

# Webinar Transcript

## Cracking the Code of GA4 E-Commerce Tracking

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### **Jim Brophy**

Welcome, everyone, and good morning.

Thank you for joining us for Cracking the Code of GA4 E-Commerce Tracking. I'm your host, Jim Brophy, group director of digital here at Northwoods.

Let's face it, getting e-commerce tracking right in GA4, is just plain hard. The majority of e-commerce sites don't have it set up correctly, and struggle to understand why.

But fear not, today, our resident Google Analytics and Google Tag Manager expert, Fred Pike, is on hand to break down the GA4 e-commerce model, and show you how to set up e-commerce tracking like a pro.

Fred will also cover the most important actions to track in GA4, best practices for e-commerce tracking, and the most common issues businesses run into, as well as how to test your GA4 installation.

As I mentioned, your trail guide this morning is Fred Pike. Fred is a world-renowned expert in Google Analytics, Google Tag Manager, and all things Google. A sought after speaker and educator, Fred has led courses at industry leading conferences, events, and organizations including Conversion Excel, Measure Summit, and Super Week.

Fred is passionate about finding the best ways to drive website traffic, and understanding user interactions. He's also an accomplished pit musician and coffee barista, and is the proud owner of beloved Pekingese, Xuxa.

If you have questions during the presentation, please use the Q&A feature at the bottom of your screen to submit your questions at any time, and we'll answer as many as we can during our Q&A session immediately following the presentation.

Also, please feel free to use chat to connect with our team and other attendees, or share real-time feedback with Fred using the reactions button in the bottom toolbar.

We will also address questions we receive from folks when registering for today's class. Additionally, we'll also be sending out a recording of today's webinar in the next few days, so you'll be able to re-watch it, or share it with your colleagues.

So with those housekeeping items out of the way, I'm going to go ahead and turn things over to Fred.



**Fred Pike**

Thank you, Jim. Sorry about messing up the important clicker, and making sure that the presentation is moving forward properly. So let's move on here, and hope that I can do a better job of running this presentation.

So one of the things that I love in my job, is working with the e-commerce sites. And we tend to do a fair amount of work with e-commerce sites, particularly larger ones.

And usually on the e-commerce side itself, in that platform, things look pretty good. It's often working well, it's flowing smoothly.

We have the sun shining, and our clients may think, "Yeah, I can improve things a little bit," But on the platform side itself, things are often pretty good.

But when you try to get that e-commerce information from that platform, into GA4, it's often a different story. And this is where we often get called in.

People are saying, "I don't know what's happening, why I'm not integrating with GA4. What's going on with that? It just is not giving me the information that I'm expecting to see.

It doesn't seem accurate. I don't trust the numbers." And so it can be a fricking nightmare to get that nice e-commerce information from your platform into GA4.

And why is that? At one level, it's kind of hard to understand, because the GA4 e-commerce model is actually conceptually, very easy.

And I think at the end of this, you're going to understand how easy it is at some level. But implementing it is really hard.

There are nuances, there are details, there's legacy stuff left over from Universal Analytics. It can be really, really tough to implement correctly.

And even people, even like development staff on companies that work on e-commerce platforms, often don't understand this as well as they should.

So where I come in, where we come in often, is to help people understand how to get their e-commerce platform stuff working in GA4. And what I'm going to try to do today is bring some light into that.

As you leave here today, I want to make sure that you understand the GA4 e-commerce model. I want to make sure you understand some of the challenges, and we're going to spend some time at the end, maybe getting a little bit more technical, getting a little bit more nerdy than you might expect in a webinar like this.

But in terms of testing and verifying installations, it's hard not to get down in the dirt a little bit. And so I'm going to try to... I mean, I'm going to try to not get us too dirty, but hopefully, you'll get some understanding of what is this whole thing, how come it's so hard to get e-commerce working properly in GA4.

So with that prologue, today's journey, we're going to start off with the GA4 e-commerce model, and this is really the heart of what I'm hoping we get across.



It's really hard to see if things are working properly if you don't understand that e-commerce model. We're going to talk about some of the most important events that come out of that e-commerce model, and also maybe some of the less important events.

I'm going to do a really, really brief overview of setting up e-commerce. Honestly, setting up e-commerce in detail could be a 40-hour course.

We're not going to do that, maybe that'll be next week. But today, we're just going to do kind of a brief overview touching on some of the e-commerce stuff. I'm going to run through some common issues in this section where I talk about some of the tools to test and verify your installation.

And the cool thing about these tools, is that it's not just verifying your own installation. The way you kind of get good at this, the way you are able to verify your own installation, is if you're curious with every other e-commerce site that you run into on the web.

And if you run these tools and look at, "Oh, how are they doing this? What are they doing? What are some of the things that they're doing well or not," that's going to train your eye, that's going to train you to look at how to do good tracking for GA4, e-commerce tracking in GA4.

