



shopify



GA4



GTM

Google Analytics 4

Shopify

eCommerce tracking



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Project Brief

The client is seeking expert assistance in implementing robust ecommerce tracking for a Shopify store using Google Analytics 4 (GA4) and Google Tag Manager (GTM). The objective is to enhance the client's understanding of customer behavior, measure sales performance, optimize marketing efforts, and enable data-driven decision-making. The expert will set up GA4 and GTM. This includes configuring ecommerce tracking, defining conversion goals, integrating marketing platforms like Facebook Pixel and Twitter Pixel, and monitoring sales, customer behavior, and marketing effectiveness.

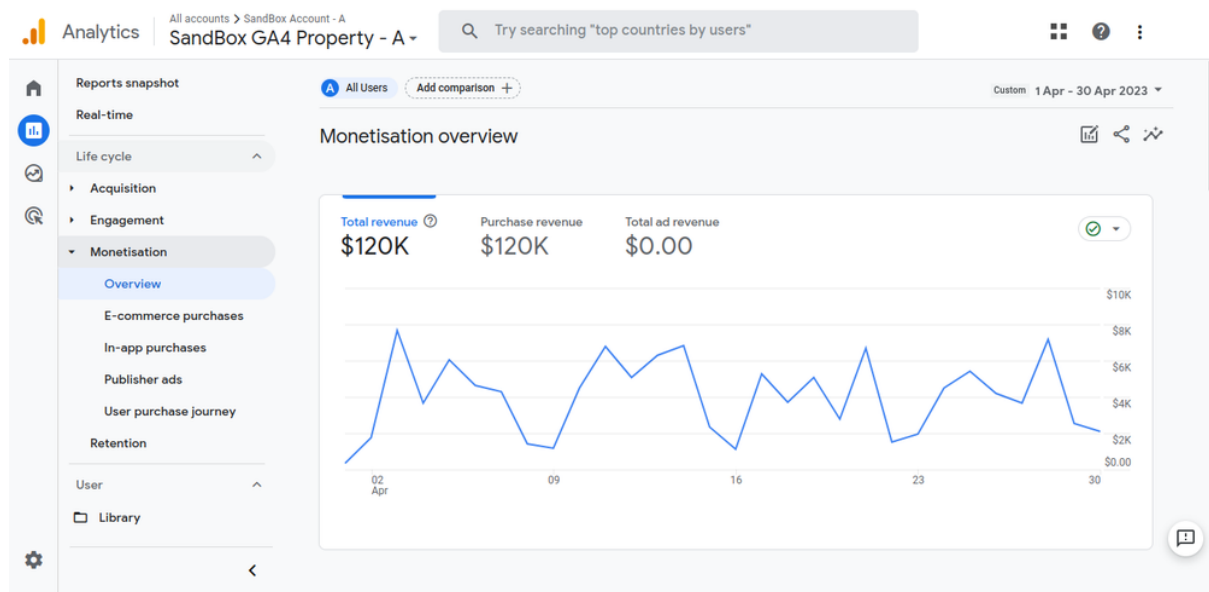


Figure: Ecommerce dashboard in GA4 after tracking setup

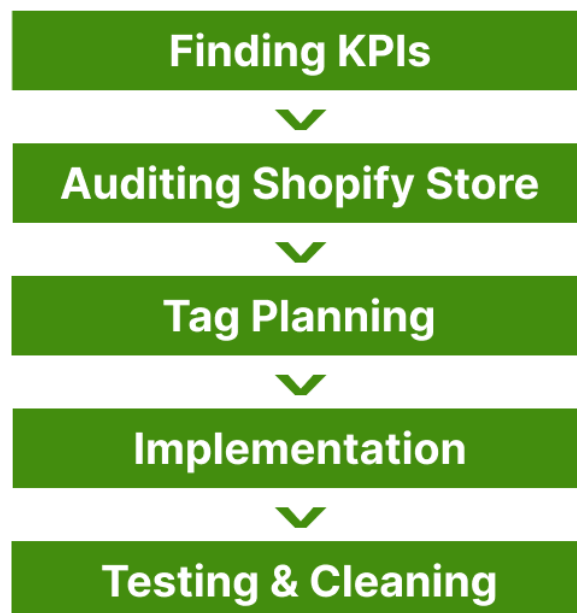
Challenges

- ☒ Communicating the tracking process to stakeholders
- ☒ Configuring GA4 & GTM for Shopify integration
- ☒ Backend **DataLayer** implementation to capture relevant ecommerce data
- ☒ Mapping and setting up ecommerce events (e.g., view_item, add_to_cart, purchase) in GA4
- ☒ Configuring tags, triggers, and variables in GTM for effective event tracking and data capture
- ☒ Integrating with marketing platforms (e.g., Google Ads, Facebook Pixel, Twitter Pixel) for enhanced campaign tracking
- ☒ Testing and validating the tracking setup to ensure reliable data collection and measurement accuracy

