Marine Insurance Dashboard Report

Overview

This report provides an in-depth analysis of the various dashboards created in Power BI, which focus on **Risk Analysis**, **Financial Overview**, **Claims Management** and **Adjuster Performance** for the **Marine Insurance** claims. The dashboards aim to provide meaningful insights into the claims process, identify risk patterns, and help stakeholders make informed decisions based on real-time data.

1. Dashboard Overview

The dashboard is divided into multiple sections to provide comprehensive insights into claims handling, risk factors, and financial impacts. The key dashboards include:

- **Claims Management Page**
- **Adjuster Performance Page**
- **Financial Overview Page**
- **Risk Analysis Page**

Each page is interactive, allowing users to filter data, explore different dimensions, and gain insights from various perspectives, ensuring effective decision-making.

1. Claims Management Page

Overview

The **Claims Management Page** provides an overview of claim statuses and tracks the financials associated with different product types. The page helps monitor the overall claims pipeline, ensuring efficient handling and identifying potential areas of concern.

Visuals:

- **Claim Amount (Total)**: A **card** visual that displays the total claim amount, helping stakeholders understand the financial exposure.
- **Count of Claim ID**: A **card** visual showing the total number of claims handled so far.
- **Average Risk Score**: This card shows the average risk score for all claims.
- **Approved, Pending, and Denied Claims Cards**: Cards show the current number of approved, pending, and denied claims, providing a quick snapshot of the claims processing pipeline.
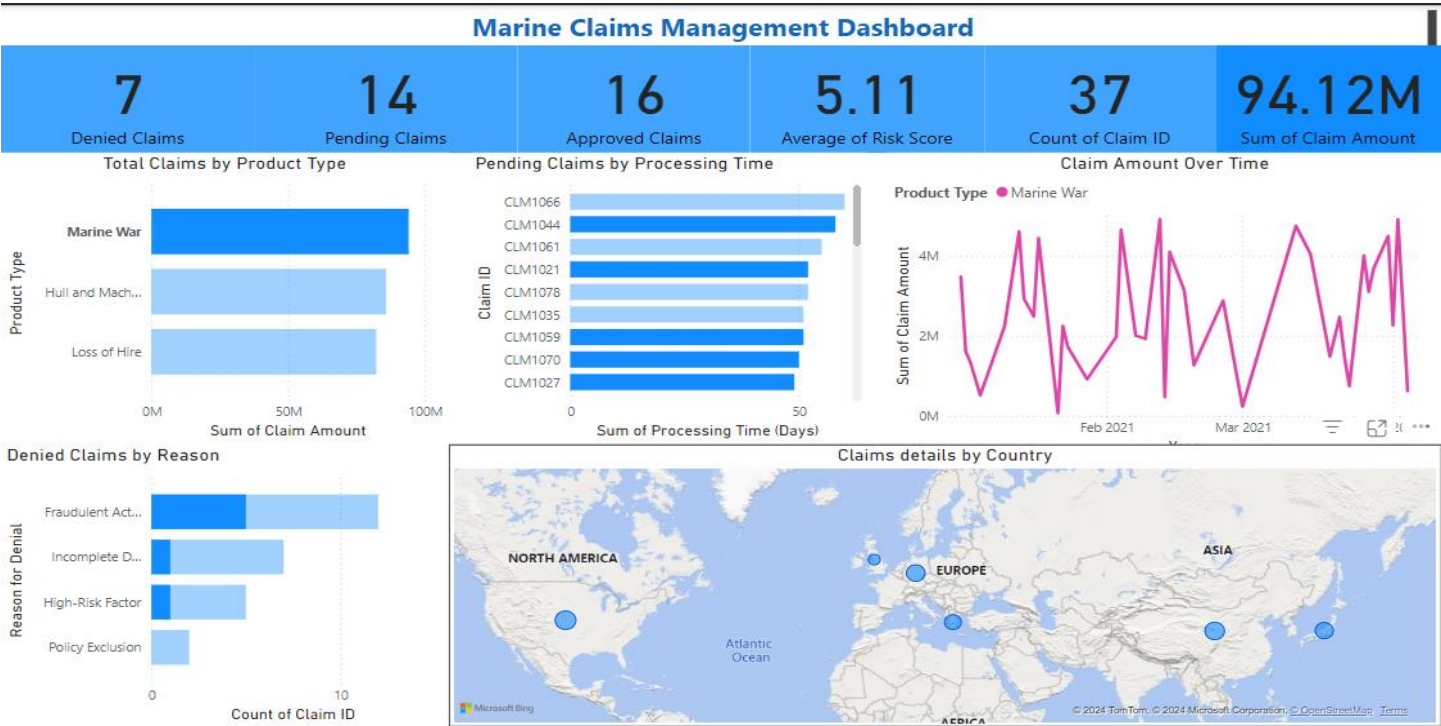
Charts:

- **Claim Amount Over Time**: A **line chart** visual that tracks how claim amounts have changed over time, helping identify patterns and trends.

- **Total Claims by Product Type**: A **bar chart** that breaks down the total claim amounts across different product types such as **Hull and Machinery**, **Loss of Hire**, and **Marine War**. This chart helps identify which products contribute most to claims.
- **Denied Claims by Reason**: A **bar chart** visual that shows the reasons for denied claims, such as **Fraudulent Activity**, **Incomplete Documentation**, etc., allowing stakeholders to address common issues.
- **Pending Claims by Processing Time**: This bar chart shows how long claims have been pending. It helps identify backlogs in the claims processing workflow.
- **Claims Distribution by Country**: A **map visual** that provides geographical insights into claims, helping stakeholders understand the global distribution of claims.

Claims Management Page with Marine War Selected

When **Marine War** is selected from the bar chart in the **Claims Management Page**, the entire dashboard updates to reflect data specific to the **Marine War** product. Each card and chart dynamically adjust to show key metrics and insights related to **Marine War** claims only.

Below is the image showing values and charts for specific product **MARINE WAR.**

2. Adjuster Performance Page

Overview

The **Adjuster Performance Page** evaluates the efficiency and effectiveness of claims adjusters. This page helps assess adjuster workloads, processing times, and overall performance.

Visuals:

- **Number of Claims Handled per Adjuster**: A **clustered bar chart** showing the number of claims each adjuster has handled. This chart helps monitor workload distribution.
- **Average Processing Time for Pending Claims by Adjuster**: This bar chart displays the average time adjusters take to process claims, specifically pending ones. It highlights inefficiencies in the claims processing workflow.
- **Claims Distribution by Adjuster**: A **donut chart** showing the percentage of claims each adjuster is handling. This visualization helps in resource allocation and balancing workloads.
- **Approval Rate and Average Claim Amount per Adjuster**: A **combined bar and line chart** showing the approval rate of each adjuster alongside the average claim amount they handle.

Usefulness:

This page provides detailed insights into the performance of claims adjusters, helping management allocate resources effectively, identify overburdened adjusters, and take corrective action to reduce processing times.

3. Financial Overview Page

Overview

The **Financial Overview Page** focuses on key financial metrics related to claim payouts, pending reserves, and claim distributions across different product types. This page is crucial for monitoring financial health and managing cash flow.

Visuals:

- **Total Payout Card**: Displays the total amount paid out for claims, showing the overall financial impact.
- **Pending Claim Reserves Card**: Shows the total monetary value of claims that are still pending, helping stakeholders understand the liabilities.
- **Average Payout per Claim Card**: Provides the average amount paid out for each claim, helping identify trends in claim payouts.
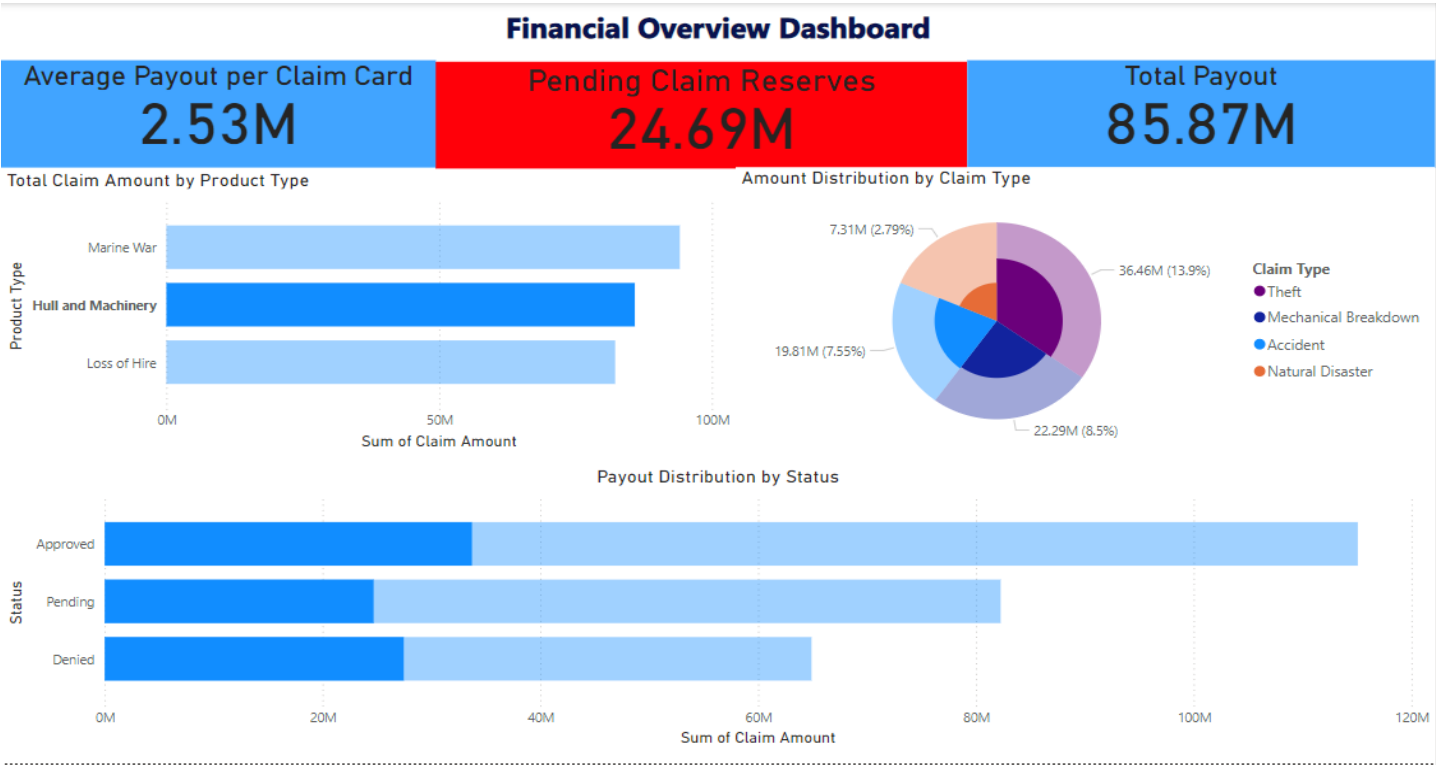
Charts:

- **Total Claim Amount by Product Type**: A **bar chart** that breaks down the total claim amounts for various product types. This helps understand which products lead to higher claims.
- **Amount Distribution by Claim Type**: A **pie chart** visualizing the distribution of claims across different types such as **Theft**, **Mechanical Breakdown**, **Accident**, and **Natural Disaster**. This helps identify which claim types are driving financial losses.
- **Payout Distribution by Status**: A **stacked bar chart** showing the distribution of payouts for approved, pending, and denied claims, allowing stakeholders to track how much money is tied up in pending claims.

Financial Overview Page with Hull and Machinery Selected

When the **Hull and Machinery** product is selected in the **Financial Overview Page**, all cards and charts dynamically update to show financial metrics and performance insights related to **Hull and Machinery** claims only. This allows stakeholders to drill down into the financial data specific to this product.

Here's how each element of the dashboard updates when **Hull and Machinery** is selected:

Usefulness:

The Financial Overview Page provides key financial insights that allow stakeholders to monitor the financial performance of the claims process. This page helps management understand cash outflows, pending liabilities, and provides insights into which products or claim types contribute most to payouts.

