**Document 1- Business case document template**

**➢ Why is this project initiated?**

Answer: The project for creating an **Auto and Property insurance policy** is initiated to meet **market demand, regulatory changes**,and maintain a **competitive advantage**. It aims to **improve customer experience, generate revenue**,and **diversify risk** through new coverage options. The project also supports **business growth, technological advancements,** and **operational efficiency** by adopting modern systems, automation, and digital solutions.

* **Market Demand:** The project is driven by the need for people to protect their property and vehicles, as more customers want insurance that fits their needs.
* **Regulatory Changes:** New laws or regulations may require changes to the insurance policy to stay compliant.
* **Competitive Advantage:** The project helps the company stand out in a crowded market by offering better or unique insurance products.
* **Technological Advancements:** New technologies, like AI, help improve risk analysis, claims processing, and customer experience.
* **Revenue Growth and Profitability:** Offering new policies can bring in more customers and increase the company’s earnings while reducing costs.
* **Improving Customer Experience:** By providing easier-to-understand policies and faster service, the company can keep customers happy and loyal.
* **Risk Mitigation:** The company can reduce its exposure to risks by offering a range of insurance policies and adjusting to emerging threats.
* **Business Growth and Expansion:** The project allows the company to expand into new markets, attract different customer groups, and grow its business.
* **Brand Image and Trust:** Offering reliable, transparent policies helps build a trustworthy reputation, making customers feel more secure.
* **Technological and Operational Enhancements:** The project improves how the company works by updating systems and processes, making everything run smoother and faster.

**➢ What are the current problems?**

Answer: The main problems with using the Waterfall Model for a PNC Auto and Property insurance policy are:

1. **Rigid Structure:** Difficult to adjust to changes once development starts.
2. **Long Development Time:** Slow to respond to market shifts or customer demands.
3. **Lack of Flexibility:** Hard to make changes during the project, risking misalignment with needs.
4. **Integration Issues:** Challenges in aligning with existing systems or third-party services.
5. **Late Testing:** Issues found late in the process can delay deployment.
6. **Limited Stakeholder Feedback:** Reduced involvement can lead to mismatched expectations.
7. **Budget and Resource Problems:** Potential for inefficiencies and cost overruns.
8. **Technological Lag:** Difficulty in adapting to emerging technologies during development.

These challenges can slow progress, increase costs, and result in a product that doesn’t fully meet market or customer expectations.

**➢ With this project how many problems could be solved?**

Answer: With this project, several problems could be solved, including:

1. **Streamlining Operations:** Through better integration of systems, reducing manual processes, and improving efficiency in underwriting and claims handling.
2. **Improving Customer Experience:** Offering more tailored, accessible, and user-friendly policies.
3. **Adapting to Market Needs:** Creating a more responsive insurance product that aligns with evolving customer demands and regulatory changes.
4. **Enhancing Risk Management:** Using advanced technologies to more accurately assess and price risk.
5. **Boosting Profitability:** By automating and optimizing processes, reducing overhead costs, and increasing customer retention.

These solutions could significantly enhance the company’s competitiveness and operational effectiveness.

**➢ What are the resources required?**

Answer: To implement the PNC Auto and Property insurance policy project, the required resources are:

1. **Human Resources:** Project managers, business analysts, underwriters, actuaries, software developers, QA testers, legal/compliance experts, and customer support teams.
2. **Technology and Tools:** Insurance management software, data analytics tools, CRM (Customer Relationship Management) systems, and testing tools.
3. **Financial Resources:** Budget for development and operational costs.
4. **Infrastructure:** Servers, hosting, and security systems.
5. **Training and Support:** Employee training and customer education materials.
6. **Marketing Resources:** Marketing team for promotional campaigns.

These resources ensure efficient development, launch, and support of the policy

**➢ How much organizational change is required to adopt this technology?**

Answer: Adopting this technology will require moderate to significant organizational change, including:

1. **Process Changes** for new systems and automation.
2. **Employee Training** on new tools and processes.
3. **Cultural Shifts** towards innovation and customer-centric approaches.
4. **Leadership Support** for guiding the transition and managing resistance.
5. **System Integration** and **data migration** to align with existing infrastructure.

Proper change management will be essential for smooth adoption.