Shopify Tracking Strategy

My Shopify tracking strategy involves a concise 5-step process: finding KPIs, auditing the Shopify store, planning tags, implementing tracking, and testing for accuracy and cleanliness. This streamlined approach ensures effective ecommerce tracking without unnecessary complexity.

My Shopify Ecommerce Tracking Process



Nahidul Islam

Figure: Shopify tracking process

Step 1 – Finding KPIs: Identify the key metrics to track that align with your business goals.

Measurement Plan		
Objectives	Revenue growth	Brand awareness
KPIs	Customer base	Email list growth
Measurable metrics	Purchases Conversion rate Revenue Contact form submission	Lead-magnet downloads Social media sharing New visitors

+ 1. UA Events Audit 2. Measurement Plan 3. Tag Plan

Figure: Finding KPIs through measurement plan

Step 2 – Auditing Shopify Store: Carefully review the Shopify store to ensure accurate tracking, backend dataLayer setup, improve data quality, and utilize ecommerce analytics effectively for valuable business insights and decision-making.

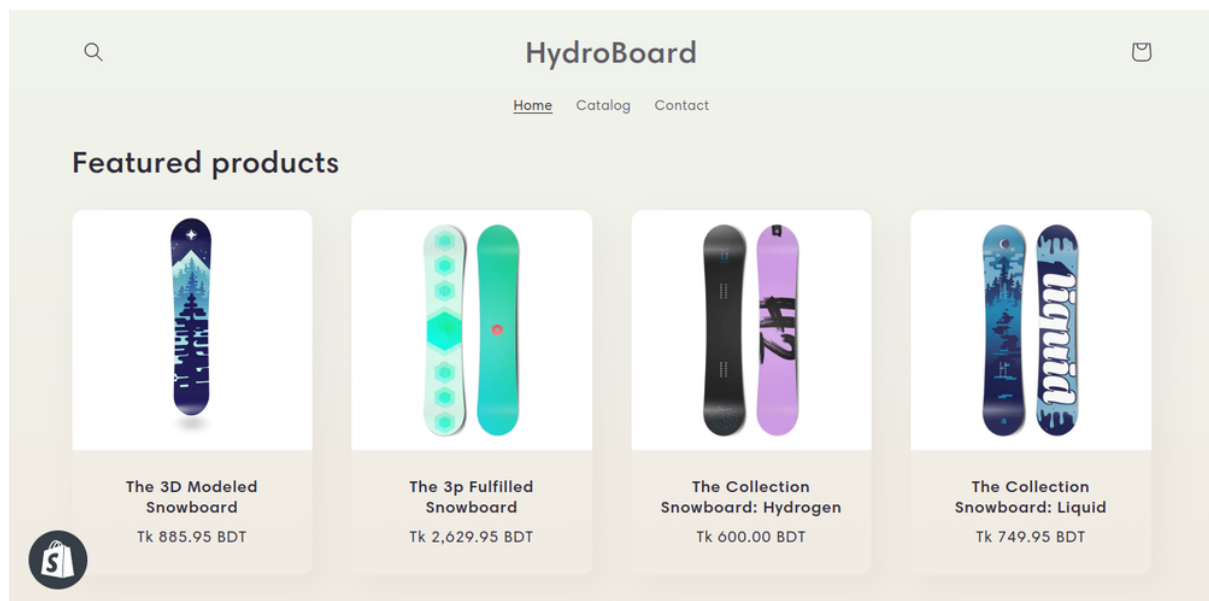


Figure: A test Shopify store

Step 3 – Tag Planning: Getting on the same page with the client to plan tags, making sure we capture the right data for seamless ecommerce tracking.

Tag Plan			
What to track	Description	GA4 Event Name	Parameters
Newsletter subscriber	User subscribes to newsletter	generate_lead	N/A
Form views	User views a form e.g. contact us	form_view	N/A
YT video impressions	User plays YT video	N/A	N/A
Product impressions	User views a product	view_item	items
Add to cart	User adds a product to cart	add_to_cart	items
Product checkout	User begins checkout	begin_checkout	items
Purchases	User purchases a product	purchase	currency value tax shipping affiliation transaction_id

Figure: Tag plan

4. Implementation: Put your tag plan into action by implementing the necessary tracking codes and tags.

5. Testing & Cleaning: Thoroughly test the implementation and ensure data accuracy, while cleaning up any unwanted or duplicate data & tags.

