



Assessment Submission Form

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|------------------------------|--|
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| Assessment Title | Assignment 3 - Project Management Plan (PMP) |
| Module Code | IS40890 |
| Module Title | Project Management |
| Module Co-ordinator | Dr Brendan Spillane |
| Tutor (if applicable) | |
| Date Submitted | |
| Date Received | |
| Grade/Mark | |

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Group Members & Contributions:

| Team Member | Contributions | Images, Tables, etc, Created : |
|-----------------------------------|---|---|
| Siyan Bu (24202507) | <input type="checkbox"/> Wrote Stakeholder Management Plan <input type="checkbox"/> Wrote Communication Plan <input type="checkbox"/> Assign tasks <hr/> <ul style="list-style-type: none"> Reviewed Section Title (ensure Consistent Formatting) Reviewed Introduction, Rationale, and Project Charter Wrote Budget & Cost Management Plan as part of project charter Wrote Objectives, Goals, and Deliverables Wrote Change Management Plan | <input type="checkbox"/> Stakeholder Communication Plan Table <input type="checkbox"/> Stakeholder Power-Interest Matrix <input type="checkbox"/> Stakeholder Communication Plan |
| Varul Demta (24291194) | <input type="checkbox"/> Wrote Closure Criteria & Deliverables <input type="checkbox"/> Wrote Testing and Verification Plan <input type="checkbox"/> Wrote Maintenance & Support Plan <hr/> <ul style="list-style-type: none"> Reviewed every section and discussed with the team Reviewed Whole document after formatting and finalizing | <input type="checkbox"/> Key Deliverables Table <input type="checkbox"/> Testing and Verification Plans <input type="checkbox"/> Maintenance and Support Plan |
| Divanshi Madaan (24281267) | <input type="checkbox"/> Wrote Quality Management Plan <input type="checkbox"/> Wrote Resource Management Plan <input type="checkbox"/> Wrote Risk Management Plan <hr/> <ul style="list-style-type: none"> Reviewed Project Organisation and Governance Reviewed Scope Management Plan Reviewed Schedule Management Plan | <input type="checkbox"/> Resource Estimation Table <input type="checkbox"/> Resource Tools Table <input type="checkbox"/> Risk Register Table <input type="checkbox"/> Probability-Impact Matrix |
| Anjali Nayak (24207319) | <input type="checkbox"/> Wrote Project Organisation and Governance <input type="checkbox"/> Wrote Scope Management Plan <input type="checkbox"/> Wrote Schedule Management Plan <hr/> <ul style="list-style-type: none"> Reviewed Quality Management Plan Reviewed Resource Management Plan Reviewed Risk Management Plan | <input type="checkbox"/> Organisation Chart <input type="checkbox"/> WBS <input type="checkbox"/> Gantt Chart |
| Elizabeth Rasmussen (24229561) | <input type="checkbox"/> Integrated Document (assembling, editing, formatting, and finalizing the complete document) <input type="checkbox"/> Created Table of Contents <input type="checkbox"/> Edited Change Management Plan <hr/> | <input type="checkbox"/> Reviewed, reformatted, and edited every table, chart, and figure <input type="checkbox"/> Edited Timeline Table <input type="checkbox"/> Changed everything to British English |

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|----------------------------|--|--|
| | <ul style="list-style-type: none"> Reviewed Closure Criteria & Deliverables Reviewed Testing and Verification Plan Reviewed Maintenance & Support Plan | |
| Sourav Tripathi (24210122) | <ul style="list-style-type: none"> <input type="checkbox"/> Wrote Section Title (ensure Consistent Formatting) <input type="checkbox"/> Wrote Introduction, Rationale, and Project Charter <input type="checkbox"/> Wrote Budget & Cost Management Plan as part of project charter <input type="checkbox"/> Wrote Objectives, Goals, and Deliverables <input type="checkbox"/> Wrote Change Management Plan <hr/> <ul style="list-style-type: none"> Reviewed Stakeholder Management Plan Reviewed Communication Plan Reviewing if everyone completed the tasks assigned | |

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| Introduction, Rationale and Charter | |
|-------------------------------------|---|
| Project Introduction | <p>The Online Furniture Store & Customisation Platform project aims to create a comprehensive e-commerce solution that allows customers to browse, purchase, and customise furniture products according to their preferences. This platform will bridge the gap between traditional furniture retail and modern digital shopping experiences by offering interactive customisation tools that enable users to visualise their choices before purchase.</p> <p>This Project Management Plan (PMP) outlines the approach, methodologies, and processes that will be employed to ensure successful project execution. It addresses the key aspects of project management including scope</p> |

| | |
|------------------------|---|
| | <p>definition, timeline management, resource allocation, risk assessment, and quality control measures.</p> <p>The project will be executed using an Agile-hybrid approach, with core development occurring in iterative 3-4 week sprints while maintaining alignment with traditional project management milestones. This balanced methodology allows for adaptability to changing requirements while ensuring adherence to the €2,000,000 budget and 36-week timeline covering January to September 2025.</p> |
| Rationale | <p>The furniture industry is experiencing a significant shift toward online shopping, with market research indicating that e-commerce furniture sales have grown by over 12% annually in recent years. Despite this growth, many online furniture retailers fail to address a critical customer concern: uncertainty about how furniture will look and fit in their spaces.</p> <p>Our research indicates that:</p> <ul style="list-style-type: none"> • 68% of potential furniture buyers hesitate to purchase online due to visualisation concerns • 43% of furniture returns occur because items don't match customer expectations • 87% of consumers would be more likely to purchase furniture online if they could customise and visualise it first <p>By developing a platform that combines traditional e-commerce functionality with advanced customisation tools, we aim to capitalise on this market opportunity while solving a genuine customer pain point.</p> <p><u>Strategic Alignment:</u></p> <p>This project directly supports the organisation's strategic objectives in the following ways:</p> <ol style="list-style-type: none"> 1. Digital Transformation Goal: Transitioning from traditional retail to an omnichannel approach 2. Customer Experience Initiative: Providing interactive and personalised shopping experiences 3. Revenue Diversification Strategy: Expanding into customised furniture offerings with higher margins 4. Operational Efficiency Program: Streamlining the design-to-manufacturing process |
| Project Charter | <p><u>Project Vision:</u></p> |

To create the industry's most user-friendly online furniture platform that empowers customers to discover, customise, and purchase furniture that perfectly matches their style, budget, and space requirements.

Project Mission:

To develop and launch a fully functional e-commerce platform with integrated customisation capabilities that increases customer satisfaction, reduces return rates, and drives revenue growth in the furniture retail segment.

Budget and Cost Management Plan

Budget Summary Table:

| Category | Sub-Category | Allocated Budget (€) | Percentage of Total | Description |
|---------------------|-----------------------|----------------------|---------------------|--|
| Personnel | Core Development Team | 800,000 | 40% | 10 developers, 2 architects, UX/UI team |
| | Project Management | 150,000 | 7.5% | PM, Scrum Master, Business Analyst |
| | Quality Assurance | 120,000 | 6% | QA team, testing resources |
| Technology | Software Licenses | 220,000 | 11% | 3D engine, cloud services, development tools |
| | Infrastructure | 180,000 | 9% | Servers, hosting, CDN, databases |
| | Security Solutions | 80,000 | 4% | Security tools, SSL certificates, WAF |
| External Services | Consultancy | 120,000 | 6% | E-commerce strategy, technical consultants |
| | Legal & Compliance | 40,000 | 2% | GDPR compliance, legal reviews |
| Marketing & Content | Product Photography | 60,000 | 3% | Professional furniture photography |

| | | | | |
|--------------------|------------------|-----------|------|--|
| | Content Creation | 40,000 | 2% | Product descriptions, marketing material |
| Training & Support | Staff Training | 50,000 | 2.5% | End-user and admin training |
| | Documentation | 30,000 | 1.5% | User manuals, technical docs |
| Contingency | Risk Buffer | 110,000 | 5.5% | Unforeseen costs, scope changes |
| TOTAL | | 2,000,000 | 100% | |

