Measuring Content Success with GTM
Reporting on content is hard.
Everyone is producing content, but few understand how their content is affecting business KPIs.

Confidence with web analytics software is critical.

It allows you to demonstrate the value of your work, and make informed decisions based on what’s working.
Google Analytics

Used on more than 50% of all websites, 10 times the usage of the next most popular analytics platform. Source
Questions marketers usually answer with GA...

“How many sessions started on this page?”
“How many times was this page viewed?”
“Where are my referrals coming from?”

Good questions!
All you need is robust tracking code.
Questions you could be answering with GA...

“Newsletter sign-ups are an important step in my sales funnel – what pathways do people take to that goal?”

“Which authors and categories on my blog are collectively driving the most visits to my sales pages?”

“I value engagement – how are the commenters on my blog behaving differently from other users?”
GTM can be used to deploy GA.
It doesn’t extend GA’s functionality...
...but it can make your reporting far more efficient.
What is Google Tag Manager?
Tags...

```html
<script>
(function(i,s,o,r,a,n,t){i['GoogleAnalyticsObject']=r;i[r]=i[r]||function(){
(i[r].q=i[r].q||[]).push(arguments)},i[r].l=1*new Date();a=s.createElement(o),
 m=s.getElementsByTagName(o)[0];a.async=1;a.src=e.getElementsByTagName('script')[0].parentNode.insertBefore(a,m)
})(window,document,'script','https://www.google-analytics.com/analytics.js','ga');

ga('create', 'UA-1234567-1', 'auto');
ga('send', 'pageview');
</script>

<!-- Twitter universal website tag code -->
<script>
!function(e,n,u){e.twu||(!e.twu=e.xeia.exe.apply(e,n),e.twu.push(n))}()
</script>

<script type="text/javascript">
// <![CDATA[/*
var google_conversion_id = 123456789;
var google_custom_params = window.google_tag_params;
var google_remarketing_only = true;
/* ]]>*
</script>

<script type="text/javascript" src="https://www.googleadservices.com/pagead/conversion.js"></script>
</div style="display: inline;">
<img height="1" width="3" style="border-style: none;" alt="" src="https://googleads.g.doubleclick.net/pagead/viewthroughconversion/123456789?value=0&is" />
</div>
</script>

<script type="text/javascript">
settimeout(function(){var a=document.createElement("script");
var b=document.getElementsByTagName("script")[0];
b.parentNode.insertBefore(a,b);
a.src=document.location.protocol + "//":/zyjopo.com/s/c/4022.js" +
Date().getTime()/1000000;
a.async=true;a.type="text/javascript";j=parent_node.insertBefore(a,b), 1);</script>
</script>

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...managed!

The ‘container snippet’ 😊
Using GTM
Two key terms: **tags** & **triggers**.
## Tags (‘what’)

<table>
<thead>
<tr>
<th>Featured</th>
<th>Custom</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Universal Analytics</td>
<td>Custom HTML Tag</td>
<td>DOM Ready</td>
</tr>
<tr>
<td>Google Analytics</td>
<td>Custom Image Tag</td>
<td>Page View</td>
</tr>
<tr>
<td>Classic Google Analytics</td>
<td></td>
<td>Window Loaded</td>
</tr>
<tr>
<td>Google Analytics</td>
<td>AB TASTY Generic Tag</td>
<td>History Change</td>
</tr>
<tr>
<td>AdWords Conversion Tracking</td>
<td>Adometry</td>
<td>JavaScript Error</td>
</tr>
<tr>
<td>AdWords Remarketing</td>
<td></td>
<td>Form Submission</td>
</tr>
<tr>
<td>AdWords</td>
<td>Adometry</td>
<td></td>
</tr>
<tr>
<td>DoubleClick Floodlight Counter</td>
<td>AdRoll Smart Pixel</td>
<td></td>
</tr>
<tr>
<td>DoubleClick</td>
<td>Audience Center 360</td>
<td></td>
</tr>
<tr>
<td>Floodlight Counter</td>
<td>AWIN Conversion</td>
<td></td>
</tr>
<tr>
<td>Google Optimize</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Google Optimize</td>
<td>Google Surveys Website Satisfaction</td>
<td></td>
</tr>
<tr>
<td>Google Surveys</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surveys Website Satisfaction</td>
<td>Google Surveys</td>
<td></td>
</tr>
<tr>
<td>Google Surveys</td>
<td>Google Optimize</td>
<td></td>
</tr>
</tbody>
</table>

## Triggers (‘when’)

<table>
<thead>
<tr>
<th>Page View</th>
<th>Other</th>
<th>Click</th>
</tr>
</thead>
<tbody>
<tr>
<td>DOM Ready</td>
<td>Custom Event</td>
<td>All Elements</td>
</tr>
<tr>
<td>Page View</td>
<td></td>
<td>Just Links</td>
</tr>
<tr>
<td>Window Loaded</td>
<td></td>
<td></td>
</tr>
<tr>
<td>History Change</td>
<td></td>
<td></td>
</tr>
<tr>
<td>JavaScript Error</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Form Submission</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Simple Example: The standard GA pageview tag.
Tip: `{{something}}` is a custom variable
Triggers

Firing Triggers

- All Pages
  - Page View

ADD EXCEPTION
“Newsletter sign-ups are an important step in my sales funnel – what pathways to people take to that goal?”

Let’s record an event on a form submission.
Tag Configuration

Tag type

Universal Analytics
Google Analytics

Tracking ID

{(MyAnalyticsID)}

Track Type

Event

Event Tracking Parameters

Category

Newsletter Sign-up

Action

Submit

Label

{(Page URL)}

Type: Event

Standard GA event attributes
Done!
This is a powerful approach...

...but it often amounts to scraping.

GTM can offer us a better separation of concerns.
The Data Layer
HTML (content)

The Data Layer

Tag Manager (analytics)
HTML

Data Layer 😊