Implementation Process

DataLayer Implementation: To enable effective ecommerce tracking in Shopify, I used custom *liquid snippets* to set up dataLayer that captures essential product information, event details, purchase data, and user information at the right time.

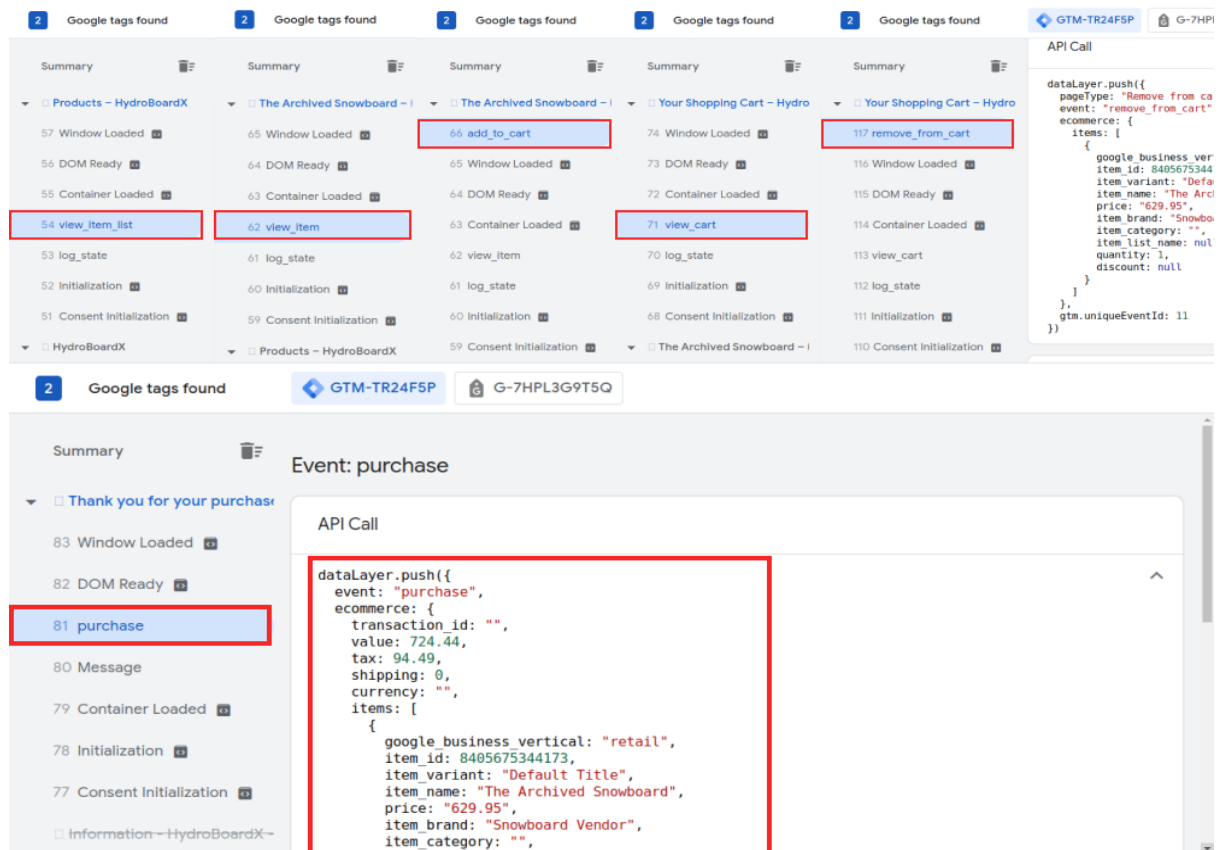


Figure: DataLayer implemented and works properly

GA4 Property Setup: Setting up a GA4 property involves creating a new property in Google Analytics 4 and configuring it to capture and track the desired data from your website or app.