Budget Allocation by Phase Table

| Phase | Allocated Budget (€) | Percentage |
|---------------------|----------------------|------------|
| Initiation | 50,000 | 2.5% |
| Planning | 100,000 | 5% |
| Design | 300,000 | 15% |
| Development | 1,100,000 | 55% |
| Testing | 250,000 | 12.5% |
| Deployment | 150,000 | 7.5% |
| Post-Implementation | 50,000 | 2.5% |
| TOTAL | 2,000,000 | 100% |

Objectives

Business Objectives:

1. Revenue Growth: Increase online furniture sales by 35% within 12 months of launch
2. Market Expansion: Acquire 20% new customers who haven't previously purchased from our brand
3. Digital Transformation: Shift 45% of in-store custom furniture consultations to the online platform
4. Customer Retention: Improve repeat purchase rate by 25% through enhanced customer experience
5. Operational Efficiency: Reduce design-to-manufacturing time by 30% for custom orders

Technical Objectives:

1. Platform Performance: Achieve page load times under 2 seconds for all critical user journeys
2. Scalability: Support up to 10,000 concurrent users during peak shopping periods

| | |
|---------------------|--|
| | 3. Mobile Optimisation: Ensure full functionality across devices with 99% feature parity |
| Goals | <p><u>Short-term Goals (0-6 months):</u></p> <ol style="list-style-type: none"> 1. Complete platform development with all core functionality by 16 July 2025 2. Successfully integrate with existing business systems within 4 weeks of development completion 3. Train all customer service representatives on the new platform within 2 weeks of beta launch 4. Conduct beta testing with a minimum of 500 selected customers 5. Resolve 95% of identified critical and high-priority issues before public launch <p><u>Mid-term Goals (6-12 months):</u></p> <ol style="list-style-type: none"> 1. Achieve 100,000 unique monthly visitors within 6 months of launch 2. Process 2,500 successful customised furniture orders 3. Expand product customisation options to include all major furniture categories 4. Implement Phase 2 features including augmented reality visualisation 5. Reduce customer support inquiries related to platform usage by 30% <p><u>Long-term Goals (12-24 months)</u></p> <ol style="list-style-type: none"> 1. Establish the platform as the primary sales channel, representing 60% of total company revenue 2. Expand to international markets with localised versions in 3 additional languages 3. Develop a mobile app with feature parity to the web platform 4. Create an ecosystem of complementary services (interior design consultation, etc.) 5. Achieve industry recognition as a leading furniture e-commerce innovation |
| Deliverables | <p>Platform Essentials</p> <ol style="list-style-type: none"> 1. Complete e-commerce system (product catalog, accounts, checkout, orders) 2. 3D furniture customization tools with real-time visualization 3. Mobile-optimized experience with touch controls 4. Enterprise system integrations (inventory, ERP, manufacturing) <p>Delivering a full-featured furniture e-commerce platform with unique customization capabilities by September 2025 within €2M budget.</p> |

Project Organisation and Governance Chart

The success of the Online Furniture Store & Customisation Platform largely hinges on an effectively defined project organisational structure and governance model. These give a clear

definition of roles, efficient decision-making, accountability, and effective collaboration throughout the phases of the project—beginning with initiation right through to launch.

Governance Structure

This project will adopt a **hierarchical governance model** with clearly defined roles and reporting lines. Governance will operate at **three levels**:

- **Strategic Level** (Project Sponsor / Steering Committee)
- **Tactical Level** (Project Manager & Core Leadership Team)
- **Operational Level** (Execution Teams: Development, Design, QA, Marketing)

Hierarchical Governance Table:

| | | |
|--------------------------|---|---|
| Strategic Level | Project Sponsor / Steering Committee | <ul style="list-style-type: none"> • Approves budget and high-level milestones. • Resolves escalated issues. • Ensures alignment with organisational goals. |
| Tactical Level | Project Manager | <ul style="list-style-type: none"> • Oversees the overall project execution. • Manages resources, budget, risks and timelines. • Facilitates team collaboration and stakeholder communication. |
| | Functional Leads (Team Leads) | <ul style="list-style-type: none"> • Technical Lead: Oversees software development and integrations. • Design Lead: Manages UI/UX work and customisation tools. • Marketing Lead: Plans marketing and promotional strategy. • QA Lead: Ensures quality standards and testing protocols. |
| Operational Level | Execution Teams | <ul style="list-style-type: none"> • Designers • Developers • Testers • Content Creators • Marketing Specialists <p>who execute the tasks under the guidance of their respective leads.</p> |

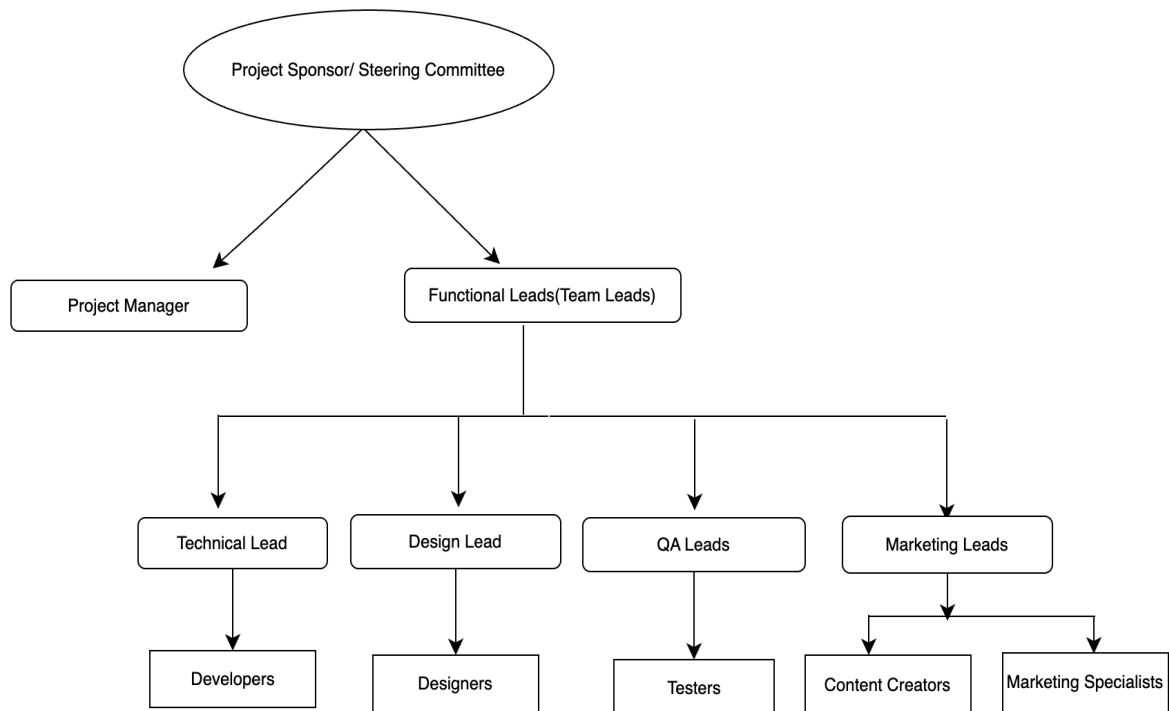


Fig 1: Personal Hierarchy

| Scope Management Plan | |
|------------------------|--|
| Scope Statement | The project involves the development of an interactive web-based furniture store and customisation website through which users can search, purchase, and customise furniture. The system will include user account management, inventory management, 3D customisation tool, e-commerce features, logistics integration, and customer support features. |
| In Scope | <ul style="list-style-type: none"> • Website and mobile-responsive design • Furniture browsing and filtering • Customisation engine (e.g., color, size, material) • User registration and login • Online shopping cart and checkout • Payment gateway integration • Inventory and order management • Admin dashboard • Marketing and analytics tools • Logistics tracking • Customer support chat |
| Out of Scope | <ul style="list-style-type: none"> • Physical manufacturing of furniture • Delivery logistics handled by third-party • In-store experiences or physical showrooms |

Management Approach

- **Scope Definition:** Through stakeholder interviews, requirements documentation, and market research.
- **Work Breakdown Structure (WBS):** Used to structure all deliverables into manageable components.
- **Scope Verification:** Formal review of each deliverable with stakeholders.
- **Scope Control:** All change requests go through a Change Control Board (CCB) to avoid scope creep.