So at that point, I have a couple of websites I'm going to go through. But I may ask for an audience participation one, if someone wants to throw out their e-commerce site that you want me to look at, if we have time, I'd do that too.

It'd be kind of fun to look at one from the audience, and run through some of the verification tools. So let's get started.

We already are started, but let's talk about the GA4 e-commerce model. Now the GA4 e-commerce model, let me get over to it.

I have this called up already, and if you Google GA4 e-commerce events, you're going to get to this website, and we can provide the link in our follow-up.

But the scary thing, the thing that kind of throws people off this originally, or initially, is that this is in the developers.

google. com. A lot of times when you're doing searching on Google topics, you'll end up at support. google. com, which tends to be good information in general, but not as technical.

But there isn't really a support. google. com version of the e-commerce. It really is in the developer's guide. Then you don't have to be a developer to understand it, but that's where it is.

And so I don't want you to get thrown off. It's like, "Oh, I'm in marketing, I don't want to be a developer." You don't have to be, but you do need to understand the model. So starting off, there are two different ways that you can create the model to send information to GA4, either through Google Tag or Google Tag Manager.

They're very, very similar. I can run through some of the nuances between those two models if you want at some point in the question and answer, but I'm not going to do that now, I'm just going to go through the Tag Manager version, which is essentially, not essentially, but very, very similar to the Google Tag version.



So the GA4 e-commerce model at its heart, has something called the items array, the items array. So if you've been working with e-commerce, you may have heard of that, and it may sound a little bit frightening, but it's really not.

Conceptually, again, it's very easy. In this items array, we have two items, and an array can be one or more items, that's what an array means in programmers speak.

And we have one item that's in this one set of brackets, and we have a second item here. So in our items array, we have right here, two different items, and we're talking about the product that we're selling, or that we're viewing, or that we're purchasing, or whatever.

It's going to have either the item ID or the item name. I see a question, oh, there go. we It's going to have either the item ID or the item name.

And in the items array, for each item in that array, you have to use either the ID or the name, that's required. If you don't have those, then your items array is not going to work.

After that, you really can put in pretty much whatever you want. You can use whatever the parameters, or these items of information that you want, you don't have to use them all, but use as many as makes sense in your scenario.

For example, maybe there's a coupon on this item with a discount, the index we'll talk about a little bit later, but you might include the brand or the category.

You can have up to five different categories that you break it down. And in the categories, typically, they go from great big categories, down to smaller. In this example, apparel, adult, shirts, crews, short sleeves, you can see you're going further down the line.

And I'm sure you're familiar with this with any clothing, e-commerce site that you've been out on, you're shopping for men's, or whatever, going down. And then we'll talk about these two a little bit later too.

You can have a variant, you can have a location ID. And now the location ID is a little bit interesting, and it brings up kind of a bigger point, in that here, this developer's guide is telling you what the parameters are, like item brand, but it doesn't really explain what those things are.

And this comes out more at the location ID than any place else. What the heck is that? How are you supposed to interpret that? There's a different set of, a different developer's google.

com support site, or page, on the GA4 recommended events, and this has information about those item parameters, including a description of them.

Now, I don't know why they didn't put the description in the other place, but they didn't. If you want to find the description, it's right here. As I said, item ID, or item name is required, one of those.

And if we look at the location ID, the physical location associated with the item, the Google place ID. All right, you never would've known that from this item array, but it's as described here.

Most of the parameters are fairly self-explanatory. Now one thing that I will say, that Google really wants you to stick to their procedure for e-commerce.



They want you to use the e-commerce model. It's pretty strict, but I will say that when Google can, they have accommodated some minor variations.

For example, they're saying that the price should be put in as a number, and the same with quantity. Now, in fact, if you put that in as a string, as if it were text with a double quote around it, the Google e-commerce model is actually smart enough to recognize that a one with a double quote around it is the same thing as a number one without the double quotes, same with the quantity.

There's a tiny bit of flexibility with the model, but not much. The other place that there is a tiny bit of flexibility, which really surprised me. I didn't know this until recently, but if your developers just call this ID and name, that'll work also.

And I was shocked when I discovered that that worked, but it does. Regardless, even though there is some variation to how Google let's use e-commerce the side, just use the e-commerce model as defined here.

So things are strings or numbers, and that's how you're going to fill out the items array. So one more thing on here.

If there's some information, additional information that you want, that is not one of the standard parameters here, you can actually add that in.

In the free version of GA4, you can add up to 10 custom dimensions, 10 custom parameters in here, to track what's significant, or what's important about your specific e-commerce implementation.

Feel free to expand on this, but when possible, use the parameters that are already in the model. And this brings up another interesting point, and you may have heard about this, you might have been confused about this in the GA4 UI, or if you're running GA4 Explorations.

There are different scopes around items, or parameters, within GA4. There can be user-scoped, which is typically something that applies to a user regardless of how many times they log in.