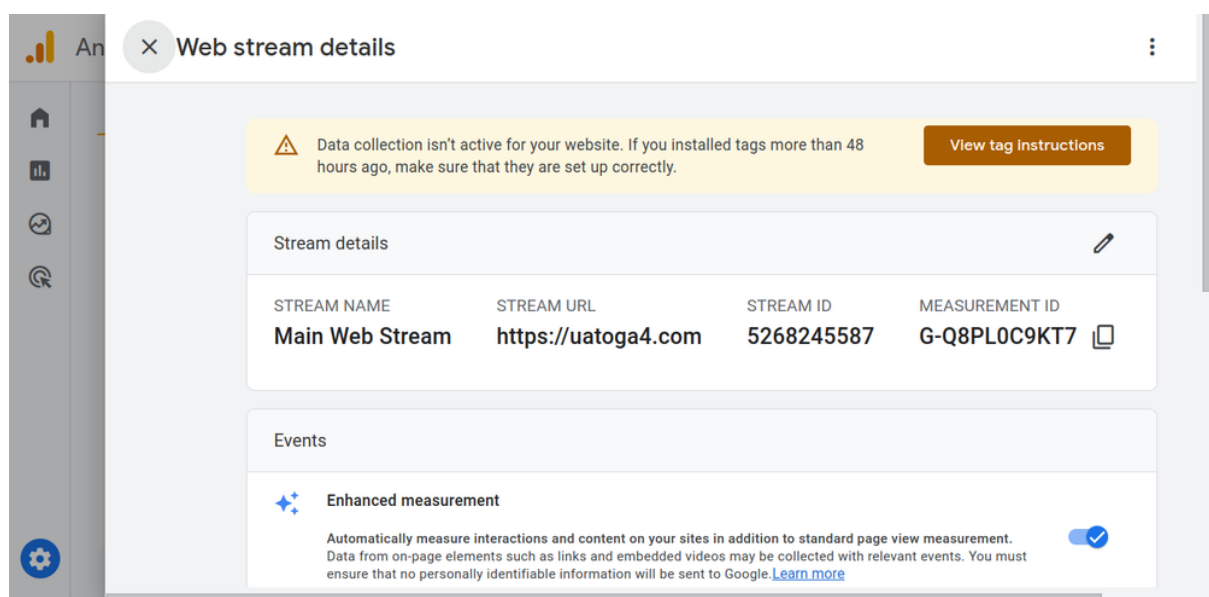


Figure: GA4 property setup

GTM Container Setup: Setting up a GTM (Google Tag Manager) container involves creating and configuring a container within GTM to easily manage and deploy different tags, like GA4 tracking codes and other scripts, on your website or app without the need for manual code changes.

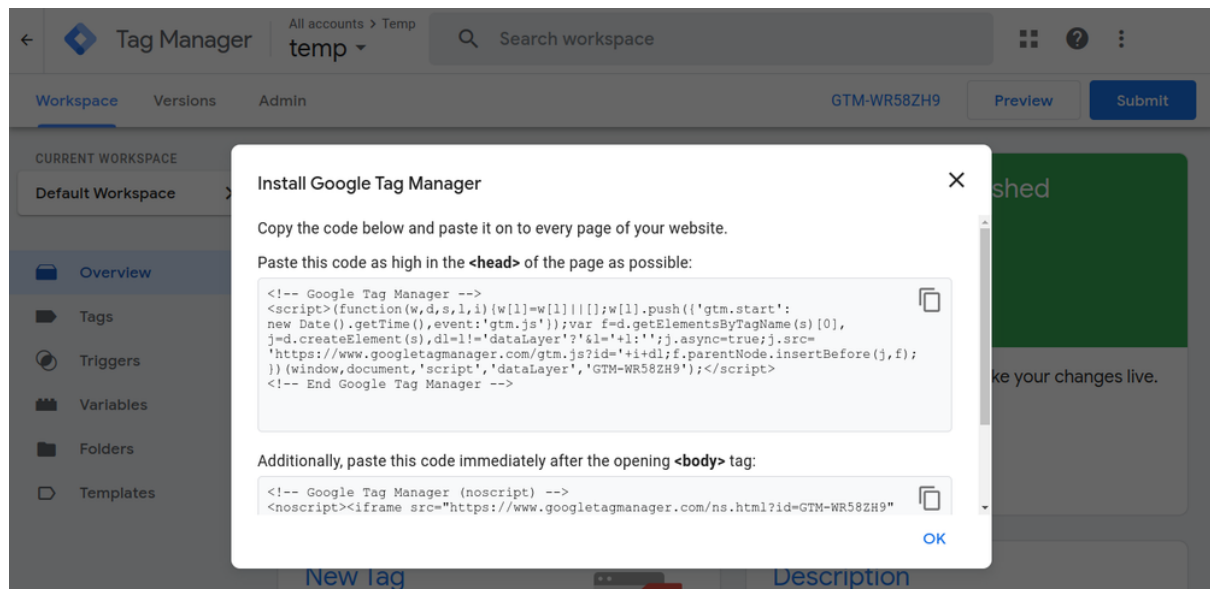


Figure: GTM container setup

GA4 Setup with GTM: Configuring GA4 tags in GTM involves setting up the necessary tracking codes and triggers within the GTM container to ensure seamless data collection and event tracking in Google Analytics 4.