Work Breakdown Structure (WBS)

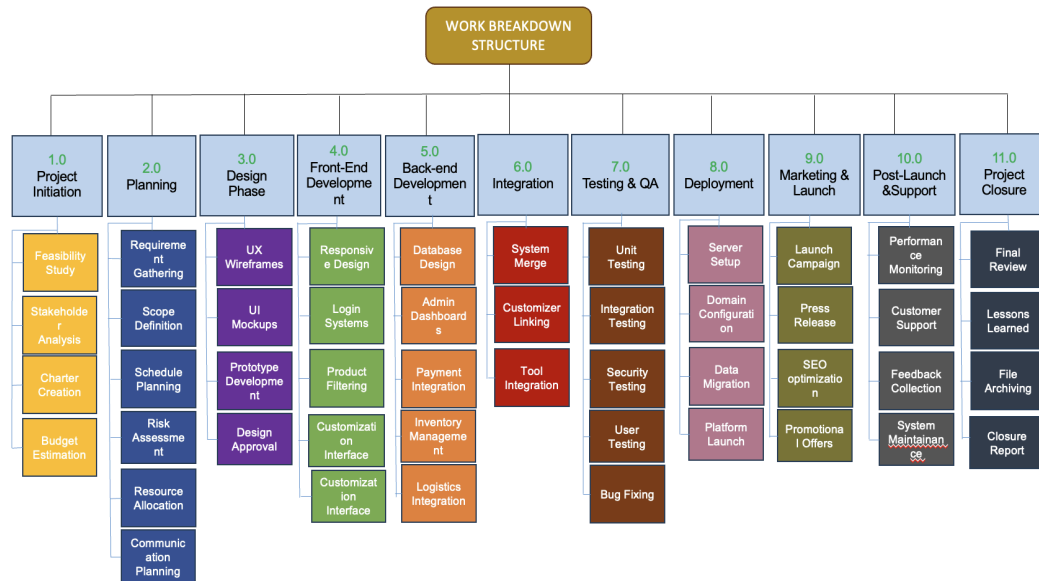


Fig 2: WBS Chart

1. Project Initiation

It lays the foundation for the project by establishing goals, identifying stakeholders, creating the project charter, and estimating initial costs and timelines.

2. Planning

We prepare a comprehensive project plan for scope, requirements, schedules, risk planning, communication plans, and resource planning to facilitate organised execution.

3. Design Phase

Design is all about creating user-friendly UI/UX designs, wireframes, and interactive prototypes of the online store and customisation tools.

4. Front-End Development

This is the development of the website interface, including product browsing, customisation features, user accounts, and a seamless checkout process.

5. Back-End Development

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| | <p>We implement server-side systems like the database, admin panel, payment gateway, inventory management, and logistics integration.</p> <p>6. Integration All modules front-end, back-end, and third-party systems—are integrated to facilitate data to flow effortlessly across the platform and for customization features to be executed in real time.</p> <p>7. Testing & QA The whole system is tested for usability, performance, security, and functionality through unit, integration, and user acceptance testing to make it stable enough for release.</p> <p>8. Deployment The platform is deployed to a live server with end configurations, SSL setup, and performance optimisation before going live to the public.</p> <p>9. Marketing & Launch We execute digital marketing campaigns, launch events, and SEO campaigns to make people aware of and push customers to the platform.</p> <p>10. Post-Launch & Support Once launched, we monitor the platform, address user support inquiries, fix emerging issues, and implement changes from customer feedback.</p> <p>11. Project Closure We close the project by verifying deliverables, documenting lessons learned, releasing resources, and closing contracts and formal documentation.</p> |
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| Schedule Management Planning |
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| <p>The Online Furniture Store project runs from January to September 2025, across 7 phases and multiple sprints. It begins with Initiation and Planning (Jan–Feb), followed by a detailed Design Phase (Feb–Mar). The Development Phase (Mar–Jul) delivers features in five sprints, including infrastructure, customisation tools, and dashboards. Testing and QA (Jul–Sep) ensures quality through unit, integration, and user testing. Deployment takes place in early September, followed by Post-Implementation tasks like monitoring and project closure. The Gantt chart outlines clear timelines, dependencies, and milestones, supporting effective progress tracking and timely decision-making throughout the project.</p> |
| Project Timeline: |

| Phase | Sprint | Tasks | Duration | Start Date | End Date | Milestone |
|--------------------|------------|--|----------|-------------|-------------|-----------------------|
| Initiation | - | 1.1 Project Kick-off Meeting 1.2 Stakeholder Analysis 1.3 Project Charter Approval 1.4 Team Formation | 2 weeks | 02 Jan 2025 | 15 Jan 2025 | Charter Signed |
| Planning | Pre-Sprint | 2.1 Requirement Gathering Workshops 2.2 Technical Architecture Planning 2.3 Resource Allocation 2.4 Risk Assessment 2.5 Vendor Selection 2.6 Project Plan Finalisation | 4 weeks | 16 Jan 2025 | 12 Feb 2025 | Planning Complete |
| Design | Sprint 0 | 3.1 UI/UX Discovery Sessions 3.2 Wireframe Creation 3.3 Information Architecture 3.4 Visual Design System 3.5 Customisation Tool Prototyping 3.6 Database Schema Design | 6 weeks | 13 Feb 2025 | 26 Mar 2025 | Design Approved |
| Development | Sprint 1 | 4.1 Basic Platform Infrastructure 4.2 User Authentication System 4.3 Product Catalog Basic Setup | 3 weeks | 27 Mar 2025 | 16 Apr 2025 | Core Infrastructure |
| | Sprint 2 | 4.4 Shopping Cart & Checkout 4.5 Payment Gateway Integration 4.6 Order Management System | 3 weeks | 17 Apr 2025 | 07 May 2025 | E-commerce Module |
| | Sprint 3 | 4.7 3D Visualisation Engine 4.8 Customisation Interface 4.9 Real-time Pricing Calculator | 4 weeks | 08 May 2025 | 04 Jun 2025 | Customisation Tool |
| | Sprint 4 | 4.10 Mobile Responsiveness 4.11 ERP Integration 4.12 Inventory System Connection | 3 weeks | 05 Jun 2025 | 25 Jun 2025 | Integrations Complete |
| | Sprint 5 | 4.13 Customer Portal 4.14 Admin Dashboard 4.15 Analytics Implementation | 3 weeks | 26 Jun 2025 | 16 Jul 2025 | Full Platform MVP |
| Testing | Sprint 6 | 5.1 Unit Testing & Bug Fixes 5.2 Integration Testing 5.3 Performance Testing 5.4 Security Audit | 4 weeks | 17 Jul 2025 | 13 Aug 2025 | QA Sign-off |

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| | Sprint 7 | 5.5 User Acceptance Testing 5.6 Beta User Testing 5.7 Load Testing 5.8 Cross-browser Compatibility | 3 weeks | 14 Aug 2025 | 03 Sep 2025 | UAT Complete |
| Development | - | 6.1 Production Environment Setup 6.2 Data Migration 6.3 Soft Launch 6.4 Monitoring & Optimisation | 1 week | 04 Sep 2025 | 10 Sep 2025 | Go-Live |
| Post-Implementation | - | 7.1 Performance Review 7.2 Stabilisation Support 7.3 Documentation Finalisation 7.4 Handover & Project Closure | 2 days | 11 Sep 2025 | 12 Sep 2025 | Project Closure |