**➢ Time frame to recover ROI?**

Answer: The time frame to recover ROI (Return on Investment) for the PNC Auto and Property insurance policy project can vary, but typically it would take 1 to 3 years. Factors influencing this include:

1. **Implementation Costs:** The initial investment in technology, resources, and training.
2. **Revenue Generation:** New policy offerings and customer acquisition may gradually increase revenue.
3. **Cost Savings:** Automation and streamlined processes could reduce operational costs over time.
4. **Market Penetration:** The speed at which the new policy gains market share and customer adoption.

A shorter recovery period (closer to 1 year) may be possible if the market demand is high and adoption is quick. However, a longer period (closer to 3 years) might be expected for slower adoption or if more extensive system integration is needed.

**➢ How to identify Stakeholders?**

Answer: By mapping out the interests and needs of each stakeholder, you can ensure effective communication and decision-making throughout the project.

* **Conduct Stakeholder Mapping:** Identify all internal and external groups affected by the project.
* **Review Organizational Structure:** Look at departments and teams that will interact with or be impacted by the policy.
* **Consult Key Decision Makers:** Engage executives and managers to understand who else should be involved.
* **Analyze Customer Feedback:** Understand the customer base and any third parties that influence or interact with your customers.

To identify stakeholders for the PNC Auto and Property insurance policy project:

1. **Internal Stakeholders:** Include project teams (managers, developers, analysts), leadership, underwriting, marketing, sales, customer support, and IT.
2. **External Stakeholders:** Include customers, regulatory bodies, insurance agents, third-party service providers, investors, and partners (e.g., reinsurers).

Identify stakeholders through stakeholder mapping, reviewing the organizational structure, consulting decision-makers, and analysing customer feedback.

**Document 2: BA Strategy**

Write BA Approach strategy (As a business analyst, what are the steps that you would need to follow to complete a project-What Elicitation Techniques to apply, how to do Stakeholder Analysis RACI/ILS, What Documents to Write, What process to follow to Sign off on the Documents, How to take Approvals from the Client, What Communication Channels to establish n implement, How to Handle Change Requests, How to update the progress of the project to the Stakeholders, How to take signoff on the UAT- Client Project Acceptance Form)

**Answer:** As a Business Analyst (BA), here’s a structured approach to ensure the successful completion of the PNC Auto and Property Insurance Policy project:

**1. Project Initiation & Stakeholder Analysis**

* **Stakeholder Identification:**
	+ **Techniques**: Use **Stakeholder Mapping** (e.g., Influence vs. Interest Matrix) to identify key stakeholders (internal and external).
	+ **RACI Matrix:** Define roles and responsibilities (Responsible, Accountable, Consulted, Informed) for all stakeholders to clarify involvement.
	+ **ILS (Influence, Legitimacy, and Support):** Assess stakeholders’ influence and how much they are affected by the project to prioritize communication.

**2. Elicitation Techniques**

* **Interviews**: Conduct interviews with key stakeholders (e.g., underwriters, regulatory experts) to gather requirements and expectations.
* **Workshops**: Facilitate workshops to collect detailed information on business processes, policies, and systems.
* **Surveys/Questionnaires**: Use these for larger groups, particularly customers or agents, to gather opinions and feedback.
* **Document Analysis**: Review existing insurance documents, regulations, and procedures to ensure consistency with new policies.
* **Prototyping**: Create prototypes of user interfaces or insurance policy offerings for feedback.

**3. Document Writing**

* **Business Requirements Document (BRD)**: Outline high-level business needs, goals, scope, and objectives.
* **Functional Requirements Document (FRD)**: Detail specific functionality, including system behaviour, user interactions, and performance requirements.
* **Use Cases/User Stories**: Describe individual user interactions and system processes in a detailed and clear manner.
* **Data Mapping/Process Flows**: Visual representations of data and workflows, identifying data sources, flows, and systems integration.
* **Test Plans & Scenarios**: Document test scenarios and acceptance criteria for UAT (User Acceptance Testing).

**4. Process to Sign off on Documents**

* **Review & Validation**: Review the documents with stakeholders to ensure accuracy and completeness.
* **Approval Sign-off**: Request formal sign-offs from stakeholders (e.g., leadership, IT, regulatory bodies) on the final version of the documents.
* **Version Control**: Ensure documents are version-controlled for traceability and future reference.

**5. Client Approvals**

* **Client Presentation**: Present the final documents (BRD, FRD) and prototypes to the client, ensuring they align with their expectations and business goals.
* **Formal Approval Process**: Establish a clear process where the client reviews and signs off on the key documents (BRD, FRD, Use Cases).
* **Change Control Process**: If there are significant changes, use a formal change request process for client approval before proceeding.

