

# Case Study: UA to GA4 Migration for a Website

## Client Overview:



All Time Trading is a well-established wholesale distributor and supplier of various products such as clothing, accessories, health and beauty products, household essentials, and more. The company was founded in 2001 and has grown to become one of the most trusted sources for bulk purchasing in the United States.

## Challenge:

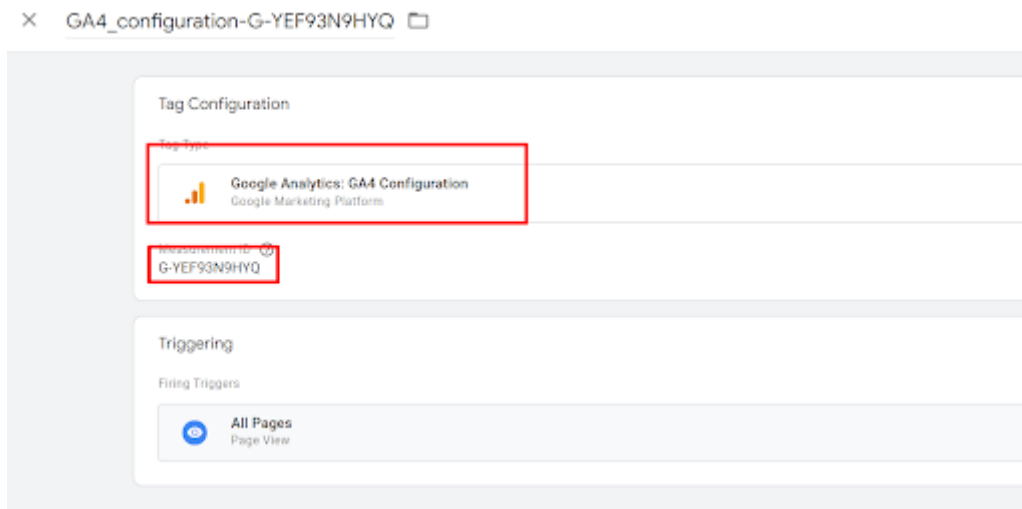
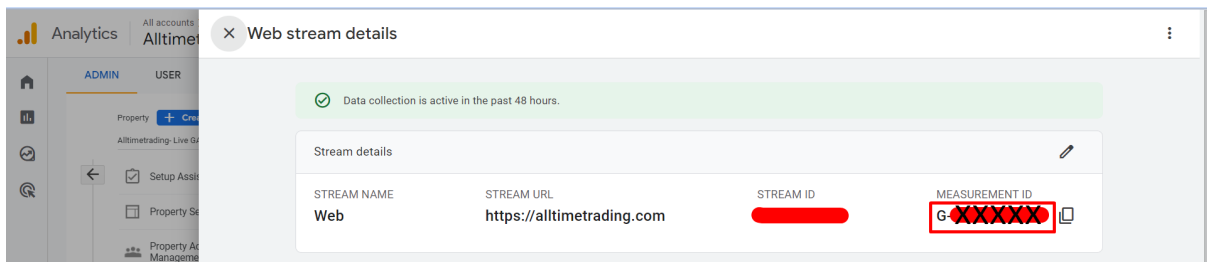
The client was heavily dependent on the UA reporting structure and was facing difficulty in migrating their website from Universal Analytics to Google Analytics 4 as they had limited knowledge of the new version of Google Analytics.

The client also wanted to make sure that the migration process did not cause any disruption to their website and that all existing tracking features were migrated correctly to GA4.

## Approach:

To tackle the challenges faced by our client, we developed a comprehensive approach to migrate from UA to GA4 seamlessly. Here's how we did it:

1. **Setting up the GA4 Property:** To begin using Google Analytics 4 (GA4), the initial step involves setting up a new GA4 property within the Google Analytics admin console. This involves customizing the appropriate settings and creating a GA4 Configuration tag in Google Tag Manager (GTM) that uses the unique Measurement ID provided upon property creation.



2. **Checking UA Events:** The first step was to check the UA events to identify what events were being tracked and how they were being tracked. This involved checking the website's code and the UA events that were firing.

