Chapter 6 - Final Project (Data Analytics Plan for Game Company)

## The goal of this final project is to combine and apply the skills learned throughout this Data Collection module.

The task:

The company you work for is launching a new strategy game, where players must figure out different ways to complete increasingly difficult levels. The game has in-app purchases, and players can buy additional tools to help them complete the levels. The goal of the company is to grow the player base and maximise in-app purchases. Consider - how can the company leverage digital analytics?

You decide to make a proposal for your boss to use Google Analytics. To succeed, you will first need to describe how you can leverage digital analytics and what you can learn from the data. Next, specifically for Google Analytics, describe:

* What audiences could be useful to create
* What events might be useful to track
* What conversions would be valuable
* What reports would be of particular interest (standard or within the explore tool)
* Any other methods of value that could be applied with GA4

Next, explain exactly how you would go about collecting this digital data by formulating a data collection plan.

Finally, within GA4, create relevant audiences, event and conversion configurations to include at the end of your proposal to the boss, to convince her you are prepared to start collecting the data. Use descriptive names (and description for audiences) to make it clear what data your configuration will be collecting. Include screenshots of the custom configurations at the end of the proposal.

(30 marks)

Reference:s

<https://cdn.discordapp.com/attachments/1148226823369527297/1157592721452716152/IMG_20230409_235248.jpg?ex=651d203b&is=651bcebb&hm=6755042282e4834711fd5ca1f49c4915ef5351b24d65ff3b3ec8d8844a3dac50&>

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| (Note: no use anymore for this PROJECT INTRODUCTION part, as this one is NEW not old game, just for self-reference) …. Please direct to PROPOSAL part.  **PROJECT INTRODUCTION**  For this data analysis case study, I am assuming the **Flood-It mobile app** as the subject matter. You could refer the app here on the Google Play store [here](https://play.google.com/store/apps/details?id=com.labpixies.flood&hl=en&gl=US).  Before we jump into proposals, let's get familiar with the Flood-It app and check out some of its basic stats. This step is crucial in helping us understand the current scenario of the mobile app.  **Background of the Flood-It mobile app:**   * What is Flood-It?   A simple yet addictive strategy game in which you have to flood the whole game board with one color in less than the allowed steps. [See this video on how to play this game](https://www.youtube.com/watch?v=tqWEY4_fzoI).    User acquisition stats:   |  |  |  | | --- | --- | --- | |  |  |  | | Monthly active users | XX (+ xx% qoq) |  | | New users |  |  | | Total users |  |  | | page view |  |  | | Average engagement time |  |  |   Revenue stats:   |  |  |  | | --- | --- | --- | |  | Revenue model | | | Buy for “Extra steps” | “Remove ads” | | Total revenue | XX (+ xx% qoq) |  | | Total ad revenue |  |  | | First Time Purchase conversion |  |  | | Purchase conversion |  |  | | Average purchase revenue |  |  | | Average Revenue Per Paying User (ARPPU) |  |  |   (Source: [Google Analytics 4 of Flood-it](https://analytics.google.com/analytics/web/demoAccount?appstate=/p153293282)) |

This proposal is a bit detailed, but it covers all the essential aspects clearly. To make it even clearer for a boss unfamiliar with Google Analytics, you might want to consider:

* Simplify Language: Break down technical terms and use simpler language. For example, instead of saying "Objective 1: Grow the player base," you could say "Goal 1: Get more players."
* Visual Aids: Consider adding visual aids like charts or graphs to illustrate key points. For instance, you could include a flowchart showing how user data flows through Google Analytics.
* Executive Summary: Start with a brief executive summary that highlights the most critical points and benefits of leveraging Google Analytics.
* Use Cases: Provide real-world use cases or examples of how using Google Analytics has benefited other companies in the gaming industry.
* Actionable Steps: Clearly outline the actionable steps you propose to take. Instead of just listing events and conversions, explain why they matter and how they align with the business objectives.