**6. Communication Channels**

* **Regular Status Updates**: Establish weekly or bi-weekly meetings with stakeholders to update progress, risks, and milestones.
* **Project Management Tools**: Use tools like JIRA, Trello, or Microsoft Teams for real-time collaboration, task tracking, and document sharing.
* **Stakeholder Communication**: Create a communication plan outlining how information will be disseminated (email, meetings, shared documentation).
* **Escalation Procedures**: Define clear procedures for escalating issues or risks to the appropriate level of management.

**7. Handling Change Requests**

* **Change Request Log**: Establish a log to track change requests, with details on the change, impact, and approval status.
* **Impact Analysis**: Assess the impact of the change on project scope, timeline, and resources before seeking approval.
* **Approval Process**: Ensure that any change requests are formally reviewed and approved by the relevant stakeholders (e.g., business owners, project managers).

**8. Updating Progress to Stakeholders**

* **Regular Reports**: Provide weekly or bi-weekly status reports to stakeholders, summarizing progress, risks, issues, and upcoming milestones.
* **Dashboard**: Use project dashboards (e.g., in Jira or Microsoft Project) to provide a visual overview of the project's progress.
* **Meetings**: Hold regular check-in meetings with key stakeholders to ensure alignment and gather feedback.

**9. UAT & Client Project Acceptance**

* **UAT Planning**: Prepare a **User Acceptance Test Plan** with test cases, success criteria, and timelines.
* **Client Involvement**: Involve the client in UAT testing, ensuring they validate that the system and policies meet business requirements.
* **Signoff on UAT**: Once UAT is completed, request the client to sign off on the Client Project Acceptance Form, confirming their approval.
* **Feedback Loop**: Address any issues or concerns raised during UAT before getting final client approval.

This approach ensures that the project is delivered with clear requirements, effective communication, and stakeholder alignment throughout its lifecycle.

**Document 3- Functional Specifications**

**Answer:** A functional specification (FSD) is a document that describes how a system or product will function.

|  |  |
| --- | --- |
| **Project name** | Property and Casualty (PNC) Policy Analysis for Automobile and Property |
| **Customer name** | XYZ |
| **Project Version** | Version 1.0 |
| **Project Sponsor** | Ankur Agarwal |
| **Project Manager** | Udaya K |
| **Project Initiation date** | 01/01/2025 |

**Functional Requirement specifications:**

**Answer:** Functional Requirements Specification for PNC Policy Analysis (Auto and Property)

|  |  |  |
| --- | --- | --- |
| **Req ID** | **Req Description** | **Priority** |
| FR0001 | User should be able to log in to the application to access PNC policy details for Auto and Property. | High |
| FR0002 | The system should allow users to create and manage Auto and Property insurance policies. | High |
| FR0003 | User should be able to view and update the details of existing policies (e.g., policyholder info, coverage details). | High |
| FR0004 | System should calculate policy premiums based on customer details, vehicle/property value, and coverage type. | High |
| FR0005 | User should be able to add and remove coverage options for Auto and Property policies. | Medium |
| FR0006 | System should provide automated policy renewal reminders based on the expiration date. | Medium |
| FR0007 | System should allow users to generate reports on policy status, claims history, and premium payments. | High |
| FR0008 | The system should integrate with third-party data providers for vehicle history or property valuation. | Medium |
| FR0009 | User should be able to process claims by linking claims to specific Auto or Property policies. | High |
| FR0010 | System should validate that coverage limits, deductibles, and other policy conditions comply with regulatory requirements. | High |
| FR0011 | User should be able to generate certificates of insurance for policyholders. | Medium |
| FR0012 | The application should allow users to track policyholder communications (emails, calls, letters). | Low |
| FR0013 | The system should send automated alerts to users when claims are filed or when a claim status change. | Medium |

**Non-Functional Requirements:** Non-functional requirements (NFRs) are the characteristics of a system that define how it should behave, rather than what it does