If I log into a website five different times, and it identifies me, that is a user-scoped that knows that it's Fred. There can be session-scoped, which is just things that happen within the session that I'm on the website.

There can be events scope, which is smaller, down to just one event, like a page view, and an event-scoped item on a page view would be like the page title for example.

And then there's item-scoped. And as you can probably guess, if you weren't familiar with that, an item-scoped parameter is anything that's within the items array, whether it's one of these standard parameters here, or it's a parameter that you add, it's one of your custom parameters.

So anytime you hear somebody talking about item-scoped, what they're talking about is something that is actually from the items array.

Okay, so I hopefully beat this to death. This is the heart of the GA4 e-commerce model. Now what do you add to that? Obviously, you're never going to send just an items array.



What you're going to do is add other things around that. For example, you're going to view item details. So this is when I'm on a product detail page, for example.

And what I'm doing is sending the items array, I'm looking at one specific item, but I'm also going to create, going to send along some additional information.

How much is the value of this item that I'm looking at, and what's the currency? And one thing that when people move from Universal Analytics to GA4, in Universal Analytics we did require, or Google did require value.

In GA4, they added the requirement of currency. You have to pass that along. And if you don't pass that along, your information won't get sent properly, won't be read properly as an e-commerce hit in GA4.

So that's one of the common issues that really trip people up a lot during the transition to GA4. Most people are aware of that now, but that was a common issue before.

Another common issue that often developers don't know what to do with, is this example with the discount.

Let's say that you have a discount for your product, this price, what is this price? Is this the price pre-discount or post-discount?

And that is really unclear in most of the Google documentation, but in fact, this price is post-discount. So the actual price of this item is \$ 12 .23.

Here's a discount of \$ 2. 22, and the price here is panel one. So the real price, the non-discount price is \$12. 23.

And then the quantity is three, so the value here of what we're looking at is \$ 30 .03. So again, another little nuance that can really trip up a development staff, or you when you're looking at the view item list, or the view item.

So that's something I just wanted to point out here. And man, there's been a lot of confusion around this, with many of the dev teams that I work with.

Okay, so there's one of the e-commerce events that is commonly used in e-commerce, a view item. And then of course, we have add to cart, that's something that hopefully is going to happen a lot.

We have, you can see, it looks just like the view item. We have the currency and the value, and we have an items array. Again, in this case, just one, but it looks like what we've looked at before.

And then finally, we begin checkout. At the checkout level, you might have a coupon that applies to the whole basket. If you buy over \$ 150, you get 10% off, or something like that, that would apply at the basket level.

And then finally, the purchase, where you actually have successfully completed a purchase. And now we add a little bit more information, we add a transaction ID, so you can tie this purchase in to your e-commerce store.



And we add the tax, shipping, again, the currency, we always have that. And here you can see that we bought two different items in our purchase.

This doesn't seem that hard, right? I mean, there were a few details, but I think it's conceptually, pretty simple.

It makes sense. The items array is a heart. Everything that you're going to sell or look at, or whatever, is going to be in that items array, and then we add events around that.

I hope you get a little bit comfortable with this. Now let's continue on here.

We talked about the developer's guide and where these things are explained a little bit further. Now let's just review the requirements.

You have to have currency, you have to have value, and you have to have an items array. So you need those three things to send a successful e-commerce hit to GA4, for GA4 to recognize, "Oh, this is e-commerce, I'm going to put it in the right bucket." So you need those three things.

In the items array, you need either the item ID or the item name. And as I mentioned, you can actually use ID or name, but I would still go with item ID or name.

And the item price is after the discount. So those are the requirements if you're going to use the GA4 e-commerce model, if you're going to have things being sent to GA4.

We talked about some of the events, like the add to cart, et cetera, but let's talk about the most important events. And you're probably going to have a sense for this, which are the events that are most important of all those things in the GA4 e-commerce?

You'll have a sense, but Google is also guiding us in this, and telling us these are the events that are important. And where they do that is within GA4, in two different places, in two different reports in the monetization, either the purchase journey or the checkout journey.

So we're going to look at those two, and then we're going to also look at purchases here. So let's go over to Google Analytics.

And where that information comes up is in the monetization report. And the monetization report is going to show all sources of revenue.

Typically, that's going to be your e-commerce purchases, but if you're running an app and you're selling things within the app, that would show in monetization as well.

If you're running display ads on your website, and you're getting revenue from that, that would show up in monetization as well. In this particular example, this is from the Google Merchandise Shop, so they're only selling Google merchandise, T-shirts, little drink things, all types of things that are Google-branded.

So let's look at some of the events that Google thinks are important, and that's in these two different journeys.

So we have the purchase journey, which is how does a person go from arriving on the website, to actually purchasing? And the way Google defines that, which I think actually makes sense, is there's a session start.





