

CASE STUDY

GA4 Enhanced Ecommerce Implementation
Using GTM and Shopify Integration

Created

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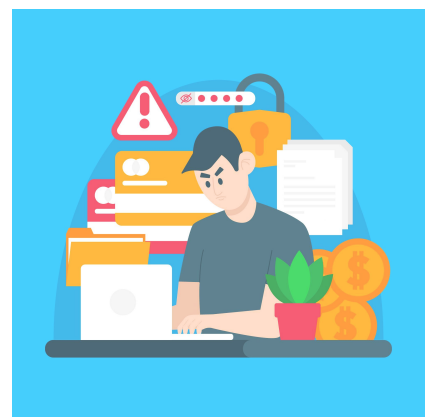
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Shopify and GA4 Enhanced Ecommerce Tracking



Challenge

A Shopify-powered e-commerce business in the East was facing challenges with Universal Analytics (UA) in capturing purchase data reliably. The client was unable to track data for resale products put on the post-purchase page and upsell products bought through third-party interfaces. Moreover, 90% of the data couldn't be tracked before deployment, making it difficult to match revenue data. Till date Shopify is

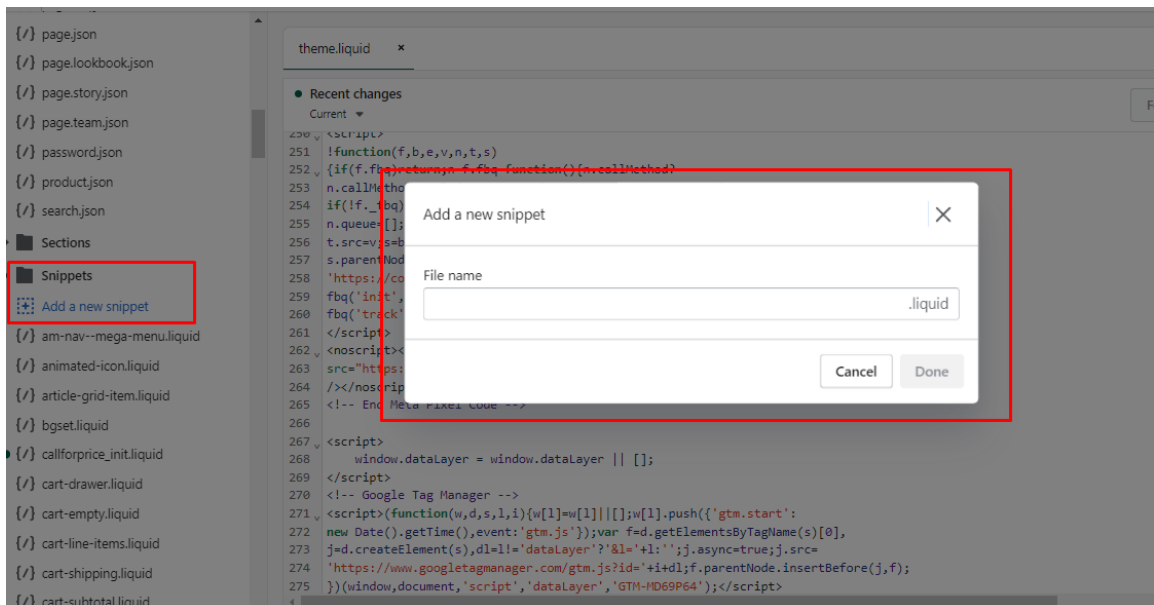


not supporting post-purchases tracking and all product level parameters tracking via default integration to GA4.