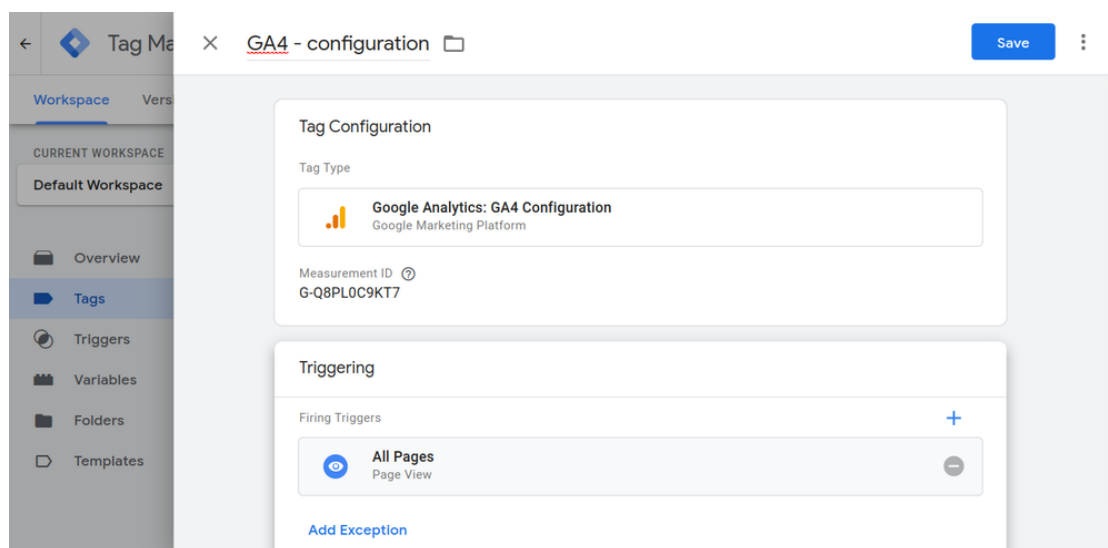


Figure: GA4 configuration tag in GTM

GTM Tag Setup: GTM tag setup involves configuring tags within Google Tag Manager (GTM) to capture specific events and data on a website. This includes creating tags for various tracking purposes, such as pageview tracking, form submissions, button clicks, and other user interactions.