|  |  |  |
| --- | --- | --- |
| **Req ID** | **Req Description** | **Priority** |
| NFR-001 | The system must provide a response time of less than 2 seconds for policy analysis queries in 95% of the cases. | High |
| NFR-002 | The system should be capable of processing 1000 transactions per second under normal conditions. | High |
| NFR-003 | The system should be scalable to handle up to 500,000 active users and support expansion without significant downtime. | High |
| NFR-004 | The system should handle peak loads of up to 10,000 concurrent users without performance degradation. | High |
| NFR-005 | The system should have a minimum availability of 99.9%, ensuring minimal downtime. | High |
| NFR-006 | The system must implement disaster recovery to restore operations within 1 hour of an unexpected failure. | High |
| NFR-007 | Automated daily backups should be performed, with a 7-day retention period. | Medium |
| NFR-008 | The system must operate with an error rate of less than 0.01% under normal conditions. | High |
| NFR-009 | All sensitive customer data must be encrypted both in transit (TLS 1.2 or higher) and at rest (AES-256 encryption). | High |
| NFR-010 | The system must implement role-based access control (RBAC) to ensure appropriate data access. | High |
| NFR-011 | Multi-factor authentication (MFA) must be required for all users accessing the system. | High |
| NFR-012 | The system must comply with GDPR, CCPA, and other applicable privacy regulations. | High |
| NFR-013 | The user interface must be intuitive and user-friendly, ensuring efficient interaction for policy analysis tasks. | Medium |
| NFR-014 | The system must comply with WCAG 2.1 Level AA accessibility standards. | Medium |
| NFR-015 | The system must provide comprehensive training modules and user documentation. | Medium |
| NFR-016 | The system should be capable of real-time monitoring to detect anomalies and provide alerts to the development team. | High |
| NFR-017 | The system must maintain detailed logs and audit trails of user actions, data access, and errors for at least 1 year. | High |
| NFR-018 | Security patches and updates should be applied regularly, and the system must support automated patching with minimal downtime. | High |
| NFR-019 | The system must support integration with third-party services, such as underwriting systems, claims platforms, and payment gateways. | High |
| NFR-020 | The system must support multiple languages, initially including English, Spanish, and French. | Medium |
| NFR-021 | The system should handle time zone differences for global operations and adjust timestamps accordingly. | Medium |
| NFR-022 | The system must comply with all applicable insurance industry regulations, including Solvency II, NAIC, and regional standards. | High |
| NFR-023 | All transactions, policy updates, and claims must have a clearly documented audit trail. | High |
| NFR-024 | In case of system decommissioning, proper data export and archiving procedures must be followed, ensuring data accessibility for compliance purposes. | Low |

**Document 4- Requirement Traceability Matrix**

Answer: A requirements traceability matrix (RTM) is a document that shows the connection between requirements and other deliverables in a project. It's used to track and verify that all requirements are met.

**Requirement Traceability Matrix (RTM)**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Req ID** | **Req Name** | **Req Description** | **Design** | **D1** | **T1** | **D2** | **T2** | **UAT** |
| FR0001 | Login | User should be able to log in to the application to access PNC policy details for Auto and Property. | Yes | Completed | Yes | Yes | Yes | Yes |
| FR0002 | Create & Manage Policies | The system should allow users to create and manage Auto and Property insurance policies. | Yes | Pending | No | Yes | Yes | Yes |
| FR0003 | View & Update Policies | User should be able to view and update the details of existing policies (e.g., policyholder info, coverage details). | Yes | Pending | Yes | No | Yes | No |
| FR0004 | Calculate Policy Premiums | System should calculate policy premiums based on customer details, vehicle/property value, and coverage type. | Yes | Completed | No | Yes | Yes | Yes |
| FR0005 | Add/Remove Coverage Options | User should be able to add and remove coverage options for Auto and Property policies. | Yes | Pending | Yes | No | No | No |
| FR0006 | Automated Policy Renewal Reminders | System should provide automated policy renewal reminders based on the expiration date. | Yes | Pending | Yes | Yes | Yes | Yes |
| FR0007 | Generate Policy Reports | System should allow users to generate reports on policy status, claims history, and premium payments. | Yes | Pending | No | Yes | No | Yes |
| FR0008 | Integration with Third-Party Providers | The system should integrate with third-party data providers for vehicle history or property valuation. | Yes | Completed | No | Yes | Yes | Yes |
| FR0009 | Process Claims | User should be able to process claims by linking claims to specific Auto or Property policies. | Yes | Pending | No | Yes | Yes | Yes |
| FR0010 | Validate Coverage Compliance | System should validate that coverage limits, deductibles, and other policy conditions comply with regulatory requirements. | Yes | Completed | Yes | Yes | Yes | Yes |
| FR0011 | Generate Certificates of Insurance | User should be able to generate certificates of insurance for policyholders. | Yes | Pending | No | Yes | Yes | Yes |
| FR0012 | Track Policyholder Communications | The application should allow users to track policyholder communications (emails, calls, letters). | Yes | Completed | Yes | Yes | Yes | Yes |
| FR0013 | Automated Alerts for Claims Status Changes | The system should send automated alerts to users when claims are filed or when a claim status change. | Yes | Pending | No | Yes | Yes | Yes |

**Document 5- BRD Template**

Answer: A business requirements document (BRD) is a document that outlines the requirements for a project. It helps keep everyone involved on the same page and prevents the project from expanding beyond its boundaries.