Event Category	Total Events	Unique Events	Event Value	Avg. Value
	82,617 % of Total: 100.00% (82,617)	29,193 % of Total: 100.00% (29,193)	0 % of Total: 0.00% (0)	0.00 Avg for View: 0.00 (0.00%)
1. enhanced_ecommerce	61,328 (74.23%)	13,650 (46.76%)	0 (0.00%)	0.00
2. item_page	4,721 (5.71%)	2,731 (9.35%)	0 (0.00%)	0.00
3. header	3,820 (4.62%)	2,741 (9.39%)	0 (0.00%)	0.00
4. model_page	2,605 (3.15%)	1,561 (5.35%)	0 (0.00%)	0.00
5. family_page	2,014 (2.44%)	1,722 (5.90%)	0 (0.00%)	0.00
6. load-cells_page	1,569 (1.90%)	1,327 (4.55%)	0 (0.00%)	0.00
7. search	1,173 (1.42%)	1,154 (3.95%)	0 (0.00%)	0.00
8. Olark_Chat	1,098 (1.33%)	717 (2.46%)	0 (0.00%)	0.00
9. home_page	621 (0.75%)	533 (1.83%)	0 (0.00%)	0.00
10. store_page	601 (0.73%)	462 (1.58%)	0 (0.00%)	0.00

A	B	C	D	E	F	G
Page url	Event Category	Event Action	Event Label	Status	Comments	Recommendations
All pages	--	--	--	Not Implemented	On clicking on the header and footer, the events are not getting fired.	To track the user's interaction on the page, we have to implement an event
Home page	--	--	--	Not Implemented	On the clicking on any section under the 'today's hot category', the events are not firing	
Home page	--	--	--	Not Implemented	On clicking on any of the section under the brands we love or doing good together, the events are not firing	
All pages	LiveChat	Ticket form filled in	(no group)	Implemented	On successful submission of the live chat form	
<a href="https://www.allmetrading.com/100-pieces-paper-happy-new-year-hats-new-years/p-684877.asp">https://www.allmetrading.com/100-pieces-paper-happy-new-year-hats-new-years/p-684877.asp</a>	--	--	--	Not Implemented	On filling the ask question form , the event is not fired	
<a href="https://www.allmetrading.com/432-pieces-ointment-safetec-triple-antibiotic-ointment-0-9-g-first-aid-gear-p-2851652.asp">https://www.allmetrading.com/432-pieces-ointment-safetec-triple-antibiotic-ointment-0-9-g-first-aid-gear-p-2851652.asp</a>	Page Error	432 Pieces Ointment Safetec Triple Antibiotic Ointment - 0.9 G - First Aid Gear - at - allmetrading.com	432-pieces-ointment-safetec-triple-antibiotic-ointment-0-9-g-first-aid-gear/p-2851652.asp	Implemented with Issue	The event is firing as page error, on the page load. The above event is firing irrelevant as we will be unable to get any insight	If the event is not useful, we can remove its implementation, or we can also change the naming convention of the event, for better insights from GA
<a href="https://www.allmetrading.com/Checkout/Complete/?thankyou=y%2F%2F%2BomfDj.09CEno8W7LGXsbT%2EQa3hu%2BuDkYxI.g%3D">https://www.allmetrading.com/Checkout/Complete/?thankyou=y%2F%2F%2BomfDj.09CEno8W7LGXsbT%2EQa3hu%2BuDkYxI.g%3D</a>	undefined	gtm.load	--	Implemented with Issue	On each purchase from the website, the event is firing as undefined o the page load event category is passing as undefined	We will be unable to detect any type of insights by the undefined value refer to the GA screenshot: <a href="https://imghostr.com/cd5479_su7">https://imghostr.com/cd5479_su7</a>

The next step was to determine whether the events were being tracked in GTM or on the page itself. This involved checking the website's code and the GTM tags that were firing.

