**Journey Analytics** is the process of tracking, analyzing, and visualizing customer journeys across various touchpoints and channels to understand how users interact with a product or service. It provides insights into the sequence of events, behaviors, and decisions made by users, enabling businesses to identify pain points, optimize processes, and enhance the overall customer experience.

Journey analytics often involves:

1. **Mapping Customer Paths**: Identifying distinct journeys that customers take to achieve a goal, such as purchasing a product or resolving an issue.
2. **Analyzing Exit Points**: Understanding where and why users drop off or abandon their journey.
3. **Measuring Engagement**: Evaluating time spent, actions taken, and overall satisfaction during key interactions.
4. **Optimizing Conversion**: Pinpointing areas of friction and opportunities to improve customer experience and drive revenue.

### ****Problem Statement****

Despite having a wide array of customer touchpoints across platforms (e.g., iOS, Android, Web, Call Center), there is a lack of comprehensive understanding of:

1. **Customer Behavior Across Journeys**:
   * How do customers interact with various channels?
   * What are the most frequent and successful paths?
   * Where do customers face challenges, leading to drop-offs?
2. **Platform and Channel Efficiency**:
   * Which platforms (iOS, Android, Web) and request channels (Call Center, Retail, Web, Mobile App) perform best in terms of engagement and conversion?
3. **High Drop-Off Points**:
   * What are the key pages or steps where customers exit the journey, and why?
4. **Revenue Leakage**:
   * Are there opportunities to increase revenue by improving specific journeys or addressing underperforming segments?

Without addressing these gaps, the business risks losing potential revenue, decreasing customer satisfaction, and failing to capitalize on growth opportunities.

### ****Objective****

To harness the power of journey analytics to:

* Map out customer journeys and identify patterns.
* Optimize user experiences by resolving pain points and reducing drop-offs.
* Improve platform-specific strategies to boost engagement and conversion.
* Enable stakeholders to make data-backed decisions for driving revenue and customer retention.

### ****Customer Insights and Revenue Analysis****

#### ****1. Monthly Recurring Revenue (MRR) by Region****

* **Insight**: Scotland, North West, and London are the top-performing regions in terms of MRR, contributing the highest share to the total **£4,634,879 MRR**.
* **Actionable Point**: Focus on maintaining strong customer engagement in these regions while leveraging insights to uplift revenue in underperforming areas like Northern Ireland and North East.

**Visual**: Monthly Recurring Revenue (MRR) by Region (Bar Chart)

#### ****2. Average Revenue Per User (ARPU)****

* **Insight**: The **average ARPU** stands at **£19.13**, with a distribution heavily skewed toward lower-revenue customers. This indicates an opportunity to enhance offerings for mid-to-high-revenue customers.
* **Actionable Point**: Introduce tiered plans or premium offerings to drive ARPU growth across all customer segments.

**Visual**: Distribution of Total Revenue (ARPU) (Histogram)

#### ****3. Platform Usage and Conversion Rates****

* **Insight**:
  + **Platform Share**: iOS dominates with **71%**, followed by Android at **22%**, while Web trails with **6.5%**.
  + **Conversion Rates**: Web leads in efficiency with a **1.18% conversion rate**, surpassing other platforms.
* **Actionable Point**: Enhance customer acquisition strategies on iOS and Android while optimizing the Web platform's content to maintain high conversion efficiency.

**Visual**: Conversion Rates by Platform and Channel (Bar Chart)

#### ****4. Customer Journeys and Exit Points****

* **Insight**:
  + Over **6,776 unique customer journeys** were identified.
  + **Top Exit Points**: Pages like **Sign-In**, **Splash Page**, and **Manage Billing** have the highest drop-offs.
  + **Critical Journeys**: “Dashboard” and “Your Bills” are the most common paths customers take.
* **Actionable Point**: Optimize the user experience on high-exit pages by simplifying workflows and improving navigation. Focus on streamlining critical customer journeys.