4. Risk Analysis Page

Overview

The **Risk Analysis Page** focuses on assessing the risk levels of different claims and their impact on financials. This page helps stakeholders identify high-risk claims and make proactive decisions to mitigate potential losses.
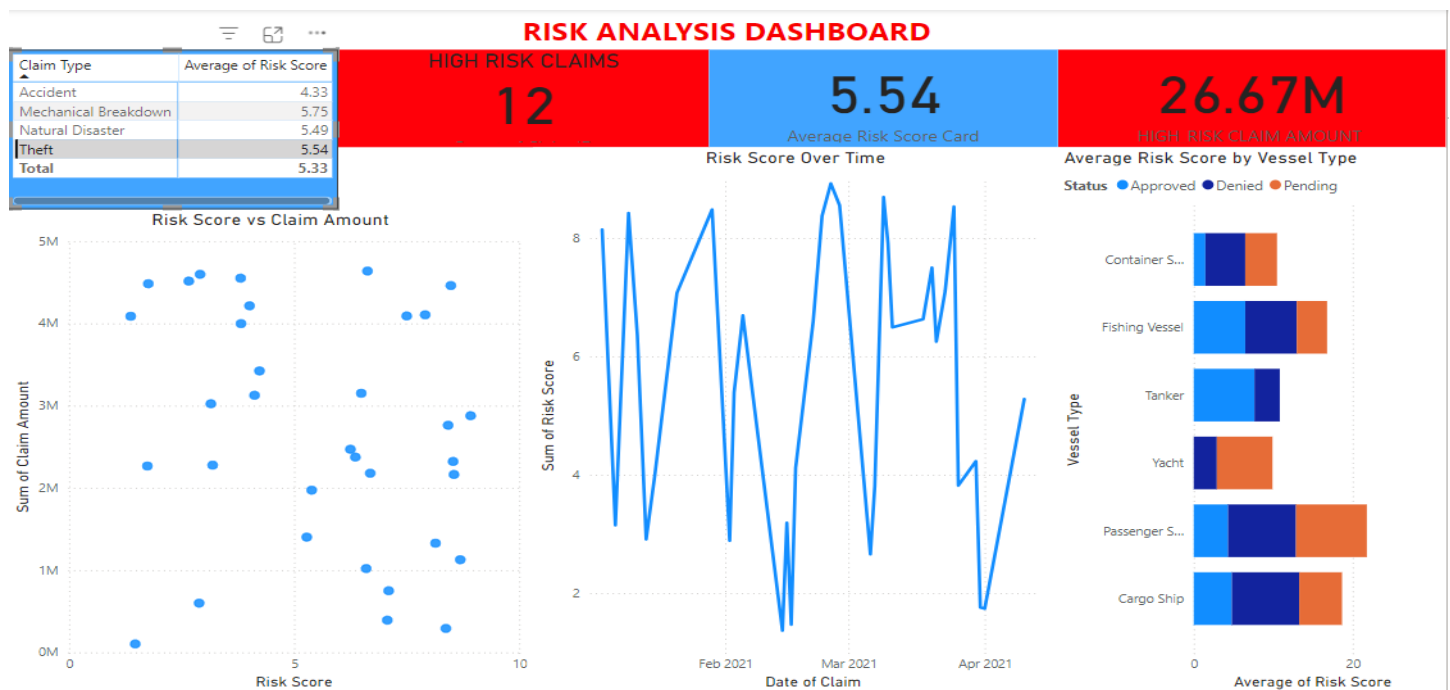
Visuals:

- **High-Risk Claims Card**: A card that shows the total number of claims that have been classified as high-risk, helping stakeholders focus on those that pose the most financial threat.

- **Average Risk Score Card**: Displays the average risk score across all claims, providing an overview of the risk profile.
- **High-Risk Claim Amount Card**: Shows the total monetary value associated with high-risk claims.

Charts:

- **Risk Score vs. Claim Amount**: A **scatter plot** that shows the relationship between claim amounts and risk scores. This visual helps assess whether higher-risk claims are correlated with larger financial payouts.
- **Risk Score Over Time**: A **line chart** showing how risk scores have trended over time, helping stakeholders monitor changes in risk exposure.
- **Average Risk Score by Vessel Type**: A **bar chart** that breaks down the average risk score for each vessel type, such as **Container Ships**, **Fishing Vessels**, and **Tanker Ships**. This helps stakeholders identify which vessel types are riskier.
- **Average Risk Score by Claim Type**: This table shows the average risk score for different claim types, such as **Accidents**, **Mechanical Breakdowns**, and **Theft**, providing insights into which claim types carry more risk.

Usefulness:

This page is essential for understanding the risk factors that contribute to claims. Stakeholders can use this information to implement risk management strategies, such as tightening policies for high-risk claims or revising premiums for high-risk products or vessel types.