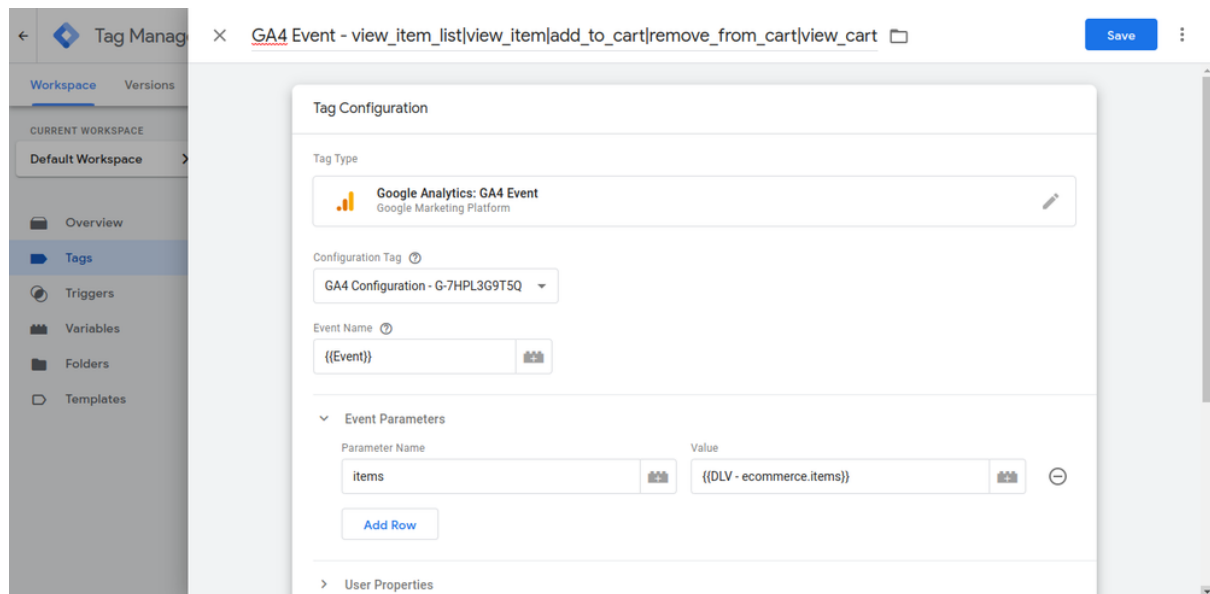


Figure: GTM Tag setup

GTM Triggers Setup: GTM trigger setup involves configuring specific events or conditions that activate the firing of tags, allowing for precise tracking and data collection based on user interactions.

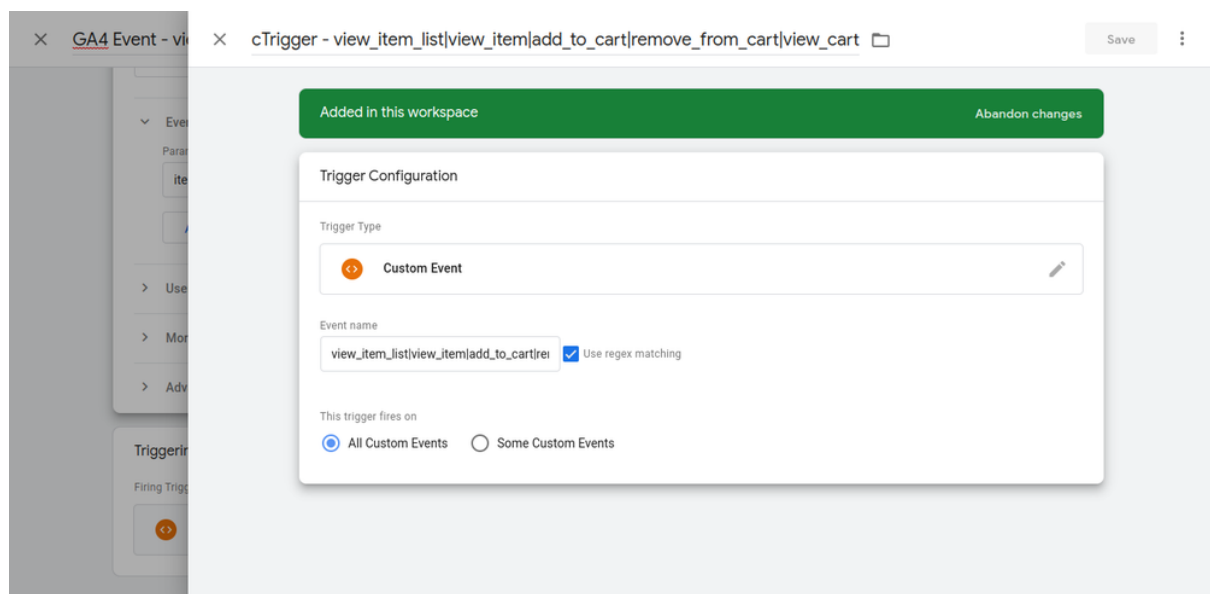


Figure: GTM custom Trigger setup

GTM Variables Setup: GTM tag setup involves creating and configuring tags to track specific actions on your website or app for accurate data collection in Google Analytics or other tools.

The screenshot shows the Google Tag Manager interface. On the left is a sidebar with a list of variables: 'Click Classes', 'Click Element', 'Click ID', 'Click Target', 'Click Text', 'Click URL', 'DLV - ecommerce.items' (which is selected and highlighted in blue), 'DLV - event', 'Environment Name', 'Event', 'Form Classes', 'Form Element', 'Form ID', and 'Form Target'. The main area displays the configuration for the selected variable, 'DLV - ecommerce.items'. At the top of this area is a green banner that says 'Added in this workspace' with a link to 'Abandon changes'. Below this is a 'Variable Configuration' section. It shows 'Variable Type' as 'Data Layer Variable'. Underneath, there's a field for 'Data Layer Variable Name' with the value 'ecommerce.items' and a small icon to its right. Below that is the 'Data Layer Version' field with the value 'Version 2'.