**Visuals**:

1. Exit Points Analysis (Table)
2. Unique Customer Paths Visualization (Table of Journey Counts)

#### ****5. Device and Pricing Model Insights****

* **Insight**:
  + **Device Analysis**: Apple and Samsung dominate the device market, representing the majority of customer usage.
  + **Pricing Model Engagement**: The **Model V3** pricing strategy outperforms other models, particularly in **Call Centers**, indicating its strong customer preference.
* **Actionable Point**: Create device-specific marketing campaigns targeting Apple and Samsung users.

**Visuals**:

1. Device Manufacturer Distribution (Bar Chart)
2. Customer Limb Detail Analysis by Pricing Model (Bar Chart)

#### ****6. Time Spent on Pages****

* **Insight**:
  + A significant portion of users spends minimal time on pages, indicating potential for faster content delivery.
  + Long durations on certain pages may suggest user difficulty or high engagement.
* **Actionable Point**: Reduce page load times and improve clarity for critical pages requiring longer user interactions.

**Visual**: Distribution of Time Spent on Pages (Log-Transformed Histogram)

### ****Recommendations****

1. **Focus on High-Performing Regions**:
   * Leverage successful engagement strategies from Scotland, North West, and London to uplift underperforming regions.
2. **Enhance Conversion Channels**:
   * Prioritize optimizing Web platforms for seamless onboarding while addressing Call Center inefficiencies.
3. **Streamline User Journeys**:
   * Reduce friction on high-exit pages like Sign-In and Splash Pages.
   * Enhance navigation and clarity on the “Dashboard” and “Your Bills” journeys.
4. **Device-Specific Marketing**:
   * Tailor campaigns to Apple and Samsung users to maximize engagement.
5. **Increase ARPU**:
   * Develop premium offerings or loyalty incentives for high-value customers.
6. **Monitor and Improve Time Efficiency**:
   * Optimize content and reduce delays on pages with long user durations.

### ****Next Steps****

* Conduct **A/B testing** for Web optimizations and high-exit pages.
* Launch targeted marketing campaigns for high-value regions and device-specific users.
* Deploy monitoring for customer journeys to continuously improve UX.

### ****Key Insights****

#### ****1. Platform Usage Distribution****

* **Findings:**
  + **IOS** leads in platform usage with **71.4%** of all interactions.
  + **Android** accounts for **22.1%**, while **Web** usage is **6.6%**.
* **Implications:**
  + IOS users are the primary audience, and optimizing user journeys for IOS can yield significant business value.
  + Android and Web platforms should not be overlooked, as improving engagement on these platforms can unlock untapped potential.

#### ****2. Request Channel Performance****

* **Analysis:**
  + The highest engagement is observed in the **Call Centre** channel, accounting for **62.5%** of unique accounts, followed by **Retail (26.9%)**, **Mobile App (8.7%)**, and **Web (1.8%)**.
  + Conversion rates in different channels reveal:
    - **Web** has the highest conversion rate (1.18%), indicating strong intent among users navigating through web journeys.
    - **Mobile App** performs well in conversion, especially considering its smaller user base.
    - **Call Centre** has the highest absolute engagement but a lower conversion rate, indicating a need to streamline processes.
* **Recommendations:**
  + Enhance the user experience for Web and Mobile App users.
  + Evaluate Call Centre operations to address conversion drop-offs and align service quality.

#### ****3. Conversion Rates by Platform and Channel****

* **Insights:**
  + Conversion rates highlight that:
    - **Android-Web (0.8%)** and **IOS-Retail (0.17%)** indicate room for growth in these combinations.
    - The Web platform consistently outperforms other platforms in conversion across all channels.
* **Actionable Steps:**
  + Focus marketing efforts on high-performing Web and Mobile App channels.
  + Leverage Call Centre traffic by equipping agents with targeted promotions to improve conversions.

### ****Visualizations****

* **Platform Usage Distribution:** A bar graph showcasing platform-wise interaction breakdown (IOS, Android, Web).
* **Request Channel Usage and Conversion:** Stacked bar charts comparing channel engagement and conversion rates across platforms.