Trigger Name	Event Category	Event Action	Event Label	Status	Comments	Recommendations
UA - Pageview	Google Analytics: Universal	All Pages	Google Analytics - UA	a year ago		
UA - Event OptiMonk	Google Analytics: Universal	gaOptiMonkRule	Google Analytics - UA	a year ago		
UA - Event LiveChat	Google Analytics: Universal	gaLiveChatRule	Google Analytics - UA	a year ago		
all_events_ua	Google Analytics: Universal	all_page_dr	Unfiled items	a year ago		
UA - Event - Page Error	Google Analytics: Universal	Page Error	Google Analytics - UA	a year ago		
Scroll_Tracking_UA	Google Analytics: Universal	scroll_depth_all_pages	Unfiled items	a year ago		
checkoutOption_UA	Google Analytics: Universal	checkoutOption_ce	Unfiled items	a year ago		
productImpression_UA	Google Analytics: Universal	productImpression_ce	Unfiled items	a year ago		
addToCart_UA	Google Analytics: Universal	addToCart_ce	Unfiled items	a year ago		
promotionImpression_UA	Google Analytics: Universal	promotionImpression_ce	Unfiled items	a year ago		
Purchase_UA	Google Analytics: Universal	purchase_ce	Unfiled items	a year ago		
removeFromCart_UA	Google Analytics: Universal	removeFromCart_ce	Unfiled items	a year ago		
promotionClick_UA	Google Analytics: Universal	promotionClick_ce	Unfiled items	a year ago		

3. **Categorizing Events:** Once the events were identified, the event category was renamed as the event name for the events which were accurate and useful. We also created a detailed [fresh schema](#) too as the earlier tracking was not working properly.

1	Page url	Scenario	Screenshot	Event Name	Event Category	Event Action	{{Custom Dimension}}
2	Home	When user clicks arrow on top banner slider	<a href="https://prnt.sc/2x8YmL8uLj">https://prnt.sc/2x8YmL8uLj</a>	home_page	top_banner	slide	
3		When user clicks on top banner click	<a href="https://prnt.sc/SR9Yag9ZzRbH">https://prnt.sc/SR9Yag9ZzRbH</a>		top_banner_click	{{click_url}}	
4		When user clicks on any item in top section. eg Baby Care	<a href="https://prnt.sc/iAY5ju-LiSk">https://prnt.sc/iAY5ju-LiSk</a>		{{(top_section_heading}}	{{(item_click}}	
5		When user click on any category/brand	<a href="https://prnt.sc/8Qh5sQ99paLj">https://prnt.sc/8Qh5sQ99paLj</a>		{{(heading}}	{{(click_url}}	
6	All Categories Page	When user click arrow on any category/brand Slider	<a href="https://prnt.sc/M_HctU90REKW">https://prnt.sc/M_HctU90REKW</a>	all_categories	{{(heading}}	Slide	
7		When user click on any link in our other stores	<a href="https://prnt.sc/Uw5Dc-dW3wn">https://prnt.sc/Uw5Dc-dW3wn</a>		{{(heading}}	{{(click_url}}	
8		When user clicks on Any Link	<a href="https://prnt.sc/b40BE60XX7ud">https://prnt.sc/b40BE60XX7ud</a>		{{(category)}}   {{(sub_category}}	N/A	
9	Category Page	When user clicks on See More	<a href="https://prnt.sc/Ttwbe9AZLb">https://prnt.sc/Ttwbe9AZLb</a>	category_page	see_more   top	N/A	category_number : {{(category_number)}} category_name : {{(category_name}}
12		When user clicks on Any Sub category link	<a href="https://prnt.sc/Z4nMUG-h6rV">https://prnt.sc/Z4nMUG-h6rV</a>		sub_category_click	{{(click_url}}	category_number : {{(category_number)}} category_name : {{(category_name}}
13		When user clicks on Sort By	<a href="https://prnt.sc/D44W6Pe_gt_f">https://prnt.sc/D44W6Pe_gt_f</a>		sort_by   top	{{(option_selected}}	category_number : {{(category_number)}} category_name : {{(category_name}}
14		When user clicks on Page Number	<a href="https://prnt.sc/2k0NaG3Ld_f">https://prnt.sc/2k0NaG3Ld_f</a>		page_number   top	{{(page_number_selected}}	category_number : {{(category_number)}} category_name : {{(category_name}}
15		When user clicks on Any Product	<a href="https://prnt.sc/PYccDcz3Xa94">https://prnt.sc/PYccDcz3Xa94</a>		product_click	N/A	category_number : {{(category_number)}} category_name : {{(category_name)}} product_sku : {{(product_sku)}} product_name : {{(product_name}}
16		When user clicks on Add To Cart below Product Image	<a href="https://prnt.sc/7GXK-1cPpXm">https://prnt.sc/7GXK-1cPpXm</a>		add_2_cart	N/A	category_number : {{(category_number)}} category_name : {{(category_name)}} product_sku : {{(product_sku)}} product_name : {{(product_name}}

4. **Creating GA4 Tags:** The next step was to create GA4 tags in GTM to track the events that were being migrated. This involved mapping the UA events to the appropriate GA4 parameters and custom events dimension and metric name.