Figure: GTM Variable setup

Tag, Triggers, and Variables: We implement necessary tags, triggers, and variables in Google Tag Manager to setup user interaction, ecommerce data, tracking pixels, etc.

CURRENT WORKSPACE

Default Workspace >

Overview

Tags

Triggers

Tags

<input type="checkbox"/>	Name ↑	Type	Firing Triggers
<input type="checkbox"/>	GA4 Configuration - G-7HPL3G9T5Q	Google Analytics: GA4 Configuration	All Pages
<input type="checkbox"/>	GA4 Event - begin_checkout	Google Analytics: GA4 Event	cTrigger - begin_checkout cTrigger - begin_checkout

CURRENT WORKSPACE

Default Workspace >

Overview

Tags

Triggers

Variables

Triggers

<input type="checkbox"/>	Name ↑	Event Type	Filter
<input type="checkbox"/>	cEvent - purchase	Custom Event	
<input type="checkbox"/>	cEvent - view_item_list view_item add_to_cart remove_fro	Custom Event	
<input type="checkbox"/>	cTrigger - begin_checkout1	All Elements	Click Classes contains cart_ch

User-Defined Variables

<input type="checkbox"/>	Name ↑	Type
<input type="checkbox"/>	cJSV - ecommerce.items - v1	Custom JavaScript
<input type="checkbox"/>	DLV - ecommerce - v1	Data Layer Variable
<input type="checkbox"/>	DLV - ecommerce.currency	Data Layer Variable
<input type="checkbox"/>	DLV - ecommerce.items	Data Layer Variable
<input type="checkbox"/>	DLV - ecommerce.shipping	Data Layer Variable

Figure: Tags, Triggers, and Variables in GTM

Results

By completing the Shopify ecommerce tracking project with GA4 and GTM, I provided the client with a solution to understand the online store and enhance its performance. By accurately tracking and analyzing key metrics, the client can expect:

- **Enhanced Customer Insights:** The client gains valuable visibility into customer behavior, preferences, and trends, enabling informed decision-making for optimizing their online store offerings.
- **Improved Marketing Effectiveness:** Integration with platforms like Facebook Pixel and Twitter Pixel enhances advertising campaigns, targeting, and engagement, leading to higher conversions and maximizing the return on marketing investment.
- **Data-Driven Decision Making:** Real-time access to essential performance metrics through a custom dashboard empowers the client to make informed decisions, refine marketing efforts, and seize growth opportunities.

The client now has the tools to measure success, optimize marketing, track ROI, and enhance customer experiences.