```
<script>
dataLayer = [
  {'pageCategory': 'signup',
   'visitorType': 'high-value'}
];
</script>

<!-- 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'?'dataLayer':l;'j.async=true;j.src=
  'https://www.googletagmanager.com/gtm.js?id='+i+l+f.parentNode.insertBefore(j,f);
})(window,document,'script',dataLayer,'GTM-TKZJ72');
<!-- End Google Tag Manager -->

<!-- Google Tag Manager (noscript) -->
<noscript><iframe src="https://www.googletagmanager.com/ns.html?id=GTM-TKZJ72"
    height="0" width="0" style="display:none;visibility:hidden"></iframe></noscript>
<!-- End Google Tag Manager (noscript) -->

(Your content)

Tag Manager

CREATE ACCOUNT

<table>
<thead>
<tr>
<th>Container Name</th>
<th>Container Type</th>
<th>Container ID</th>
</tr>
</thead>
<tbody>
<tr>
<td><a href="http://www.example.com">www.example.com</a></td>
<td>Web</td>
<td>GTM.NCAA273</td>
</tr>
</tbody>
</table>
What is the Data Layer?

• The `dataLayer` is a JavaScript Array containing various key-value pairs.

• It’s basically structured data about the current page, separated from the actual content.

• It can be populated automatically with data from your CMS.
Current values of the Data Layer:

```javascript
{
  visitorLoginState: 'logged-in',
  pageTitle: 'Getting Started with Content Grouping in Google Analytics - Builtvisible.',
  pagePostType: 'post',
  pagePostType2: 'single-post',
  pageCategory: ['technical'],
  pagePostAuthor: 'Tom Bennet',
  pagePostDate: '2nd February 2017',
  pagePostDateYear: '2017',
  pagePostDateMonth: '02',
  pagePostDateDay: '02',
  deviceType: 'desktop',
  deviceManufacturer: '',
  deviceModel: '',
  postCountOnPage: 1,
  postCountTotal: 1,
  gtm: {
    start: 1490266989720,
    uniqueEventId: 6,
    element: [object HTMLDivElement],
    elementClasses: '',
    elementId: '',
    elementTarget: '',
    elementUrl: ''
  },
  event: 'gtm.click'
}
```
But this means I need a developer...

- Work with your development team to define what you want in your site’s `dataLayer`.
- Means your data is accessible in a format which is `independent` of any one platform or technology.
- Less prone to `mistakes`, decoupled from nuts and bolts of your front end.
Practical Examples
“Which **authors** and **categories** on my blog are collectively driving the most visits to my **sales pages**?”

Let’s attach a Content Grouping to our pageview tag, and use information from our Data Layer.
Content Grouping Settings

**Name**
Blog Author

**Configure the grouping**
Content Grouping lets you create logical collections of site or app content, and use those as primary dimensions in your reports. Use one or more of the methods below to group your content. Learn More

**GROUP BY TRACKING CODE**

1. **Enable Tracking Code**
   - **Enable**: On
   - **Select Index**: Select an index number (1-5).

Modify your javascript tracking code and include one of following snippets. Learn More