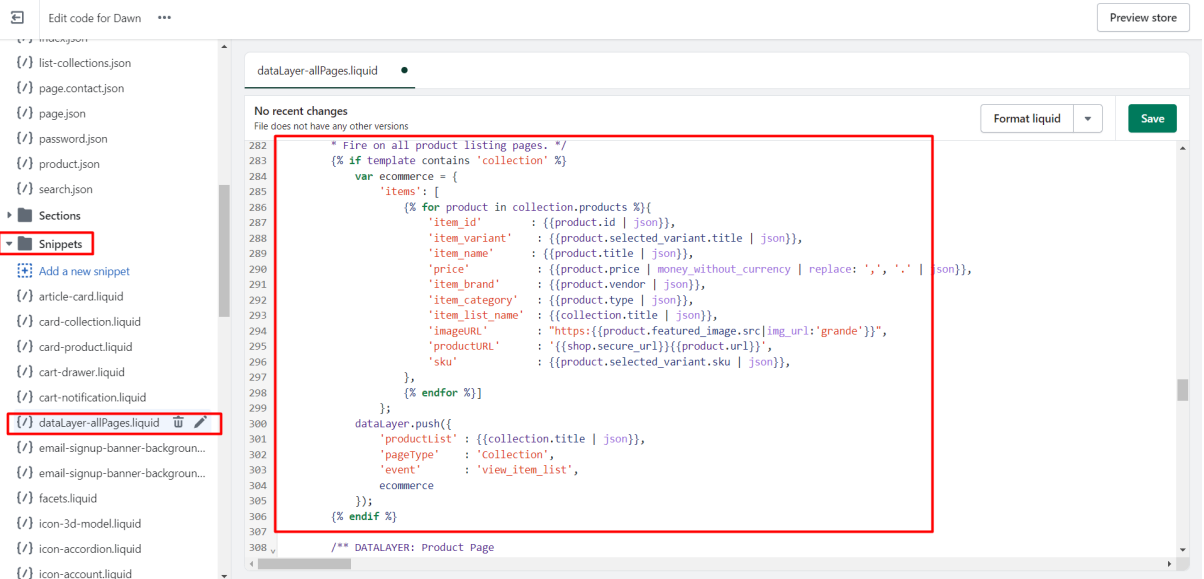


Solution Approach

AnalyticsLiv's cutting-edge approach was to develop a custom library that integrates seamlessly with Shopify's liquid files. The custom library includes Enhanced Ecommerce dataLayers and snippets to fetch product values dynamically on Shopify product pages, providing the client with more accurate purchase tracking and enabling in-depth data analysis.



AnalyticsLiv solved the client's problem by implementing a custom solution using Google Tag Manager, allowing the client to measure actual product purchase hits on the post-purchase page.



```

282 * Fire on all product listing pages. */
283 {% if template contains 'collection' %}
284   var ecommerce = {
285     'items': [
286       {% for product in collection.products %}
287         'item_id'      : {{product.id | json}},
288         'item_variant' : {{product.selected_variant.title | json}},
289         'item_name'    : {{product.title | json}},
290         'price'        : {{product.price | money_without_currency | replace: ',', '.' | json}},
291         'item_brand'   : {{product.vendor | json}},
292         'item_category': {{product.type | json}},
293         'item_list_name': {{collection.title | json}},
294         'imageURL'     : "https:{{product.featured_image.src|img_url:'grande'}}",
295         'productURL'  : '{{shop.secure_url}}({{product.url}})',
296         'sku'          : {{product.selected_variant.sku | json}},
297       },
298       {% endfor %}
299     ];
300     datalayer.push({
301       'productList' : {{collection.title | json}},
302       'pageType'    : 'Collection',
303       'event'       : 'view_item_list',
304       'ecommerce'   :
305     });
306   {% endif %}
307
308 /** DATALAYER: Product Page
  
```

The implemented solution also included a special feature for reselling products on the post-purchase and thank-you pages. Moreover, it ensured that only one item was set on fire for each payment, effectively eliminating the need to worry about duplicate purchases.

Order status page ⓘ

Add tracking scripts and other customizations.