I've hit the website, I'm now on the website, and I'm doing something on the website. The next thing they look at in the funnel, is did I look at a product.

View product, which is the view underscore item event, that's what the view product is. So in this case, of everybody that hit the website, 32% of the people actually viewed a product.

Of those people, 23% added a product to the cart. Of the people who added the product to the cart, 31% began the checkout.

And of those people, 46% actually purchased. So I'm sure you've seen these types of funnels before, but I like this, I like the funnel in general.

And I also like that Google is saying, "Hey, these are the events you want to focus on." And one of the things that Google did recently, like within the last month, which I really appreciate, is that they made this a toggle switch from a closed funnel to an open funnel.

And what does that mean? The closed funnel means you have to, the user journey has to hit every single step along here.

The open funnel means they can come in at any point, they don't have to go step-by-step. And most of the time, you think, "Okay, close funnel will work." But I will tell you I'm working with a very large e-commerce site, and they do not have the view product initiated yet.

They're not tracking that in GA4. It's something we're working on. And that meant that this funnel was totally ineffective for them, because when it was closed, the funnel broke right after the session start.

With the open funnel, they can now look at the funnel from the add to cart, to the begin checkout, to the purchase. So that's one of the funnels that we have in GA4 that's telling us which events are important.

And the next one is the checkout journey, and that starts with the begin checkout, and then it goes through the two different steps before you actually get to the end, add shipping, add payment, and then purchase.

And this one, when it was a closed funnel, this one was often a problem, this funnel, because if you're selling a digital product somehow, that's not going to be shipped, Google was requiring you to have the add shipping event in there.

And it wasn't being shipped to a physical address, so when it was a closed funnel, this was it, an often broken funnel for a lot of websites.

Now again, it's open, so you can look at it. Here's Google's interpretation of the important events, the begin checkout, add shipping, add payment, and purchase.

I think we'd all agree with purchase, and I think these steps make sense as well. And then of course, the view product, the add to cart, begin checkout, and purchase, so that makes sense.

Now let's look at the actual purchases, and let's start with the overview. So we can see, oh, I'm looking at a year's worth of data. We can see that we have total revenue of \$ 2 million and purchase revenue of \$ 2 million.





Those are identical because this is only selling one source, you are only getting one source of revenue here. You don't have the display ads, you don't have in-app purchases, so these are going to be the same.

Now let's look at the e-commerce purchases, and I want you to look at this carefully. Actually, let's just do the last 28 days.

So in the chat, let me know if you see anything unusual here.

I hear everybody typing furiously, or maybe not.

But I will give you a hint, there is a spike, yep. Yeah, this spike is something. Items viewed by item name over time, yeah, that would be curious. Now this is really low, so that seems...

Items viewed by item name. So on the 17th of June, only two items reviewed by name. Boy, that seems weird, doesn't it?

But look at the numbers down here, 38 items viewed. Yeah, lots of items added to the cart but not purchased, that is it. 38 items viewed and 4.

5 trillion items added to the cart, that feels to me, like that forest fire I was talking about. There is something massively broken here, right?

And of that 4. 5 trillion, only 1, 088 items were purchased. So let's say that the items added to cart is broken, we know that. It can't possibly be 4.

5 trillion items added to the cart, but 38 items viewed and 1, 088 items purchased, that doesn't make sense either. And of those 1, 088 items purchased, there's no revenue with them.

There's obviously, a forest fire going on here. There is some really bad tracking set up here. And while the purchase journey appears accurate, and it appears accurate because it's looking at user count.

The e-commerce purchases, which looks at the actual items, is totally hosed. Now if we look at the things that we can look at here, the pull-down list, what does this look like?

You've seen this before, this is everything from the items array. So everything we're looking at here, in this particular E-commerce purchases report, is item-scoped parameters, or dimensions.

That's why I made a big point of talking about item scope before, we can see all of the item scope here. And if we look at category, there's some things that are not set, and those are all the ones that were purchased.

We know there's things broken, all right? I'm not picking on Google. I like that they have a GA4 property that they're willing to share with the world.

And more than anything else, it's an example of a property that is really not set up well, but they're not trying to have it be an exemplar of great behavior. They're trying to at least share some information on it.

Going back to our website, or to our presentation, what that points out, is that GA4, regardless of how good your setup is, GA4 is not the source of truth for your e-commerce data.



The source of truth for your e-commerce data is your e-commerce platform. That's where the actual purchases, the actual add to carts, all those things are going to be accurate in there. GA4 is just going to be a representation.

All right, so what events aren't important? We talked about the ones that are important. For a long time, until March of last year, Shopify didn't have support for GA4.

And then ultimately, they added, I think it was March of last year, but it was way after GA4 became prevalent. And what they did, was they said, "All right, if you set up GA4 in Shopify, these are the events that are going to be automatically collected," and in terms of e-commerce, it's view item, add to cart, begin checkout, add payment, and purchase.