#### **1. Executive Summary**

* **Overview:** A concise summary of the proposed Auto and Property insurance policy, the reasons for its development, and its business value.
* **Objective:** Define the purpose of the insurance policy, the benefits it will bring to customers, and the organization’s strategy.
* **Scope:** Outline the project’s scope within the Waterfall methodology, specifying phases from requirements gathering to testing and deployment.

#### **2. Project Background and Rationale**

* **Market Analysis:** Provide insights into the current market conditions, competition, and customer needs for Auto and Property insurance.
* **Business Drivers:** Highlight the factors motivating the development of the policy, such as regulatory requirements, market demand, or new risk assessments.
* **Challenges:** Describe any challenges that could be encountered during the project (e.g., technical, legal, or operational).

#### **3. Project Objectives**

* **Goal Statement:** Define the measurable goals for the project (e.g., streamline the underwriting process, improve claims processing, customer satisfaction).
* **Key Deliverables:**
	+ Policy Product Design
	+ Underwriting Guidelines
	+ Claims Management Framework
	+ System Integration (if applicable)
	+ Customer Portal or User Interface
* **Timeline:** Set clear deadlines for each phase of the Waterfall model, specifying start and end dates.

#### **4. Stakeholders**

* **Primary Stakeholders:** Identify key stakeholders involved in the development, approval, and implementation of the insurance policy (e.g., product managers, underwriters, IT teams, legal advisors).
* **Roles and Responsibilities:** Detail the responsibilities of each stakeholder in the project.

#### **5. Requirements Analysis**

* **Functional Requirements:**
	+ Coverage options for Auto and Property
	+ Pricing structure and premium calculation rules
	+ Claims process flow
	+ Policy document generation
	+ Integration with external systems (e.g., third-party data providers, payment gateways)
* **Non-Functional Requirements:**
	+ Security and data protection standards
	+ Performance requirements (e.g., response time for customer service interactions)
	+ Scalability and future growth considerations
* **Regulatory Requirements:** Specify any industry standards and regulations for PNC insurance (e.g., state regulations for Auto insurance).

#### **6. Project Phases (Waterfall Model)**

* **Phase 1: Requirements Gathering**
	+ Detailed collection and documentation of requirements.
	+ Risk assessment and mitigation strategies.
* **Phase 2: System Design and Architecture**
	+ High-level system architecture for policy issuance, claims management, and customer service processes.
	+ Integration with existing platforms or third-party vendors.
* **Phase 3: Development and Implementation**
	+ Development of the Auto and Property insurance policy within the IT systems.
	+ Building the necessary interfaces, backend logic, and databases.
* **Phase 4: Testing**
	+ Functional testing of policy features (underwriting, claims, reporting).
	+ User acceptance testing (UAT) with stakeholder involvement.
	+ Performance and security testing.
* **Phase 5: Deployment**
	+ Final rollout to customers and production systems.
	+ Training for customer-facing teams and back-office staff.
* **Phase 6: Post-Implementation Support**
	+ Ongoing maintenance and support.
	+ Continuous improvement based on customer feedback and system performance.

#### **7. Financial Analysis**

* **Cost Breakdown:** Estimate the overall project cost, including development, testing, marketing, and training.
* **ROI Analysis:** Estimate the return on investment through expected policy sales, improved customer retention, or operational efficiencies.
* **Budget Approval:** Approval of the initial budget for each phase, including contingencies.

#### **8. Risk Management**

* **Risk Identification:** List potential risks (e.g., delays, system integration challenges, regulatory changes).
* **Risk Mitigation Plans:** Strategies to address each risk, including backup plans or contingencies.

#### **9. Conclusion and Approval**

* **Summary of Business Value:** Recap the benefits of implementing the PNC policy and how it aligns with the company’s strategic goals.
* **Approval Signatures:** Obtain sign-offs from relevant stakeholders (e.g., executive team, legal, finance, etc.).
* **Project Name**: Property and Casualty (PNC) Policy Analysis for Automobile and Property
* **Project ID**: PNC-2025-01
* **Version ID**: 1.0\_21Feb2025
* **Author**: John Doel, Senior Business Analyst, Insurance IT Team