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| **Proposal for Leveraging Google Analytics for the New Strategy Game Launch:**  Objective: persuade your boss to use google analytics (& digital analytics)   * Method: describe how you can leverage digital analytics and what you can learn from data   Digital analytics is crucial in understanding player behaviour, enhancing user experience, and ultimately maximizing in-app purchases.  Below is a detailed plan outlining how we can utilize Google Analytics effectively.  **Why leverage digital analytics?**  Digital analytics will empower us to:   * **Understand player behaviour:** Analyze user interactions within the game, identifying popular features, levels, and pain points. * **Optimize User Experience:** Track user journeys to enhance game flow, identify drop-off points, and improve overall user satisfaction. * **Maximize In-App Purchases:** Analyze purchasing behaviour, identify high-value segments, and optimize the in-app purchase funnel.   2. Google Analytics   * What audiences could be useful to create?   Audiences let you segment users in ways that are important to your business. Segment by dimensions, metrics, and events to include nearly any subset of users.  Use audiences in a few ways:   * Reporting in Analytics: Filter analytics reports by audiences you create. * If using Google Ads, export audiences to use for ad targeting and bidding. * Trigger events when users match the definition of an audience and become members. Mark those events as conversions and use them for things like bidding in Google Ads.  |  |  |  | | --- | --- | --- | | **Audience name** | **Description** | **Reason to create** | | All users |  |  | | Recently active users |  |  | | Registered users |  | If our business creates IDs for signed-in users, GA4 properties allow us to use this data when building audiences. We can now define our audiences based on IDs sent to Analytics to create audiences based on signed-in users. | | Intermediate users |  |  | | Expert users |  |  | | Purchasers |  |  | | Likely 7-day purchasers |  |  | | Crashing users |  |  |  * What events might be useful to track?   Here are some automatically collected events that might be useful to track:   |  |  |  | | --- | --- | --- | | **Automatically collected events** | **Description of events** | **Reason to track** | | screen\_view  (app) | when a screen transition occurs and any of the following criteria are met:   * No screen was previously set * The new screen name differs from the previous screen name * The new screen-class name differs from the previous screen-class name * The new screen id differs from the previous screen id |  | | app\_remove  (app) | when an application package is removed (uninstalled) from Android device. Android only. |  | |  |  |  | |  |  |  | | app\_exception | when the app crashes or throws an exception |  | |  |  |  |   Information Source: [[GA4] Automatically collected events](https://support.google.com/analytics/answer/9234069?hl=en)  And here are custom events that might be worth to collect and track:   |  |  |  | | --- | --- | --- | | **Custom events** | **Description of events** | **Reason to track** | | level\_complete |  |  | | level\_fail |  |  |   Information Source: [[GA4] Custom events](https://support.google.com/analytics/answer/12229021?hl=en)   * What conversions would be valuable?   Here are some automatically collected conversion events that would be valuable:   |  |  |  | | --- | --- | --- | | **Automatically Collected Conversion Events** | **Description of conversion** | **Reason to track** | | session\_start  (app, web) | when a user engages the app or website (??) |  | | app\_update  (app) | when the user update the app to a new version and launched again |  | | first\_open  (app) | the first time a user launches an app after installing or re-installing it.  Supports measuring first\_open conversions for users who accept Apple's iOS 14 app-tracking prompt. |  | | in\_app\_purchase  (app) | when a user completes an in-app purchase, including an initial subscription, that is processed by the Apple App Store or Google Play Store |  |   Information Source: [[GA4] Automatically collected events](https://support.google.com/analytics/answer/9234069?hl=en)  And here is custom conversion event that might be worth to collect and track:   |  |  |  | | --- | --- | --- | | **Custom Conversion Events** | **Description of conversion** | **Reason to track** | | completed\_5\_levels  (app, web) |  |  |   Information source: [[GA4] Custom events](https://support.google.com/analytics/answer/12229021?hl=en)   * What reports would be of particular interest (standard or within the explore tool)?  |  |  |  | | --- | --- | --- | | **Report type** | **Reason to track** | **Metrics** | | Acquisition report | Where are your visitors coming from? | All users over time:  New users by User Medium | | Engagement report | Which content are your customers engaging with? |  | | Monetization report | What is your customers' shopping activity? |  | | Retention report | Are your visitors coming back? |  | | Demographics report | Who are your customers? |  | | Tech report | What technology are your visitors using? |  |  * Any other methods of value that could be applied with GA4   3. Data Collection Plan:  - Define KPI: player retention, average revenue per user (ARPU) and conversion rate.  - GA4 Tag implementation with Google Tag Manager:  - Configure events: level completion, in-app purchases, user engagement  - create custom dimension and metrics…  - Create goals and conversion: in-app purchases completion  ---------------------------  SMART Objective:   |  |  |  | | --- | --- | --- | |  | **User Acquisition** | **Monetization** | | Objective | Grow the player base | Maximise in-app purchases | | + KPI | increase user base | increase in-app purchases | | + Target | 20% |  | | + Responsible |  |  |   Objective 1:  Objective 2:  Part 1: Digital Analytics  Problem statement: how can the company leverage digital analytics?   * User behaviour analysis * A/B testing * Retention analysis * Customer support insights * Pricing optimization   Part 2: Google Analytics  how you can leverage digital analytics and what you can learn from the data  Part 3: Data Collection Plan  Part 4: Events, conversions and audiences are ready to go! ***[Screenshot]***  **Reference:**  1. Google Analytics 4 #LearningSEOsocially <https://docs.google.com/document/d/1jrUs6h62O964BJKMbnCrEwzNrO39pERzXqTa3YgxL84/edit>  2. |