Okay, that seems good, but the ones that are missing are view item lists. I would agree, yeah, that's probably not the most important. The remove from cart is one that I think is really interesting that it's not listed.

It's not one of my favorite metrics, but I think it's an interesting one to look at. And in the standard Shopify native integration with GA4, that's not one of the events that is supported, which just seems a little strange to me.

And then finally, add shipping info isn't either, and that seems really strange to me. Now obviously, there are lots of different ways that you can implement Shopify, or integrate Shopify with GA4.

If you're not using the native integration, you might get these three events in whatever you're using. But we already know that add shipping info is one of the events that Google thinks it's important, because it's in that purchase journey.

It's one of the four things in that purchase journey that we just saw. So I would say I would agree with Shopify, that view, oops, that view item list is really not the most important one, and I know very, very few people who really pay attention to that.

And then removed from cart is one that I would quibble with, and add shipping, I would definitely quibble with. So let's do this very, very quick overview about setting up GA4 e-commerce.

And just to get a sense, I'm curious what you're using, all of you out in the audience, what you're using. So we have a quick poll here.

Are you using WooCommerce, are you using Shopify? Are you using a custom-built e-commerce platform, or are you doing something else?

All right, so interesting, so 29% are using WooCommerce, 43% are using Shopify, 14% are custom, and 14% other.

Okay, good. And that kind of corresponds to what we see out in the world. So let's talk extremely briefly on some e-commerce options here.

If you're using WooCommerce in WordPress, then by far, I mean hands down, no question about it, the best plugin is GTM4WP.

It had great support for Universal Analytics. It's got great support for GA4. It has a lot of other functions built into it. It's got a really knowledgeable person at the helm.



It may even be a one-person company, I'm not sure, but he's really active on social media and helping people on Facebook, and stuff like that. So if you're in WooCommerce in WordPress, that is the way to do it, absolutely.

Shopify, there is a whole lot more options here, I think. One that I've used before, is Analyzify, I never know how to pronounce that, Analyzify, whatever, so that's been a pretty good one.

I know some people use Magento. One of our clients is using LittleData. There's a native GA4 integration, and there's a lot more. And I will say, and I'm not going to spend any time at all on going further with these, but Shopify can be tricky.

If you're running Shopify, you probably know that, and so getting a really good plugin is going to make your life so much easier. Now that's a small portion of the world actually, because there are custom-built e-commerce, or e-commerce-like platforms, that we run into all the time, and this is where much of our work on e-commerce comes in.

And if it's e-commerce, like it might be something like conference registrations. It's not a standard e-commerce implementation, but you obviously want the purchase.

You want some of the information along that purchase journey. Ticket sales for plays, for musicals, for musical events, or whatever, that's another one.

Choosing a seat is not your typical e-commerce experiment, or yeah, experience, so that's one that we have run into a lot.

And we've also worked on both sides of the scale, with either very small internally-developed e-commerce platforms, or very large.

Some of our clients have one person who's developed this e-commerce platform, some of our other clients have a large dev team that have developed it as well. And this is where we do spend more time helping these types of companies get into the GA4 e-commerce model.

And as we work with the development team to implement it, and what can happen, if they implement it correctly, it can be a really easy integration.

Now that doesn't happen all the time, but if they follow this model, the e-commerce model, and if they're using the actual event names that Google is recommending, then in Google Tag Manager, which these sites are typically running, it is a super easy implementation.

And it became much easier August of last year, when Google made some changes to how it dealt with e-commerce data and GTM.

Let me show you, if they're using the standard e-commerce model in Google Tag Manager, which is the tool that we use on all our clients to send data to GA4, and to Facebook, and all the other platforms.

In Google Tag Manager, you just need two things. You need a trigger, and if you don't work in GTM, that's fine, but a trigger is something that measures when something happens.

So the trigger that we want here is when there's a custom event, that's what this is, a custom event, that's the view item list, or the select item, or the view item, or the add to card, or all these other events, all the ones that are specified here, the view item, the add, the initiate checkout, et



cetera, we put those all in one trigger, and we're using matching, so it's saying if it's this, or if it's this, or if it's this.

So we have the one trigger that's looking for the one, and we have one tag, which is what, what are you going to do with that information? That one tag is this generic e-commerce tag, and it grabs the event, that view item, the view item list, whatever the event is that was just captured by that trigger, and it sends e-commerce data using the data layer.

And we'll talk a little bit about the data layer in a bit, if we still have time. But this has become so much easier, when you have a clean implementation, it makes things so easy.

Now the fact is that this is pretty rare too, but the more I work with clients on custom e-commerce, the more I try to get them into using the standard GA4 e-commerce events, then we can just set it up easily in GTM, and all is perfect.

This is about as easy as it can get if you don't have a plugin, and if you're working with a development team. Piece of cake, we don't even have a forest fire here.