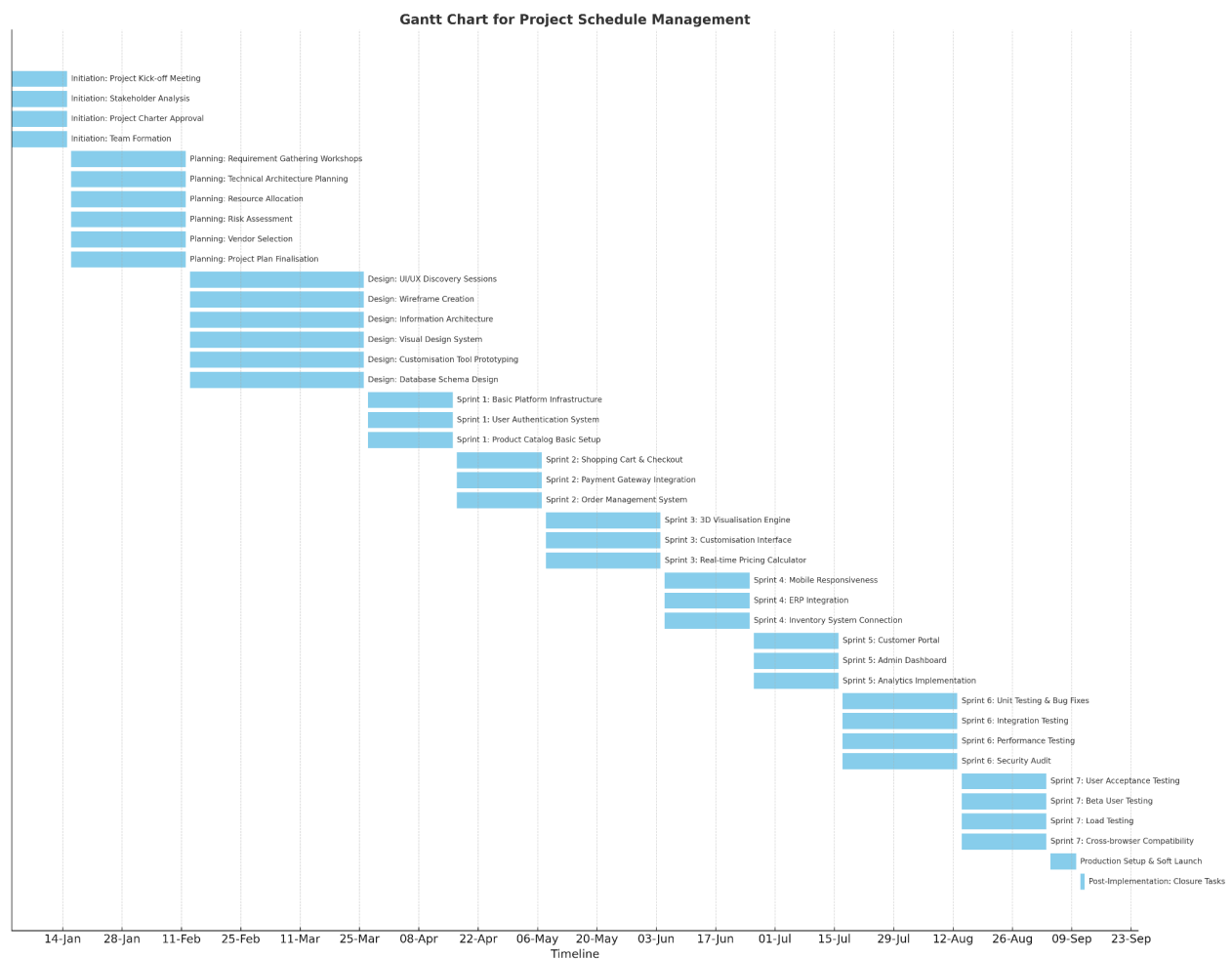
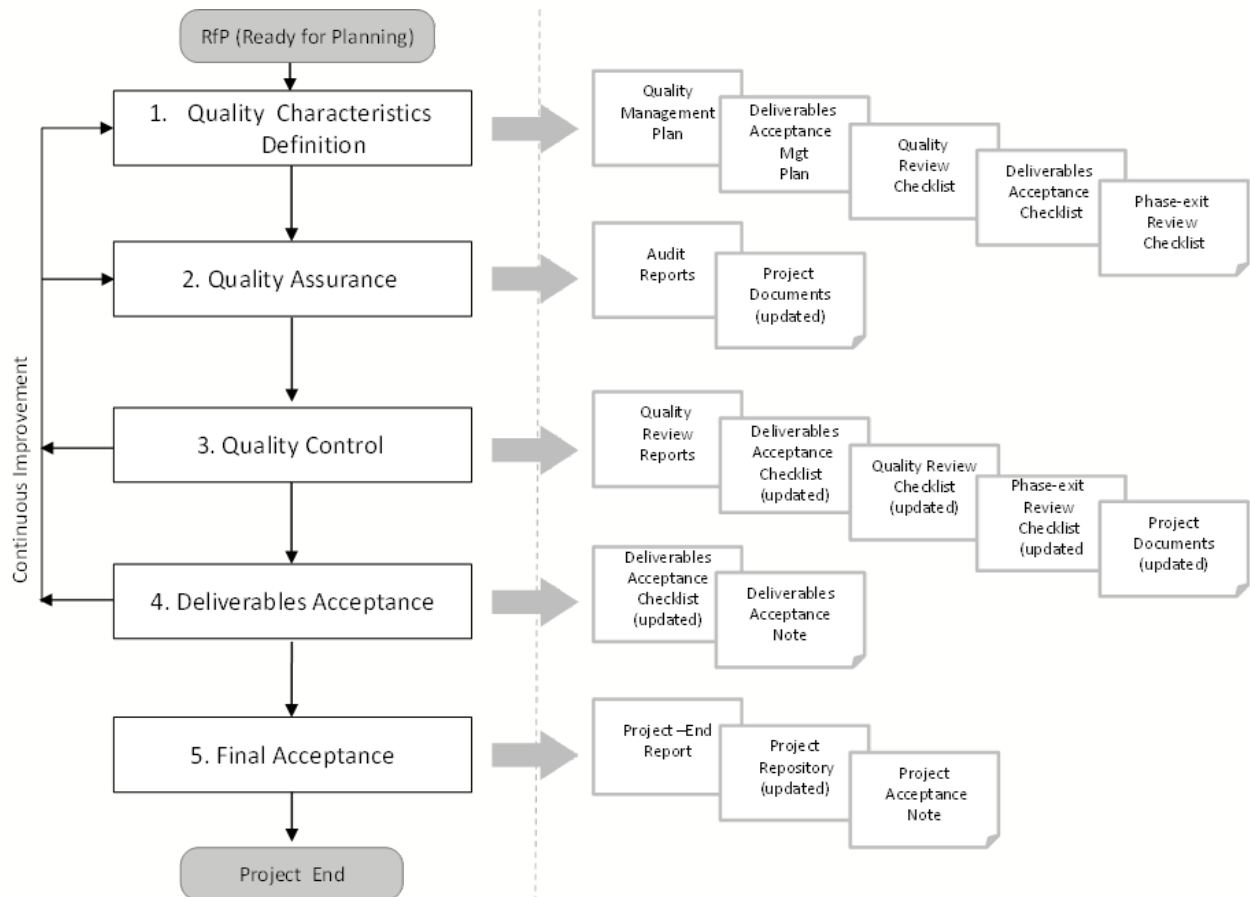


Fig 3: Gantt Chart

Quality Management Plan

5 essential steps of Quality Chart:



The quality process has five essential steps, which are shown in the chart above from defining quality attributes to reaching final acceptance. Throughout the project lifecycle, each stage generates important deliverables that enable ongoing assurance and control, including audit reports, acceptance notes, review checklists, and updated documents.

The project will adhere to the structured quality management procedure. Documents including project reports, audit logs, and checklists will be updated at each stage of this QMP to take into account stakeholder feedback, test results, and continuing evaluations. This guarantees precision, ongoing enhancement, and traceability across the whole development process.