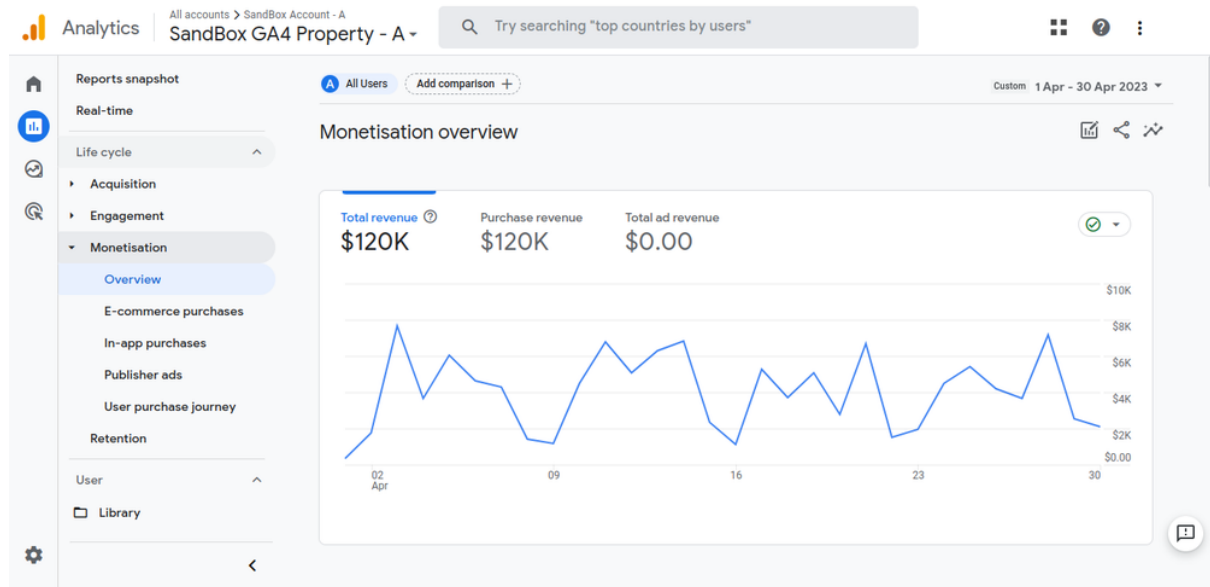


Figure: GA4 ecommerce dashboard

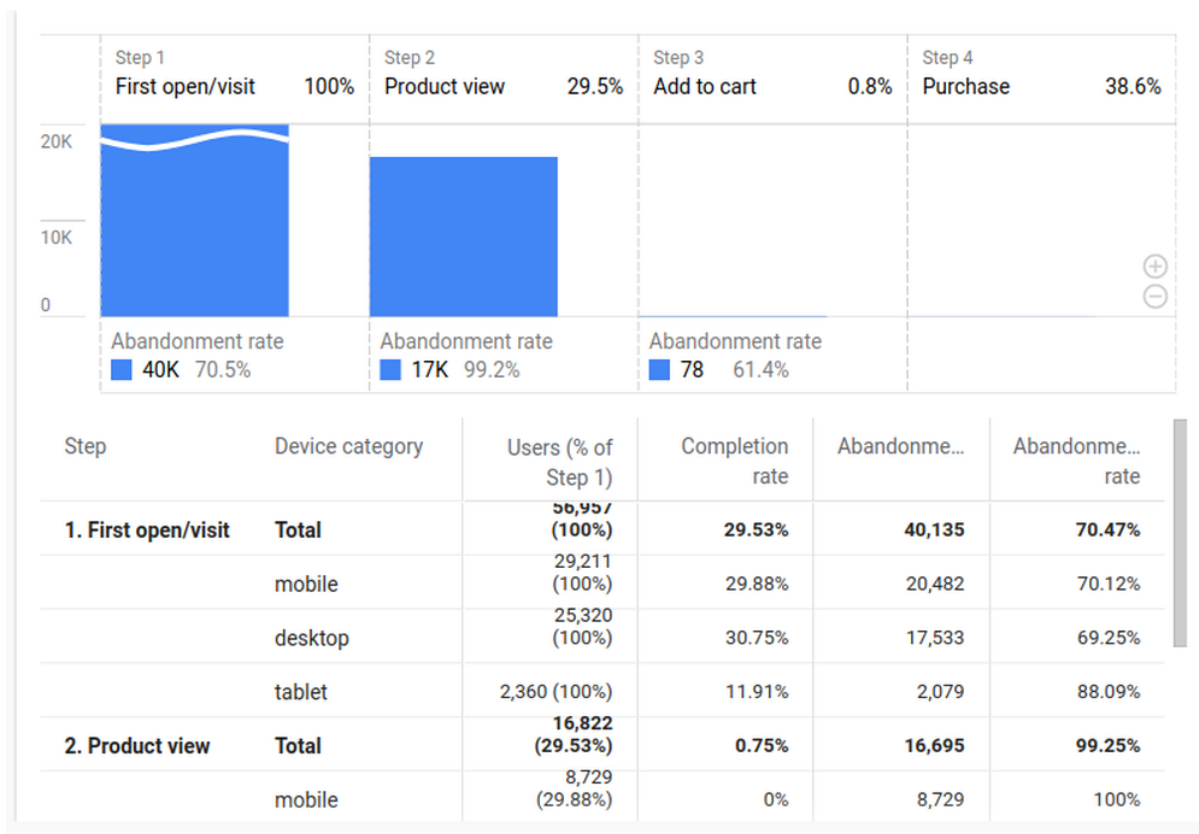


Figure: Funnel tracking dashboard

Conclusion

The implementation of Shopify ecommerce tracking with GA4 and GTM equips the client with the tools to drive success in the future. By leveraging customer insights, improving marketing effectiveness, and making data-driven decisions, the client can enhance customer experiences, increase conversions, and achieve sustained growth. This case study showcases the value and impact of this implementation in driving ecommerce success and maximizing online revenue.

Shameless plug 😊: This project demonstrates my expertise in Shopify ecommerce tracking, GA4, and GTM implementation, showcasing my ability to drive data-driven insights and optimize online store performance.

Ready to level up your digital analytics? With my GA4 and GTM expertise, we'll turbocharge your data insights and fuel your business growth. Let's connect on UpWork by visiting: <https://www.upwork.com/freelancers/nahidx>