All right, now let's dive into some tools to verify some common issues, and some live looks.

And I almost hate to do this, because I don't want to get too technical, but we have to a little bit, because you really can't verify what's going on without looking behind the scenes.

And to me, that's one of the fun things of working with websites, it's "Okay, what is happening behind the scenes here?" So if you're not super technical, I'm going to try to keep this at a high enough level that you'll say, "Wow, that's pretty cool." But that's what we have to do if we're going to verify.

And then as we go through that, we'll look at some common issues, and here's the live looks as well. So we're going to use three different tools. The first is just a Google product, the Tag Assistant, TagAssistant.

google. com. And if you have worked with Google Tag Manager before, this will be very familiar.

The next thing is a Chrome extension, something that we are going to add into our Chrome bar. And I love Chrome extensions, they give you so much information about what's happening behind the scenes, how your website is working.

I mean, there's so many different Chrome extensions. And this one, the ads were dataLayer Inspector +, this is like my number one desert island Chrome extension.

If I'm ever stuck on a desert island someplace, I'm going to have the dataLayer Inspector + with me, and you'll look at that, we'll look at that in just a second. And then the other thing is the Chrome Developer Console, the Chrome dev tools, and there's several different ways to get to that.

You can, on a non-Dell machine, you can press F12. I don't know why it doesn't work on Dell machines, but it doesn't. Or you can do control + shift + I, or you can go through the three dots on Chrome, and go to more tools and developer tools.



So that's what we're going to do, and let's go live here. And by the way, if somebody would like to look at their website using these tools, please put it in the chat, and I'd be happy to look at that.

We're going to start with... You may know that I have a dog. I have this wonderful Pekingese called Xuxa.

And Xuxa is super technical, and an influencer, and everything, and so she wanted to set up her own shop where people could buy her products.

For example, she's not a great web developer, so she's developed a really slow website. Hopefully, this will move along soon.

Come on Xuxa, you can do better than that. There we go. Okay, so she's got a few things that she sells on her shop. And you can also, if you want to, you can sign up to walk Xuxa too, so she's very proud of this.

Let's look at this in terms of the tools that we've talked about, and some of the things that happen, that I always check when I go onto a website, a e-commerce website.

I'm going to use the Tag Assistant, let's see, TagAssistant. google.

com, and I'm going to add a domain, it's not there, so I need to get the Xuxa's domain name, Put that in there and connect.

I go back and forth between using this tool, which shows me everything that is happening behind the scenes. These are events that are being pushed into the data layer.

And the data layer is essentially a storage place that you can put in information, and then pull that information out as long as they're still on that same page.

It's just temporary storage that lasts as long as that page is live. And then when you go to a next page, it gets wiped out, and it starts all over again. So let's look at my Xuxa store here, and I'm going to go to shop.

Here, we are looking at three different items. We're looking at a list of items, we're viewing a list of items. Aha, we're viewing a list of items. The event we should be expecting here, is the view item list.

If we go over here, there it is, there is my view item list, which as you remember, is one of the things from the GA4 e-commerce model.

Here's my view item list, and it's coming from that generic e-comm tag. Remember the one that I just showed you, that's what fired it here.

Here, it's coming from GTM, but I want to actually look at where it got sent. And it can get sent to different Google properties, or it could get sent to AdWords, if it's a Google Ads-related, a remarketing tag or something, or it could be Facebook or whatever.

Actually, it would only be Google Tags up here, not Facebook. So here's where it's being sent., This is the GA4 property that it's being sent to. Here's my view item list.



And the important thing is the event name, view item list, and here's my e-commerce item. Now this is a little bit hard to understand, to break this down, but this is that items array that we talked about.

And notice that there are three different items, three different elements in the items array, PR one, two, and three. Again, an array can have one or more different items.

We have the chewy toy, we have the dog bed, and we have the superhero dog toy, and of course, that corresponds to these things. So that's a view item list, you're probably familiar with that.

That's one of the events that Shopify does not include by default. And I'm relatively okay with it because there's not much that can happen.

I've yet to find actionable insights from the view item list, to tell you the truth. But here's one of the things that I always check for...

Oh, and actually, let me show you one more thing. I'm now going to call up the Developer Console, and look at that same information from the Developer Console using the dataLayer Inspector +.

So as I mentioned, I can press F12, but I'm going to do it by going down here to more tools, developer tools.

And the thing I love about the Developer Console, is that it will speak to you at whatever level of expertise you have. If you're just starting off, if you've never opened the Developer Console before, it'll give you some information that will make sense.

If you have years of experience as a developer, it's going to speak to you at that level too. And it's one of the few tools I use on a regular basis that really adjusts based on how much how technical you are.

The more technical you are, the deeper you can get. But even if you've never opened it before, we can now see, based on this Chrome extension, that we have a GA4 event, a view item list.

Cool, so let's open that up. A lot of stuff here that we don't need, but here is our information. There is our item ID, our item name, the brand, all the price.

