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)) |

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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?   - New users:  - Engaged players:  Recently active users (7-day) Targeting Ads using website behaviour  User who saw a product and did not purchase it (??)  Top spenders: Top 5% of users (??)  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 |  | | ~~page\_view~~  ~~(web)~~ | ~~each time the page loads or the browser history state is changed by the active site~~ |  | | 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)?   - User Explorer Report:  - Conversion Analysis Report (??)   * 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]*** |