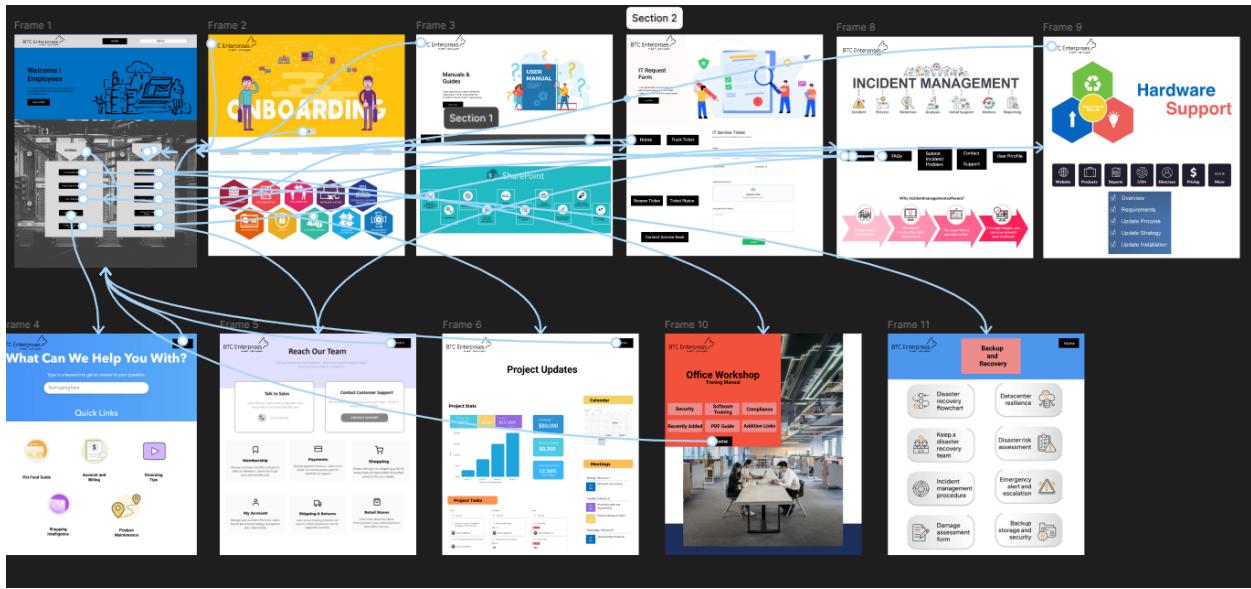


Figure 16: Prototype for the Entire Website

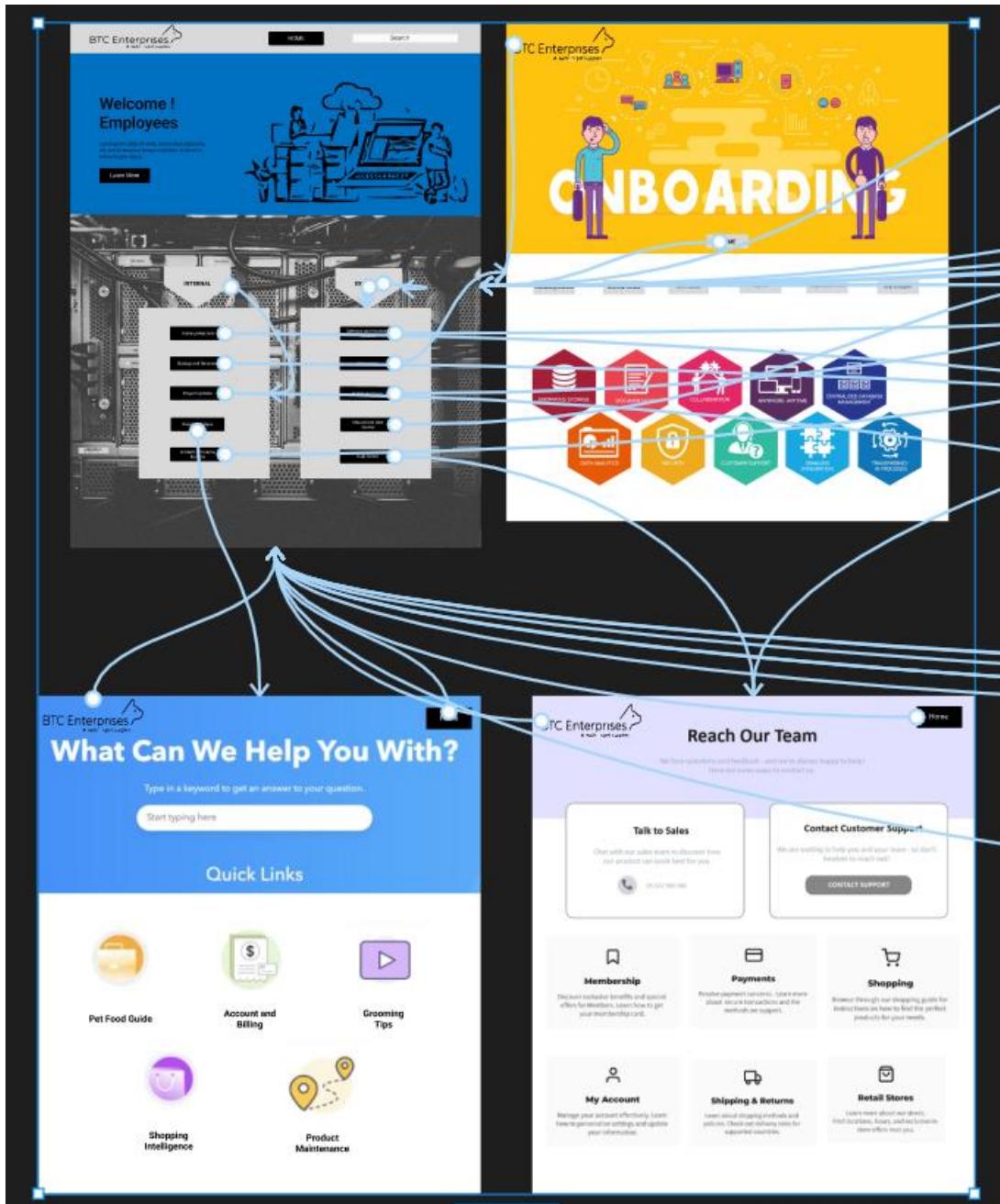


Figure 16: Prototype linking for all pages using the Homepage

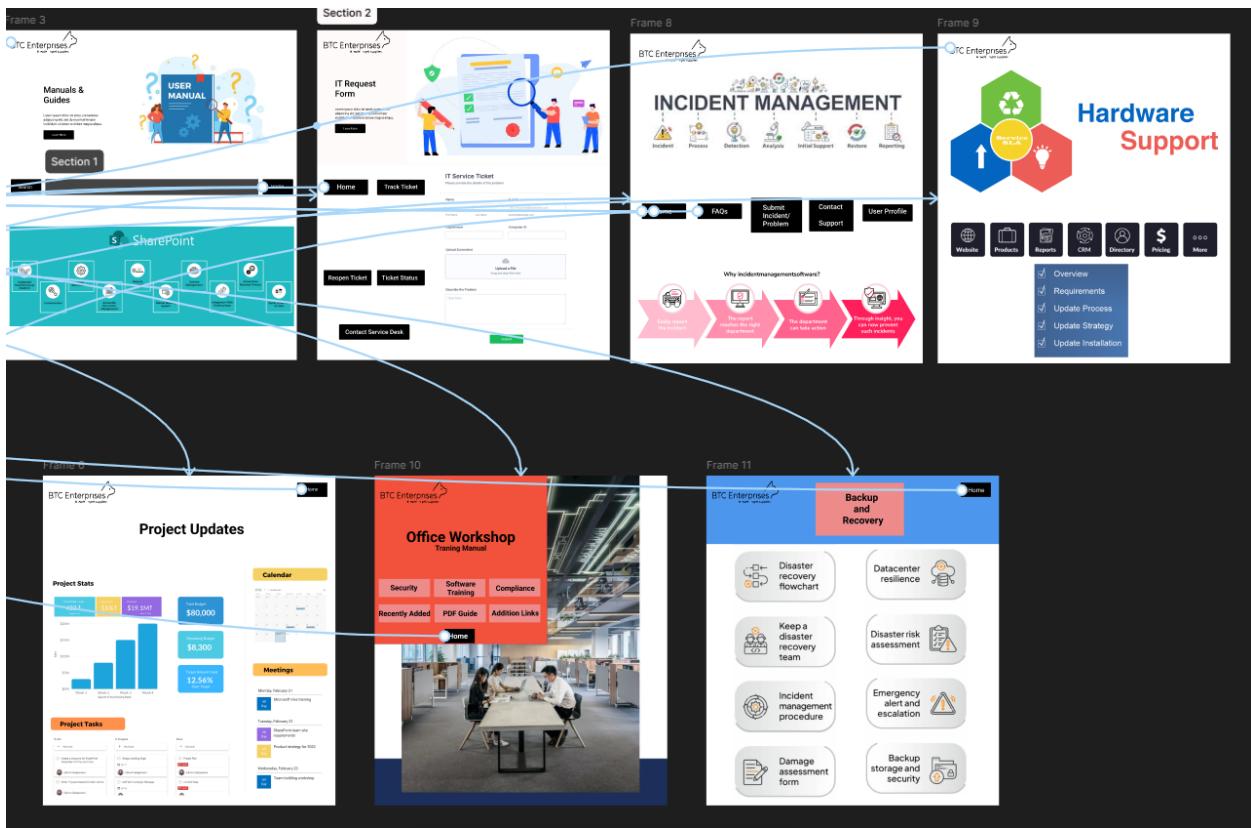


Figure 17: Prototype linking of all pages

References

Wireframes - <https://www.figma.com/resource-library/what-is-wireframing/>

Appendix

Acronym	Abbreviation
M365	Microsoft 365
AD	Azure Active Directory
IAM	Identity and Access Management
VPN	Virtual Private Network
WBS	Work Breakdown Structure
UAT	User Acceptance Testing
IT	Information Technology
PM	Project Manager
BA	Business Analyst
TL	Technical Lead
SA	System Architect
IT	Information Technology
HR	Human Resources
QA	Quality Assurance
M365	Microsoft 365
DBA	Database Administrator
AWS	Amazon Web Services
AD	Active Directory
LDAP	Lightweight Directory Access Protocol
RBAC	Role-Based Access Control
UAT	User Acceptance Testing
LMS	Learning Management System
SQL	Structured Query Language
DB	Database