And notice that this, remember I talked about the e-commerce model will accept either numbers or strings. This is a string, it's not a number, but Google will still recognize 1099 as a price, and will recognize that the...

Here's another example of a string. This is the position. So the very first thing is the chewy toy, the second one is the dog bed for small dogs, the third one is the superhero dog toy.

There's our items array, and broken out a little bit easier to look at than here, so that's why I go back and forth between the two of them.

All right, without getting too deep here, I want to show you one of the things that I check for every time I'm on a website, because this is something that most websites don't get right, don't do it accurately.



And I'm kind of surprised at some websites that don't do it as properly. But let's look at the add to cart, which is one of the most important events that you can track in GA4, right?

There's typically three places, two, but usually three places where you can do an add to cart. First, is on a view item list. A lot of times you'll see a list of items, and directly from that list of items, you can add to the cart.

I'm going to click on that add to cart, I'm still in the view item list. Let's see if anything has happened over here. Well, look at that. We have an add to cart, this is the event that gets sent to the data layer, and this is the event that gets sent to GA4.

And that add to cart, the event name is add to cart. There's that items array again, with a little bit more information, that's coming from our generic e-comm tag again.

Just that one tag in Google Tag Manager, is doing this. So we've now seen that one simple tag work for two different events, the view item list and the add to cart.

Cool, that's pretty simple. And let's break it down a little bit further in the Dev Console. Here's my add to cart, and we're going to see that items array a little bit better here, the ID, the name, et cetera.

Okay, so we know that we captured the add to cart in the first place, let's actually go into look at this item. And this should be the view item, which as you remember, is one of the things here in our purchase journey, the view product.

The actual event is view underscore item, let's see if that works. We'll be in the Tag Assistant again. And here is the trigger, and here is the event.

And that view item is the dog bed. All right, that makes sense. Now from that dog bed, we can typically add it to the cart as well, right? Here's the second place that I typically check, and let me just move down here.

I'm going to add it to the cart, and let's see if there's another add to cart. There's a view item. And where did the add to cart go? There's the add to cart.

This is the second add to the cart, and we added one at \$25. 99. We already had added one before, and so it's working so far.

Way to go, Xuxa, you've really done a great job with this shop. And the next one I want to look at is actually in the cart, so I'm going to view the cart. And this is the spot, if it's going to fail on a website, this is the spot where it fails.

On the cart, I've already added it twice, right? But in here I can add it more, and I'm going to add three more here, so we have a total of five.

I'm doing this for two reasons. What is the number that we should be adding to the add to cart? What we want is a delta. I'm listing five, but I already had two, so the delta is three, that's what should get added to the add to cart.

I'm going to update the cart. Let's scroll down here first. I'm going to update the cart, and there is my add to cart. Drum roll please, do we have a quantity of three?





We do. Wow, cool. So Xuxa has set up a really nice store here using WooCommerce with GTM4WP, and track it correctly.

So that's what I wanted to show here as one of the things that I always check on every site. And as usual, I am speaking way too much.

I see there is a request for one site, so I'm going to do that one. We'll spend just five minutes on this, and then open up for questions.

So stop debugging. I'm going to add a domain, let's take a look here.

And actually, I need the full, and I potentially need the dub, dub, dub or not too. So let's just see what that is. Willie Candles, all right, so let's grab that.

Put it in here. HTTPS dub, dub, dub, yeah, so I needed both those things.

All right, so on this page... here's a view item list, right? Here's a list of items of reviewing, so it should be a view item list, let's see if that shows up.

Oh, look, they've got lots of different Google tags here. We have Universal Analytics, we have Google Tag Manager. We have probably a remarketing. Oh, and they have two different GA4, actually three, because this could be a duplicate of one of them.

But let's see if it's this one. I don't know which is their main GA4, but let's look at this one. So do we have a convert... So we have a page view, but we don't have a view item list here.

Any chance it's over there, nope. And it's not going to be there either. Okay, so it looks like this is the main GA4, and it's in the GTM container, which would be this one.

Already, I can see we're missing something. Oops, I'm going to close this so I don't get confused. We're missing something here.

And the view item list, okay, not great. Who cares? Let's look at this love like a dog, of course I'm going to choose on the one that's like a dog. So now it's a view item, right? This should be tracked.

Let's see if it is tracked. So view item, there it is, but no hits were sent. View product.

it's in a... Where did that come from? Here's the view item. It came on view item down here, 35. Okay. It was, okay, I must've missed that, but oh, it's in one of the different GA4 properties.

All right, so did it get sent? That looks like an items array. And let's just look at it using my handy-dandy tools.

Now that's interesting, so it should be the view item. We have a bit of weirdness here. We have a pager, which makes sense. We have a view item, which makes sense. Now notice every GA4 event should be lowercase and an underscore if there's a space.