### ****Recommendations****

1. **Prioritize Platform-Specific Optimization:**
   * Enhance IOS and Android interfaces for seamless journeys.
   * Ensure Web journeys are mobile-responsive to leverage high conversion rates.
2. **Focus on Conversion in High-Engagement Channels:**
   * Empower Call Centre agents with data-driven suggestions to address customer pain points and improve sales effectiveness.
3. **Expand Successful Practices:**
   * Analyze successful Web channel interactions to replicate those practices across other platforms and channels.
4. **Introduce Personalization:**
   * Use data to identify user preferences and tailor journeys for IOS users, the largest customer base.

## 1. Revenue Distribution and Monthly Recurring Revenue (MRR) by Region

### Observations:

* The **Monthly Recurring Revenue (MRR)** exhibits the highest values in **Scotland, North West, and London**, showcasing strong market performance in these regions.
* Regions like **Northern Ireland and Wales** reflect lower MRR, suggesting untapped potential or areas requiring strategic initiatives to boost revenue.
* The regional **Revenue Distribution** boxplot highlights that **East Midlands** shows higher revenue variability, indicating potential opportunities for targeted campaigns to stabilize and grow customer contributions.

### Recommendations:

* Focus on **Scotland, North West, and London** to sustain and scale high-performing customer bases with premium offers.
* Initiate **targeted marketing campaigns** in Northern Ireland and Wales to capture underserved segments and increase market share.
* Address revenue disparities in East Midlands with **standardized pricing and service-level optimization**.

## 2. Contract Tenure Analysis

### Observations:

* The **average contract tenure** stands at approximately **10.76 months**, indicating a relatively short customer lifecycle.
* A majority of customers have a tenure below **12 months**, signaling potential churn or frequent contract renewals.

### Recommendations:

* Develop **long-term incentive programs** to encourage longer contract commitments.
* Leverage predictive analytics to identify customers at risk of churn and deploy **retention campaigns** targeting these segments.
* Highlight the benefits of longer tenures, such as **discounted rates or enhanced services**, to drive loyalty.

## 3. Average Revenue Per User (ARPU)

### Observations:

* The **ARPU distribution** centers around **£19.13**, with the majority of users contributing between £15 and £25 in revenue.
* Significant ARPU spikes could be associated with premium product offerings or bundled services.

### Recommendations:

* Explore **personalized pricing models** to encourage mid-tier customers to move towards higher-tier plans.
* Bundle services with **value-add features** (e.g., streaming subscriptions or hardware discounts) to drive incremental ARPU growth.

## 4. Platform and Channel Usage Insights

### Observations:

* **iOS** users dominate platform engagement, contributing **71% of total activity**, followed by **Android (22%)** and **Web (6%)**. This emphasizes the need for iOS-optimized experiences.
* Channels such as **Call Centers (62%)** and **Retail (27%)** drive most of the conversions, indicating customer reliance on human interaction.

### Recommendations:

* Invest in **iOS app enhancements** to capitalize on the platform's high engagement levels.
* Optimize Call Centers with **AI-driven assistance tools** to improve efficiency and reduce operational costs.
* Introduce **self-service tools for retail and web channels** to minimize dependency on physical touchpoints.

## 5. Device Manufacturer and Pricing Insights

### Observations:

* **Apple devices** account for the majority of customer interactions, followed by **Samsung and Google**. This highlights a premium customer base.
* Pricing categories like **“Counter Assisted”** dominate subscriptions, reflecting a preference for human-aided purchases.

### Recommendations:

* Launch exclusive **Apple and Samsung device plans** to strengthen loyalty among high-value customers.
* Promote **online-only offers** with price incentives to shift customer behavior towards self-service channels.

## 6. Customer Limb Detail and Request Channel Breakdown

### Observations:

* **Model v3 pricing customers** are highly engaged across **Call Centers** and **Retail**, showcasing the effectiveness of current pricing models.
* The **mobile app channel** sees limited engagement across all categories, presenting an opportunity for growth.

### Recommendations:

* Expand **mobile app functionality** to include seamless self-service options for Model v3 and Non-Model customers.
* Reinforce the Call Center and Retail engagement strategy for Model v3 with **customized promotions**.