Additional scripts

```

<!-- Google Tag Manager -->
<script>(function(w,d,s,l,i){w[l]=w[l]||[];w[l].push({'gtm.start':
new Date().getTime(),event:'gtm.js'});var f=d.getElementsByTagName(s)[0],
j=d.createElement(s),dl=!l?'dataLayer':'&l='+l+';j.async=true;j.src=
'https://www.googletagmanager.com/gtm.js?id='+i+dl;f.parentNode.insertBefore(j,f);
  
```

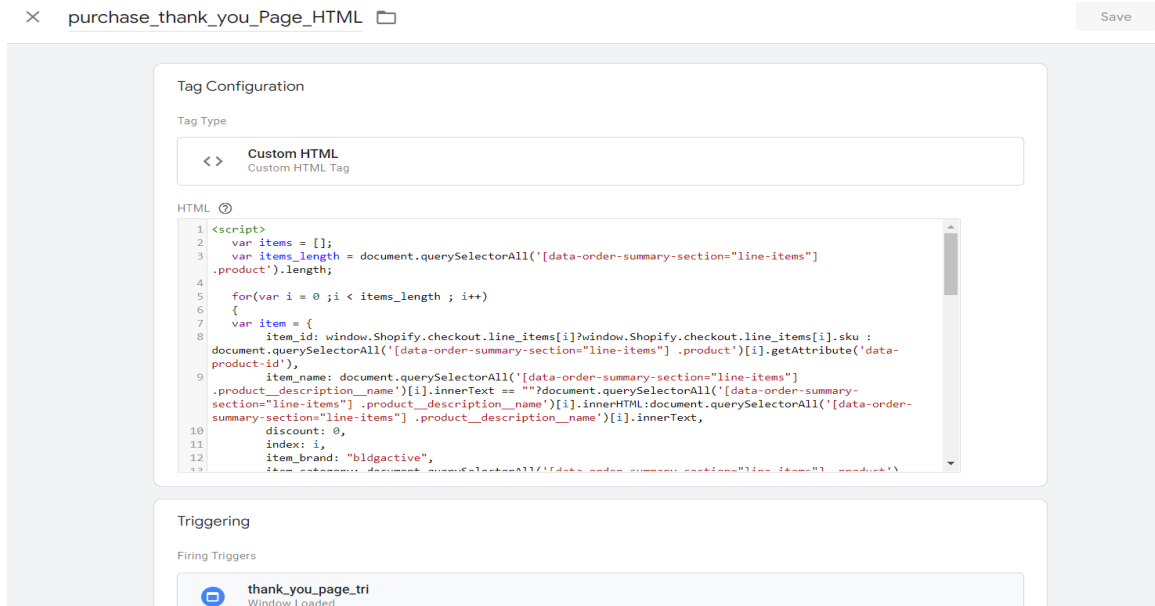
Post-purchase page ⓘ

Add tracking scripts for post-purchase events.

Additional scripts

```

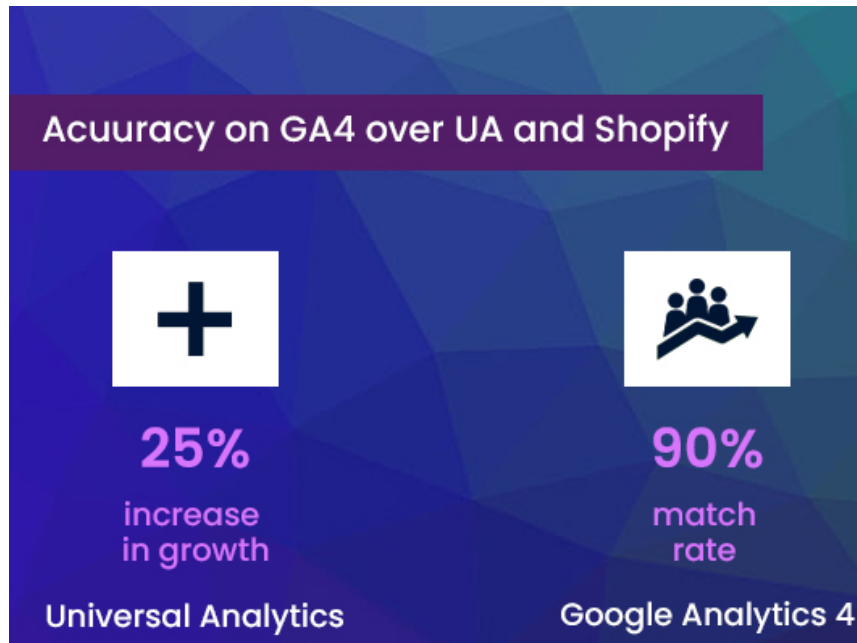
new Date().getTime(),event:'gtm.js'});var f=d.getElementsByTagName(s)[0],
j=d.createElement(s),dl=!l?'dataLayer':'&l='+l+';j.async=true;j.src=
'https://www.googletagmanager.com/gtm.js?id='+i+dl;f.parentNode.insertBefore(j,f);
})(window,document,'script','dataLayer','GTM-WZP694R');</script>
<!-- End Google Tag Manager -->
  