This has a viewed product, which that's not the way an event name should be set up. But let's see if the view item does have that correctly.

We're using view item. Yeah, so this looks good, and there's something weird here. All right, so there are a few little, there's something that's not quite right here. It's close, it may work.



I'm not sure what's going to happen. This is a missing key value pair down here. So I could go on and on, but I'm not going to do that.

I'm not going to do that to you. But I hope you get a sense for what you can do, and what you need to do to test and verify that e-commerce model that we spent so much time on at the front.

Because if you don't understand that e-commerce model, it's not going to make sense. And the only way you can test and verify, is if you understand that e-commerce model. So I apologize for going on too long maybe, but let's open it up for Q and A, if there's anything else.

**Jim Brophy**

Yes, thank you Fred. Great live looks there, thank you very much. We do have one question, a couple questions actually. Is there a way to visualize the correct data where we previously saw incorrect data in the GA4 funnel?

**Fred Pike**

You mean, like for example, if you didn't have view item, and then added it at that point? No.

**Jim Brophy**

I'm just reading the question. I'm assuming it's in the Q&A there, if you want to take a look at.

**Fred Pike**

Okay. Yeah, I'll pop that up. Is there an event where we previously... No. So in general, with GA4, you can't retroactively change data.

So if it was captured wrong, it's pretty much going to be there, wrong forever. So no, so not really. Great question though. So you just have to make a note that "Hey, as of August 1st, we changed the view item, and it's working properly from that point."

**Jim Brophy**

Looks like there's a follow-up comment to that.

**Fred Pike**

Yes, where we saw that add to carts. Yeah, so Fernanda, that is a fabulous question. So with the Google Merchandise Shop, and in particular where they have the 4. 5 trillion, nope, that is just bad data, and that is there.

If you really wanted to get that information, you would have to go to your e-commerce platform potentially, and pull it out of there.

**Jim Brophy**

Gotcha. Thank you, Fred. Another question came in, interested in what the differences are between traditional GA4 site enablement, and that for e-commerce?

**Fred Pike**

Oh, that's a really good question too. So just regular GA4 site enablement, what I try to do there is...



Really, what you're trying to do, anytime you're doing a measurement plan with a website, you're trying to listen to what the users are doing. If it's a physical store, you can actually talk to the person, "Are you interested in these pants," or whatever.

You can't do that on the website, but what you can do is measure behavior that implies intent. So what page are they looking at?

How much time are they spending on that page? If you have a pricing table, or something, did they look at that for 10 seconds? So in general, with setting up GA4 tracking on a website, you're really trying to measure that intent behavior.

With e-commerce, you are also trying to measure the intent behavior, but you're trying to do that within that specific funnel of did they look at the product, did they add it to the cart, did they start the checkout process?

Did they complete the checkout process? So it's similar, but it's a different set of events, and it's a more structured, excuse me, a more structured approach to tracking that.

### **Jim Brophy**

Excellent. Well, that's all the time we have for questions. Thank you everybody, for submitting those. And thank you so much, Fred. Before we wrap things up for today, we'd like to offer everyone in attendance, a complimentary consultation to get any additional questions you may have about GA4 e-commerce tracking answered, or to talk with our team about any GA-related topics.

To request a consultation, visit us at [nwsdigital.com/dmconsult](https://nwsdigital.com/dmconsult), and choose analytics and reporting from the consultation type dropdown field.

We also have several upcoming webinars that we think you'll enjoy. On August 8th, we will present Demystifying CMS Selection, a Strategic Approach. And on September 12th, we will discuss AI: the Future of Digital Advertising is Here.

As always, all webinars are complimentary, and begin at 10 :00 AM Central Time, and you can learn more and register at [learn@northwoods.com](mailto:learn@northwoods.com). And if you're looking for information on a specific topic, or just want to stay up to date on the latest trends and developments in this constantly changing world of digital, check out our blog, our recorded webinars, our YouTube channel, and we have a brand new vodcast that we've recently launched, called Around the Campfire, featuring casual conversations with our experts on all things digital.

We encourage you to check that out. And finally, if you'd like to learn more about Northwoods and the many services we offer, from website design and development, to custom software, and digital marketing to digital advertising and marketing strategy, visit us at [nwsdigital.com](https://nwsdigital.com) to explore our services, details, read client stories, and much, much more.

And after the webinar window closes, there's going to be a short survey that will be available. We'd really appreciate it if you could share your feedback on how we did this morning.

### **Fred Pike**



And please do fill out that survey. Please do fill out that survey. I love to get the feedback, what worked, what didn't work. It's so hard to do a webinar without getting audience participation or reaction, so please fill out that survey.

**Jim Brophy**

Excellent. Thank you, Fred. So with that, fill out the survey. Thank you very much for your time, and for joining us today. We look forward to seeing you again soon. Have a great day, and a great rest of your week.

Thank you very much.