Quality Management RACI Matrix

| Quality Activity | Project Manager | Frontend Developer | Backend Developer | QA Analyst | UI/UX Designer | Content Specialist | Logistics Coordinator | Supplier Liaison Officer | Marketing Lead | Legal Advisor | Customer Support Rep | Project Steering Committee |
|-------------------------------------|-----------------|--------------------|-------------------|-------------|----------------|--------------------|-----------------------|--------------------------|----------------|---------------|----------------------|----------------------------|
| Prepare QMP | Accountable | Consulted | Consulted | Consulted | Consulted | Informed | Informed | Informed | Informed | Informed | Informed | Responsible |
| Define Deliverables Acceptance Plan | Accountable | Consulted | Consulted | Consulted | Consulted | Consulted | Consulted | Consulted | Consulted | Consulted | Informed | Responsible |
| Conduct Quality Assurance | Responsible | Consulted | Consulted | Accountable | Consulted | Informed | Informed | Informed | Informed | Consulted | Informed | Informed |
| Conduct Quality Control | Responsible | Consulted | Consulted | Accountable | Consulted | Informed | Consulted | Consulted | Informed | Informed | Consulted | Informed |
| Perform Deliverables Acceptance | Responsible | Informed | Informed | Accountable | Consulted | Consulted | Consulted | Consulted | Consulted | Informed | Consulted | Consulted |
| Final Product Acceptance | Accountable | Informed | Informed | Responsible | Informed | Consulted | Informed | Consulted | Consulted | Consulted | Informed | Consulted |

Various stakeholders either support, consult on, or own each quality activity depending on its nature. As outlined in the RACI matrix, the Project Manager is primarily accountable for planning and executing quality processes, while the Project Steering Committee oversees strategic direction. Other roles are consulted or informed as needed, ensuring cross-functional alignment throughout QA, QC, and deliverables acceptance. Contact details for all stakeholders are provided in the Project Stakeholder Matrix.

Resource Management Plan

Required Personnel Table:

| Staff Type | Grade/ Experience | Duration | Work Package (WP) | Activity |
|---------------------------------|--------------------------|-------------------------|-------------------------|--|
| Project Manager | Senior (10+ years) | Full-time (9 months) | WP1 | Coordinate project execution, team leadership, and reporting |
| Frontend Developer | Mid-level (3+ years) | Full-time (9 months) | WP2 | Build UI components, responsiveness, and accessibility features |
| Frontend Developer | Mid-level (3+ years) | Full-time (9 months) | WP2 | Implement interactive elements, bug fixes, and UI integration |
| Backend Developer | Mid-level (3+ years) | Full-time (9 months) | WP2 | Create and manage APIs, database logic, and authentication |
| Backend Developer | Mid-level (3+ years) | Full-time (9 months) | WP2 | Manage infrastructure, security features, and performance tuning |
| UI/UX Designer | Mid-level (2–3 years) | Full-time (7 months) | WP3 | Design user journeys, wireframes, and interactive prototypes |
| QA Analyst | Mid-level (3+ years) | Full-time (6 months) | WP4 | Write and execute test cases, log bugs |
| QA Analyst | Mid-level (3+ years) | Full-time (6 months) | WP4 | Conduct regression, load, and device/browser compatibility tests |
| Content Specialist | Entry-level | Part-time (5 months) | WP5 | Write product descriptions, content guidelines, and help text |
| Marketing Lead | Mid-level (3–5 years) | Part-time (5 months) | WP6 | Plan and manage outreach, campaigns, and branding |
| Logistics Coordinator | Mid-level (3–5 years) | Part-time (6 months) | WP9 | Coordinate delivery schedules, track dispatch, handle logistics |
| Supplier Liaison Officer | Mid-level (3–5 years) | Part-time (5 months) | WP9 | Communicate with manufacturers, track stock & customisation lead times |
| Legal Adviser | Senior (5+ years) | Part-time (3 months) | WP7 | Ensure GDPR compliance, legal review of content and policies |
| Customer Support Representative | Entry-level | Part-time (5 months) | WP8 | Respond to customer queries, handle complaints, and feedback |

Resources Needed By Role Table:

| Resource Type | Tools Required |
|---------------------------------|--|
| Project Manager | Laptop with PM software (Trello, MS Teams), remote access |
| Frontend Developer | Laptop with frontend dev tools (VSCode, browser tools, testing software) |
| Frontend Developer | Laptop with frontend dev tools (VSCode, browser tools, testing software) |
| Backend Developer | Laptop with backend stack support (Postman, Firebase, database management) |
| Backend Developer | Laptop with backend stack support with cloud access (e.g. AWS CLI, deployment tools) |
| UI/UX Designer | Laptop with Figma, prototyping tools, large display preferred |
| QA Analyst | Laptop with Jira, Selenium, cross-browser/device testing tools |
| QA Analyst | Laptop with Jira, Selenium, cross-browser/device testing tools |
| Content Specialist | Laptop with Google Docs, Grammarly, CMS platform access |
| Marketing Lead | Laptop with Canva, Mailchimp, analytics tools (Meta Ads Manager, Google Ads) |
| Logistics Coordinator | Laptop with access to delivery tracking systems, shipping software, and logistics dashboards |
| Supplier Liaison Officer | Laptop with supplier CRM, order tracking tools, and inventory management system |
| Legal Adviser | Laptop with secure access, legal review software (if applicable) |
| Customer Support Representative | Laptop with email, helpdesk system (Zendesk or similar), voice/video tools if needed |

Resource Tools Inventory Table:

| Tool/Platform | Purpose | Used For | Used By |
|---------------|-------------------------|---|-------------------------------|
| Trello | Task & sprint tracking | Weekly sprints, backlog management | Entire team |
| GitHub | Source code versioning | Code collaboration, branch management | Frontend & Backend Developers |
| Jira | Issue and QA management | Bug tracking, sprint logs, test case tracking | QA Analysts, Developers |
| Figma | Collaborative design | Wireframes, user flow maps, UI mock-ups | UI/UX Designer, Frontend Devs |

| | | | |
|----------------------------------|--|--|-------------------------------|
| Firestore | Backend service & auth | Hosting, analytics, login system | Backend Developers |
| AWS | Cloud infrastructure | Hosting app, storing assets, backups | Backend Devs, Project Manager |
| Canva / Mailchimp | Marketing tools | Campaign visuals and email marketing | Marketing Lead |
| ShipStation / EasyPost | Delivery tracking & logistics management | Monitor deliveries, schedule shipments | Logistics Coordinator |
| Airtable / Zoho Inventory | Order and inventory tracking | Track custom orders and supplier updates | Supplier Liaison Officer |
| Slack / Email / Zoom | Vendor communication | Daily updates, supplier meetings | Supplier Liaison Officer |
| GDPR Checklist | Legal & compliance reference | Ensuring privacy compliance | Legal Adviser |
| Zendesk | Customer support | Ticketing, user query management | Customer Support Rep |

The resource management strategy guarantees that technical and human resources are allocated appropriately to achieve the objectives of the Online Furniture Store & Customisation Platform project. This strategy ensures transparent accountability and operational efficiency by outlining precise roles, tools, and duties. The equipment requirements make sure team members are properly prepared for remote execution, while the tools on the list facilitate more efficient collaboration.

| Risk Management Plan | | | | | | | | | | |
|--------------------------------------|------------------------------------|---------------------------------|---|---|----------------------------|---|---|---------------------------------|-------------------------------|-----------------|
| Risk Register with RAG Status Table: | | | | | | | | | | |
| Type of Risk | Description of Risk | Probability (High, Med, Low) | | | Impact (High, Med, Low) | | | Mitigation | Prevention | Risk Owner |
| | | H | M | L | H | M | L | | Action | |
| Technical | Feature mismatch with requirements | | | | | | | Feedback loops, early revisions | Align specs early with users | Project Manager |
| Resources | Unqualified or missing QA staff | | | | | | | Upskill or reassign QA | Early hiring & training | Project Manager |
| Communication | No staff for user complaints | | | | | | | Assign dedicated support | Launch communication channels | Project Manager |

| | | | | | | | | | |
|----------------------|---|--|--|--|--|--|---|---|--------------------------|
| Budget | Exceeds allocated funds | | | | | | Experience d budgeting & controls | Contingency planning | Project Manager |
| Infrastruct ure | Partner/vend or failure (e.g. supplier drops) | | | | | | Multiple backup vendors | Signed vendor agreements | Supplier Liaison Officer |
| Logistics | Late or missed deliveries | | | | | | Use reliable delivery platforms, track shipment | Logistics automation and schedule buffers | Logistics Coordinato r |
| Legal | GDPR or policy compliance issues | | | | | | Use verified tools & APIs | Internal compliance checks | Legal Team |
| Customer Behaviour | Inappropriate use of chat or features | | | | | | Moderation feedback channels | Terms of use & user training | Project Manager |
| Customer support gap | Users are unaware | | | | | | Add visible contact support | Onboarding and footer help link | Customer Support rep. |
| Content confusion | Misleading or unclear product | | | | | | QA review of content | Content reviewed by PM | Content specialist |
| Peer competitio n | Similar product in market | | | | | | Focus on USPs, monitor market | Ongoing competitor analysis | Marketing Lead |
| UI/UX issues | Users struggle to navigate | | | | | | Regular usability testing | Incorporate feedback loop | UI/UX Designer |
| Database | Data loss or corruption | | | | | | Weekly cloud backups | Backup automation & redundancy | Backend Developer |