The image shows the configuration of a Google Analytics 4 (GA4) Event tag in Google Tag Manager. The tag is named "GA4\_Event - Clic vers Instagram".

- Track Type:** Event
- Category:** social
- Action:** instagram
- Label:** {{Page - Article Name}}
- Google Analytics Settings:** {{GA - Settings}}
- Configuration Tag:** GA4\_Configuration
- Event Name:** social
- Event Parameters:**
  - Parameter Name: event\_action, Value: instagram
  - Parameter Name: event\_label, Value: {{Page - Article Name}}
- Triggering:**
  - Firing Triggers: Clic vers IG (Just Links)

Tag Name	Platform	Trigger	Category	Created
GAv4 - Item View	Google Analytics: GA4 Event	Event - Product Detail View	Google Analytics - GAv4	5 months ago
GAv4 - Remove From Cart	Google Analytics: GA4 Event	EEC - Remove from Cart - Event	Google Analytics - GAv4	5 months ago
GAv4 - View Cart	Google Analytics: GA4 Event	EEC - Checkout Basket - Event	Google Analytics - GAv4	5 months ago
GAv4 - Begin Checkout	Google Analytics: GA4 Event	EEC - Checkout - Event	Google Analytics - GAv4	5 months ago
GAv4 - Add to Cart	Google Analytics: GA4 Event	EEC - Add to Cart - Event	Google Analytics - GAv4	5 months ago
GAv4 - Event OptiMonk	Google Analytics: GA4 Event	gaOptiMonkRule	Google Analytics - GAv4	5 months ago
GAv4 - Event LiveChat	Google Analytics: GA4 Event	gaLiveChatRule	Google Analytics - GAv4	5 months ago
also_available_as_template	Google Analytics: GA4 Event	also_available_as	Unfiled items	5 months ago
new_common_tag	Google Analytics: GA4 Event	new_custom_event	Unfiled items	5 months ago
GA_V4_get_client_id	Google Analytics: GA4 Event	gtagApiGetCe	Unfiled items	5 months ago
view_promotion_GA4_Event	Google Analytics: GA4 Event	promotionImpression_ce	Ecommerce	5 months ago
add_shipping_info_GA4_Event	Google Analytics: GA4 Event	GA4_add_shipping_info_ce	Ecommerce	5 months ago
remove_from_cart_GA4_Event	Google Analytics: GA4 Event	removeFromCart_ce	Ecommerce	5 months ago