```



AnalyticsLiv utilized a combination of GTM and our own custom code integration to manage product purchases and enable reselling on the post-purchase page. To prevent duplication of transaction details and track missing transactions in Google Analytics 4, the solution separated transaction and product details before passing them into a single transaction. Additionally, the solution included a parameter to validate the product category, ensuring that only real products and reselling products of the post-purchase and thank-you pages were tracked.

Result

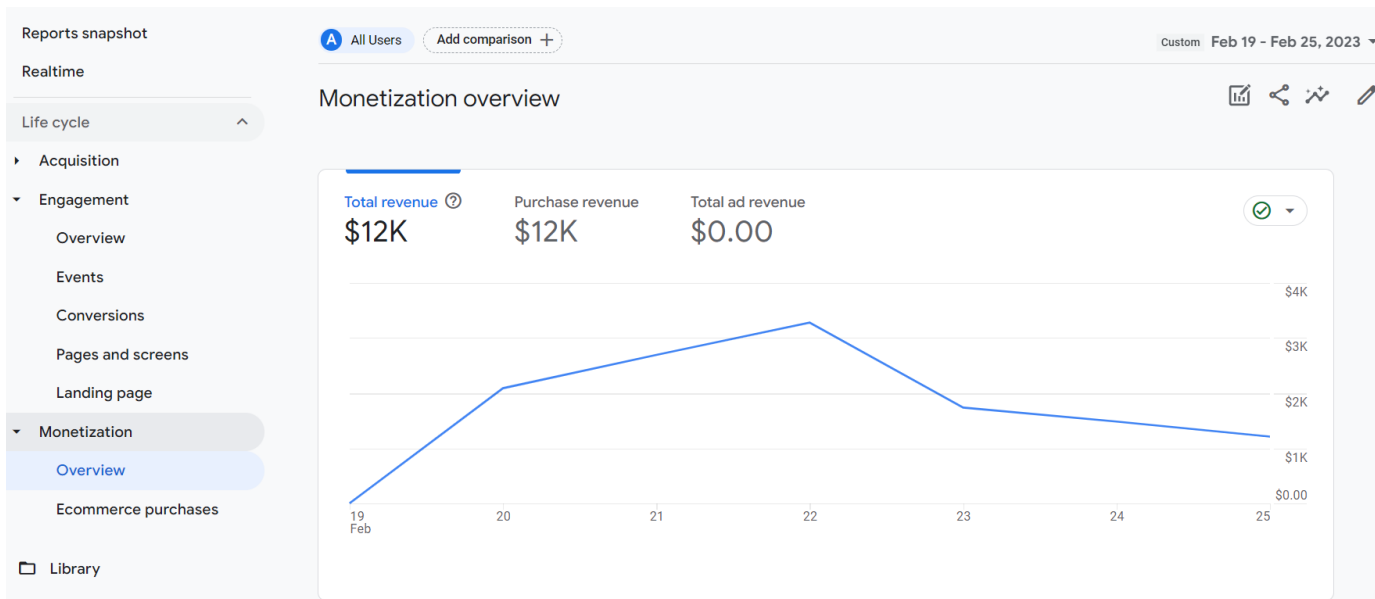
- We successfully implemented 90% of purchase events, with the exception of UA, which is at 70%.
- All GA4 enhanced ecommerce events and Shopify parameters are being successfully sent to GA4, with the ability to customise values according to the client's requirements. GTM is also being used to provide custom solutions from Shopify to GA4.



Month	UA	GA4	Description
January	70%	0%	Before implementation
February	70%	90%	After our custom solution implementation



[screenshot of the purchase in shopify date range of feb 19 to feb 25]



[screenshot of the purchase in google Analytics date range of feb 19 to feb 25]

Platforms