Risk Impact Analysis and Probability – Impact Matrix Table:

| Risk ID | Risk Description | %Probability | %Impact |
|---------|-------------------------|--------------|---------|
| A | Technical Failure | 0.8 | 0.7 |
| B | Resource (QA) Skill Gap | 0.3 | 0.4 |
| C | Communication Failure | 0.7 | 0.5 |
| D | Budget Overrun | 0.6 | 0.8 |
| E | Supplier Delay | 0.5 | 0.3 |
| F | Legal (GDPR Breach) | 0.6 | 0.9 |
| G | Customer Behaviour | 0.2 | 0.3 |
| H | Logistics Delay | 0.4 | 0.4 |
| I | Weak Marketing | 0.3 | 0.2 |

| | | | |
|---|--------------------|-----|-----|
| J | Database/Data Loss | 0.1 | 0.8 |
| K | UI/UX Confusion | 0.5 | 0.5 |

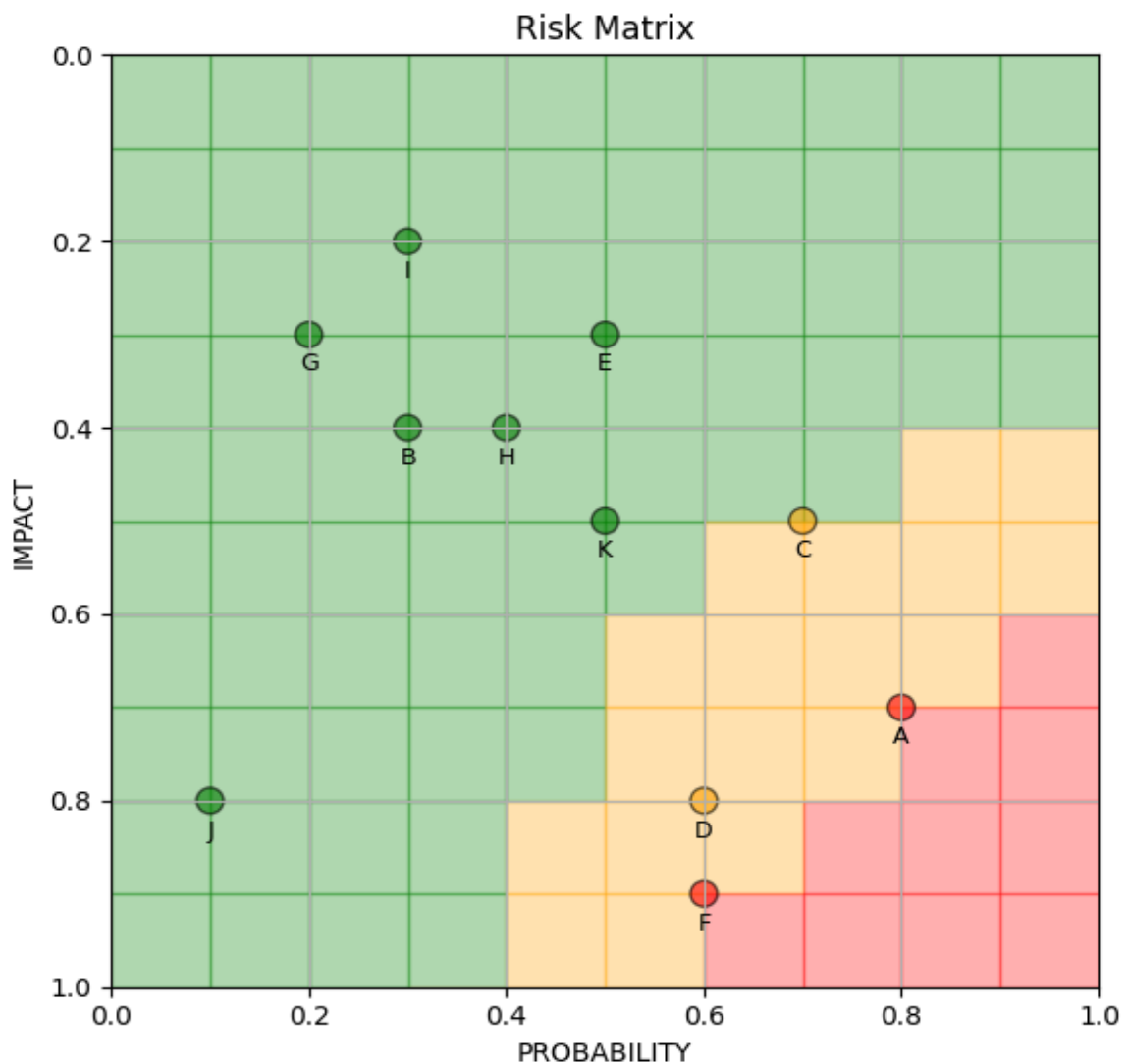


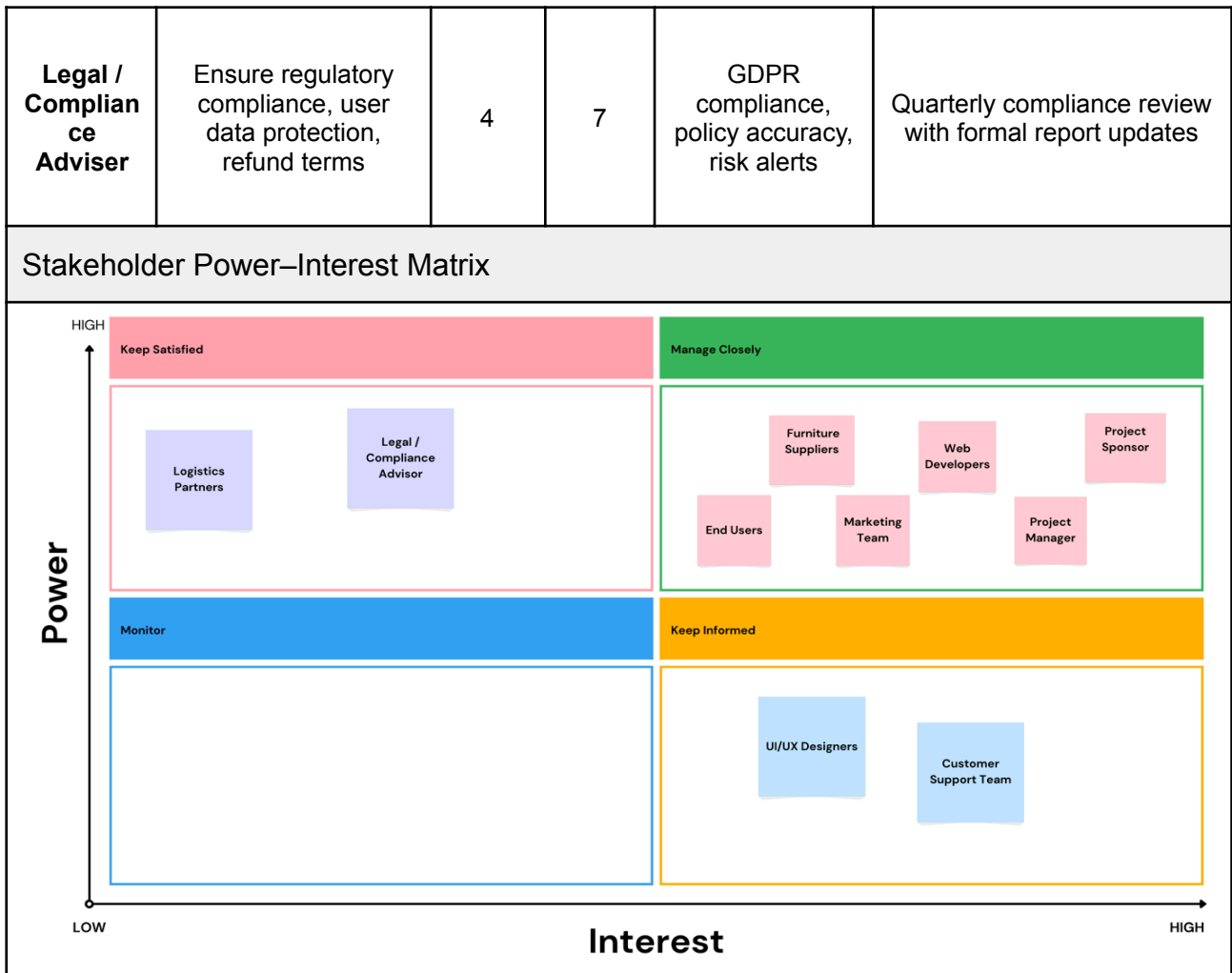
Figure 4: Risk Matrix

A combination approach is utilised to efficiently monitor threats. In order to avert any losses, risk avoidance entails completely removing risk elements, albeit this may also reduce the advantages of a project. Through early planning, control measures, and mitigation tools, risk containment aims to lessen the chance or impact of risks while taking prevention costs into account. Throughout the project, risk utilisation guarantees ongoing risk monitoring, response plan adaptation as circumstances change, and prompt handling of both developing and current issues.

Stakeholder Management Plan

Stakeholder Register:

| Stakeholder | Responsibility | Interest | Power | Stakeholder Requirements | Strategy to Gain Support or Reduce Obstacles |
|------------------------------|--|----------|-------|---|--|
| Project Sponsor | Provides funding and approves major project decisions | 6 | 10 | Timely delivery and budget transparency | Monthly reports on financial and progress status via email and dashboard |
| Project Manager | Manages schedule, risks, communication, and team performance | 8 | 8 | Real-time updates and responsiveness | Daily stand-up meetings and weekly milestone planning |
| UI/UX Designers | Create platform interface and user flows | 8 | 5 | Clear requirements and timely feedback | Weekly design reviews using Figma and Slack |
| Web Developers | Build e-commerce features, product configurator, backend | 7 | 6 | Stable priorities, accessible documentation | Agile task tracking via Trello, Slack updates, and GitHub repository |
| Marketing Team | Create campaigns, manage social media and product launches | 7 | 6 | Aligned launch timing and marketing updates | Weekly sync meetings and campaign briefs |
| Customer Support Team | Respond to customer requests and complaints | 6 | 5 | Fast response, clear FAQ, ticket visibility | Weekly internal feedback reports via helpdesk system |
| End Users (Customers) | Browse, customise, purchase furniture online | 9 | 6 | Easy navigation, personalisation, reliable transactions | In-app feature announcements and monthly satisfaction surveys |
| Furniture Suppliers | Produce furniture based on orders and sync with inventory | 6 | 7 | Clear ordering process and delivery timelines | Bi-weekly supply meetings with shared Google Sheet for tracking |
| Logistics Partners | Handle shipping, returns, and inventory delivery | 4 | 6 | Real-time delivery status, efficient communication | Monthly logistics performance meetings and shared dashboards |



| Communication Plan | | | | | |
|--------------------------------|--------------------------------|---------------------------------|----------------------|---------------------------------------|---------------------|
| Stakeholder Communication Plan | | | | | |
| Message | Provider | Recipient | Frequency | Channel | Engagement Strategy |
| Project Kick-off Meeting | Project Manager | Entire Project Team | Once (Project Start) | Face-to-face meeting | Manage Closely |
| App Development Sync | Tech Lead / Dev Team | Developers / UI/UX Designers | Weekly | Face-to-face meeting / Zoom | Manage Closely |
| Daily Stand-up Meeting | Project Manager / Scrum Master | All Sub-teams Dev/Design/QA | Daily | Online meeting | Manage Closely |
| Customer Feedback Review | Customer Support Team | Product Owner / UI Team | Weekly | Email / Face-to-face feedback session | Keep Informed |
| Marketing & Promotion Updates | Marketing Team | Product Owner / Project Manager | Weekly | Face-to-face meeting / Campaign demo | Keep Satisfied |

| | | | | | |
|--|---|-------------------------------------|-----------|----------------------------------|----------------|
| Payroll & Resource Notification | Finance / HR | All Team Members | Monthly | Email | Keep Informed |