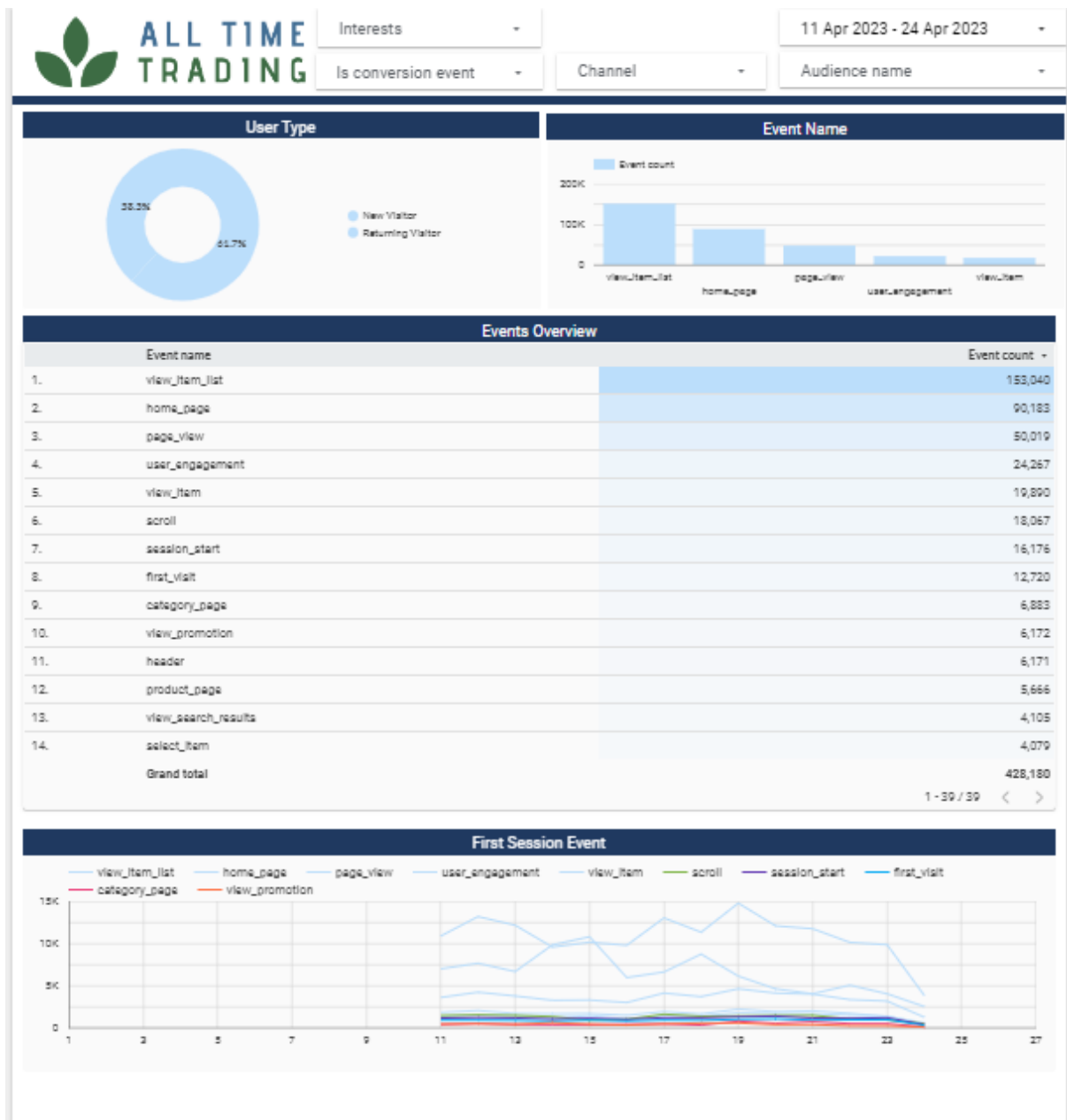
**5. Implementing Custom Tracking:** After migrating the existing tracking features. Additionally, the client implemented Client ID and User ID tracking in GA4 using GTM, enabling tracking of user behavior across devices and sessions and tracking of individual user behavior, even when the user is not signed in, providing a more comprehensive understanding of user behavior.

Property	Event Name	Event Type	Event Category	Created
Allimetrading - Live GA4 (314847031)	eventAction	Event	eventAction	9 Sept 2022
	eventCategory	Event	eventCategory	9 Sept 2022
	eventLabel	Event	eventLabel	9 Sept 2022
	login_status	Event	login_status	16 Nov 2022
	product_name	Event	product_name	28 Oct 2022
	product_sku	Event	product_sku	28 Oct 2022
	user_client_id	User	custom_client_id	28 Oct 2022
	user_id_event	Event	user_id_event	16 Nov 2022
	user_login_status	User	user_login_status	16 Nov 2022
	warehouse_number	Event	warehouse_number	28 Oct 2022

**6. Testing and Verification:** Once all the tags and triggers were set up, testing and verification were conducted to ensure that the data was being collected correctly in GA4. The Google Analytics debugger was used to check that the data was being sent correctly from the

website to GA4. It was also important to check that the data was being displayed correctly in the GA4 reporting interface.

- 7. Dashboard Creation:** We created an interactive dashboard to visualize and analyze data for the client. The dashboard provided an easy-to-use interface for stakeholders to make data-driven decisions and allowed for customization. By leveraging the data collected in GA4 through the dashboard, the client was able to make more informed decisions and improve website performance.



- 8. Rollout and Monitoring:** After testing and verification, the GA4 implementation was rolled out to the live website. It was closely

monitored to ensure that the data collected was accurate and reliable. Adjustments to the tags and triggers in GTM were made if necessary to improve data accuracy.

## **Results:**

- Increased efficiency and ease of tracking events using GTM.
- A smoother migration process without any data loss.
- At the end, it helped our client by reducing their manual effort by 30%.