| Budget & Progress Report | Project Manager | Project Sponsor | Monthly | Report + Face-to-face meeting | Manage Closely |
| Supplier & Inventory Coordination | Business Operations Team | Furniture Suppliers / Manufacturers | Bi-weekly | Face-to-face meeting / Email | Keep Satisfied |
| Logistics and Delivery Sync | Ops Team / Tech Support | Logistics Provider | Monthly | Email | Keep Satisfied |
| Compliance & Policy Updates | Legal / Compliance Adviser | Management & All Departments | Quarterly | Email | Keep Informed |
| QA Testing and Feedback | QA Team | Developers / UI/UX Designers | Weekly | Work log + Face-to-face feedback | Manage Closely |
| Communication Control & Metrics | <p>To ensure efficient and ongoing communication throughout the project, the team has established a set of control measures and evaluation mechanisms. These are utilised to monitor on a regular basis aspects such as communication frequency, content quality, and responsiveness of responses.</p> <p>The key performance indicators of communication effectiveness are:</p> <ul style="list-style-type: none"> • Whether planned meetings are held and minutes are taken accordingly; • Open and response rates of outstanding emails and notifications; • The degree to which stakeholders understand the information conveyed and the degree to which they respond in a timely manner; • The frequency of repeated communication or signs of confusion. <p>Some of the common tools used to monitor communication include meeting minutes templates, email read receipts, feedback surveys, and message logs from team collaboration software such as Trello or Slack. In addition, the Project Manager has the responsibility of monitoring communication process execution from time to time, determining whether communication objectives are being met, and initiating suitable changes during weekly meetings in accordance with stakeholder feedback. This ensures that all key stakeholders receive timely, accurate, and clear information throughout the project.</p> | | | | |
| Feedback & Listening Mechanisms | <p>We collect feedback through user surveys, team retrospectives, and the project email system. All feedback will be acknowledged and recorded by the project team within 48 hours, and key suggestions will be addressed in the monthly project updates. The Project Manager and Customer Support Team are jointly responsible for this process.</p> | | | | |
| Crisis Communication Strategy | <p>If the situation is an emergency in nature—such as a system failure, severe customer complaint, or high delays—the project team will be activating the crisis communication protocols within 2 hours. The concerned stakeholders will be informed through notice and mail on the platform.</p> | | | | |

Within 24 hours, official notification of the situation, impact, and countermeasures to be implemented will be made in order to retain transparency and also stakeholder trust.

Change Management Plan

Governance Structure:

The change management process is overseen by a defined hierarchy of approval authorities:

- *Project Manager*: Authorised to approve minor changes
- *Change Control Board (CCB)*: Reviews and approves moderate changes
- *Project Sponsor*: Required for approval of major changes
- *Executive Steering Committee*: Involved in critical change decisions

Classification System:

| Classification | Impact Description | Budget Impact | Schedule Impact |
|----------------|---|------------------|-----------------|
| Minor | Limited impact, absorbable within sprint | <€5,000 | <1 week |
| Moderate | Affects current sprint, requires reprioritisation | €5,000-€25,000 | 1-2 weeks |
| Major | Significant impact on baseline | €25,000-€100,000 | 2-4 weeks |
| Critical | Fundamental shift in project approach | >€100,000 | >4 weeks |

Contingency Reserve: €110,000 (5.5%) allocated specifically for unforeseen costs

Workflow:

Structured four-stage process:

1. Submission
 - Identification of potential change
 - Completion of Change Request Form (CRF)
2. Assessment
 - Impact analysis across all project constraints
 - Classification according to severity criteria
 - Documentation of findings
3. Decision
 - Review by appropriate approval authority
 - Decision communicated to stakeholders
 - Documentation of rationale
4. Implementation
 - Update of project documentation
 - Incorporation into work plan
 - Verification of successful implementation

All changes require proper documentation:

- Change Request Form: Details proposed change and justification
- Impact Assessment: Analysis of effects across project constraints
- Change Control Log: Central repository of all change requests
- Updated Project Documents: Revisions to affected baseline documents

| Closure Criteria and Deliverables | | |
|-----------------------------------|---|---|
| Closure Criteria | Official project closure depends on achieving the following goals below: | |
| | 1. Fulfilling all functional and nonfunctional requirements including responsive design, secure checkout, customisation engine, data protection and third party integrations(CRM analytics, CRM). All of these must be deployed and validated in the production environment. | |
| | 2. Achieving 95% success rate in User Acceptance Testing(UAT). Resolving all critical and high priority defects to ensure user-readiness. | |
| | 3. Stakeholders (Product Owners, Marketing Team, Operations Team, Executive Team) validation of meeting strategic and operational targets to provide formal approval. | |
| | 4. Meeting Performance Targets such as loading page in under 2 seconds, scalability for over 10,000 users, adaptive website layout and functionality parity over 99%. | |
| | 5. Comprehensive documentation such as user guide, technical documentation, runbooks and FAQ documents must be approved and deployed. | |
| | 6. Provide training and knowledge transfer(KT) to all operation, support and maintenance teams using the materials provided. | |
| | 7. Do Post-Implementation Review to summarise the actions taken, lessons learned, test results, KPI's and identifying potential areas for improvement. | |
| | 8. System handover to the operations, maintenance and support team with defined SLAs and actions to take during escalations and high-priority issues. | |
| Expected Deliverables | 9. Perform a successful test run for a short time in real time. | |
| | Category | Expected Output |
| | Platform | A dynamic responsive website containing wishlist, advanced search and real-time customisation. |
| | Admin Properties | Implement role-based access according to designation for managing customer, inventory, order and analytics. |

| | | |
|--|-------------------------------------|--|
| | Service Integrations | Create secure connection pathways for payment gateways(Paypal, Revolut), inventory management, ERP and CRMs. |
| | Support & Logistic Tools | Live chat, order tracking, ticket management, real-time inventory data and notifications |
| | Documentation | User guides, technical documentation, training videos, Project charter, FAQs documentation, issue resolution documents |
| | Quality Assessments Reports | System logs, defect reports, test logs, UAT reports, traceability matrix |
| | Staff Training | Staff training in functional, operational and support readiness and test their skills in real-world scenario |
| | Closure Package | Post-launch support plans, financial statements, performance KPIs, test-run success reports and sign-off validations. |

Testing and Verification Plans

The testing methodology is structured and multi-phased for ensuring that the platform is robust, scalable and user-friendly. It ranges from individual module validation to high-end performance simulations and user feedback.

Testing Phases

| Test Phase | Aim | Tools | Sprint Number |
|--------------------------------|--|--------------------------------|---------------|
| User Acceptance Testing | End-to-end validation through Beta test of 500 users | Jira | 6 |
| System | Use real-world workflows across the whole platform | Automated & Manual Testing | 6 & 7 |
| Performance | Evaluate performance during heavy load and response time (<2s) | JMeter | 7 |
| Security | Ensuring secure payments, data protection and identify vulnerabilities | OWASP ZAP, Burp Suite, OpenVAS | 6 |
| Unit | Validation of individual components like shopping cart, customisation | Junit, Mocha | 6 |
| Integration | Ensure smooth interactions between services(cart -> payment) | Postman, Newman | 6 |

| | | | |
|-----------------------------------|--|------------------------|---|
| Multi-Browser | Ensuring UX consistency across different browsers like Chrome, Edge, Firefox, Safari | BrowserStack, Selenium | 7 |
| Verification and Reporting | <ul style="list-style-type: none"> Requirement Traceability Matrix that traces every test case to a predefined requirement. Continuous testing within each sprint. QA reports, testing results and incident logs are taken care of via Jira and TestRail. QA team to officially sign-off for deployment. After UAT, stakeholders review and test KPIs to decide on official launch. | | |
| Testing Success Criteria | <ul style="list-style-type: none"> Test case pass rate should be more than 95%. Quick Mitigation of every high-severity and critical issue. No critical open security vulnerabilities. Compatibility across all devices and browsers. Successful load handling of 10,000 parallel users with response time <2s. | | |

| Maintenance and Support Plan | | | |
|---|---|--|----------------------|
| After deployment, support and continuous enhancements ensures the platform's reliability and performance in the long term which aligns with user needs. | | | |
| Support Plan | Level | Scope | Availability |
| | L1 | User creation, general questions, password reset, ticket creation and tracking | Working hours |
| | L2 | Technical issues, functional errors and integration problems | 24/7 |
| | L3 | System outages and backend anomalies | SLA-based assistance |
| Monitoring team, core development and QA teams to be on high availability during the 4-week stabilization period. | | | |
| Maintenance Activities | <ul style="list-style-type: none"> Preventive: Regular performance auditing, monitoring, code reviews and database optimisation. Adaptive : Make updates compatible with OS, browsers and third-party applications. Corrective: Do hotfixes as per the severity, fix the bugs that occur post deployment. Perfective : Use feedback and analytics to enhance features and the interface | | |

| Monitoring and Tools | <ul style="list-style-type: none">● Application Performance Monitoring: Using tools like New Relic, Datadog to gather performance insights.● Log Collections: ELK Stack, Splunk● Analytics Tool: Google Analytics, Hotjar● Security: Firewall, Monthly patching, detecting intrusions, half-yearly audits. | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------------------|--|---------------|----------------|-----------------|---------|-----------------|----------|----|------------|--------------|---------|------|----|------------|---------------|----------|--------|----|-------|----------------|--------|-----|-------|----------|--------|--------|
| Release Updates | <ul style="list-style-type: none">● Minor Release: Every two weeks or monthly (minor updates, bug fixing, patching)● Major Release: Quarterly release(UI/UX changes, new features)● Contingency Plans: Present in all deployments. | | | | | | | | | | | | | | | | | | | | | | | | | |
| SLA-Service Level Agreements | <table><tr><th>Criticality</th><th>Code</th><th>Response Time</th><th>Updates</th><th>Mitigation Time</th></tr><tr><td>Critical</td><td>P1</td><td>15 minutes</td><td>Every 1 hour</td><td>6 hours</td></tr><tr><td>High</td><td>P2</td><td>30 minutes</td><td>Every 4 hours</td><td>12 hours</td></tr><tr><td>Medium</td><td>P3</td><td>1 day</td><td>Every 12 hours</td><td>3 days</td></tr><tr><td>Low</td><td>P4,P5</td><td>2-3 days</td><td>2 days</td><td>5 days</td></tr></table> <p>The above are ticket codes and the available engineer is required to pick them up. In case of P1 and P2 , calls with vendors may be needed and the hotline numbers of the vendors should be readily available. Ticket codes can be updated as per the criticality along with detailed information of actions taken and the reason for code updation.</p> | Criticality | Code | Response Time | Updates | Mitigation Time | Critical | P1 | 15 minutes | Every 1 hour | 6 hours | High | P2 | 30 minutes | Every 4 hours | 12 hours | Medium | P3 | 1 day | Every 12 hours | 3 days | Low | P4,P5 | 2-3 days | 2 days | 5 days |
| Criticality | Code | Response Time | Updates | Mitigation Time | | | | | | | | | | | | | | | | | | | | | | |
| Critical | P1 | 15 minutes | Every 1 hour | 6 hours | | | | | | | | | | | | | | | | | | | | | | |
| High | P2 | 30 minutes | Every 4 hours | 12 hours | | | | | | | | | | | | | | | | | | | | | | |
| Medium | P3 | 1 day | Every 12 hours | 3 days | | | | | | | | | | | | | | | | | | | | | | |
| Low | P4,P5 | 2-3 days | 2 days | 5 days | | | | | | | | | | | | | | | | | | | | | | |
| KT (Knowledge Transfer) and Feedbacks | <ul style="list-style-type: none">● Handover sessions of tickets during shift change among operations team.● Organise KT sessions, documents, shadowing and reverse-shadowing while resolving issues.● Taking feedback from customers, surveys, employees and stakeholders.●Constantly roadmap review to match business strategies. | | | | | | | | | | | | | | | | | | | | | | | | | |