**Classic Analytics Tracking Code (ga.js):**
_gaq.push(['setPageGroup', 1, 'My Group Name']);

**Universal Analytics Tracking Code (analytics.js):**
ga('set', 'contentGroup1', 'My Group Name');

**Done**
Add the content grouping to our pageview tag under ‘More Settings’
How do we reference something in our dataLayer?
Data Layer Variable = something in our dataLayer
Reference our custom variable which contains the blog post author.
<table>
<thead>
<tr>
<th>Author (Content Group)</th>
<th>Pageviews</th>
<th>Unique Views 2 (Author)</th>
<th>Avg. Time on Page</th>
<th>Entrances</th>
<th>Bounce Rate</th>
<th>% Exit</th>
<th>Page Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tyrion Lannister</td>
<td>8,744</td>
<td>2,910</td>
<td>00:03:07</td>
<td>6,261</td>
<td>81.22%</td>
<td>71.79%</td>
<td>&lt;£0.01 (145.26%)</td>
</tr>
<tr>
<td>Brienne of Tarth</td>
<td>3,210</td>
<td>2,166</td>
<td>00:04:14</td>
<td>2,709</td>
<td>89.58%</td>
<td>83.18%</td>
<td>&lt;£0.01 (34.84%)</td>
</tr>
<tr>
<td>Daenerys Targaryen</td>
<td>1,262</td>
<td>1,058</td>
<td>00:04:04</td>
<td>936</td>
<td>85.87%</td>
<td>77.97%</td>
<td>&lt;£0.01 (28.27%)</td>
</tr>
<tr>
<td>Roose Bolton</td>
<td>1,163</td>
<td>1,061</td>
<td>00:05:32</td>
<td>1,021</td>
<td>90.46%</td>
<td>87.10%</td>
<td>&lt;£0.01 (30.97%)</td>
</tr>
<tr>
<td>Jon Snow</td>
<td>671</td>
<td>529</td>
<td>00:04:52</td>
<td>520</td>
<td>83.79%</td>
<td>76.90%</td>
<td>&lt;£0.01 (60.41%)</td>
</tr>
<tr>
<td>Sansa Stark</td>
<td>531</td>
<td>491</td>
<td>00:09:01</td>
<td>486</td>
<td>93.10%</td>
<td>90.58%</td>
<td>&lt;£0.01 (67.43%)</td>
</tr>
</tbody>
</table>
“I value **engagement** – how are the **commenters** on my blog behaving differently from other users?”

Let’s define commenting as a user-level Custom Dimension.
### Dimensions vs Metrics

**Acquisition**

<table>
<thead>
<tr>
<th>Default Channel Grouping</th>
<th>Sessions</th>
<th>% New Sessions</th>
<th>New Users</th>
<th>Bounce Rate</th>
<th>Pages / Session</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>17,066</td>
<td>74.53%</td>
<td></td>
<td>46.80%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>100.00%</td>
<td>74.43% (0.05%)</td>
<td></td>
<td>46.80%</td>
<td></td>
</tr>
</tbody>
</table>

**Behavior**

|                          | 12,719   | 46.80%         | 4.34      |             |                 |
|                          | 100.05%  | 46.60% (0.00%) | 4.34 (0.00%) |             |

1. Organic Search 7,888 (46.22%) 78.88% 6,222 (48.92%) 46.39% 4.19
2. Direct 2,874 (16.84%) 72.27% 2,077 (16.33%) 43.11% 5.18
3. Social 2,512 (14.72%) 91.20% 2,291 (18.01%) 66.72% 2.07
4. Referral 2,377 (13.93%) 48.76% 1,159 (9.11%) 28.14% 6.53
5. Paid Search 906 (5.31%) 76.60% 694 (5.46%) 53.09% 3.86

**Describe Data**

**Measure Data**

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Content Groupings vs Custom Dimensions

- **Content Groupings** (like our blog author example) enable you to organise your existing pages into logical groups.

- **Custom Dimensions** let you record additional, non-standard data about users, sessions, or pages – like whether or not a user is a commenter!
- **Property Settings**
- **User Management**
- **Tracking Info**
- **Postbacks**
- **Audience Definitions**
- **Custom Definitions**
  - **Custom Dimensions**
  - **Custom Metrics**
- **Data Import**

### Custom Dimensions Table

<table>
<thead>
<tr>
<th>Custom Dimension Name</th>
<th>Index</th>
<th>Scope</th>
<th>Last Changed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blog Commenting</td>
<td>1</td>
<td>User</td>
<td>Mar 23, 2017</td>
</tr>
</tbody>
</table>

19 custom dimensions left
Tag Configuration

Tag type
- Universal Analytics
- Google Analytics

Tracking ID
- {{MyAnalyticsID}}

Track Type
- Event

Event Tracking Parameters
- Category: Blog
- Action: Comment Posted
- Label: {{Page URL}}

Standard GA event attributes
Option 1 for trigger – define your ‘Submit Comment’ button based on its class or ID.

This trigger fires on:
- [ ] All Link Clicks
- [x] Some Link Clicks

Fire this trigger when an Event occurs and all of these conditions are true:

- [ ] Click ID
- [x] equals
- [ ] submit-comment
...but with a Data Layer, we can do better!

The Data Layer can describe *actions* as well as *attributes*, using ‘Custom Events’.
Comment Submitted.

Custom Event pushed to `dataLayer` called `blogComment`.

GTM detects this, triggering a normal GA event tag...

...and this hit includes a **Custom Dimension** defining the `user` as a commenter.
One last example, just for fun.
Hypothesis:

“Visitors to my umbrella website are more engaged when it’s raining outside.”
If the data you want is available via an API...
...you can fetch it and store in the dataLayer...
...and fire it to GA as a custom dimension.
Our weather API is simple, clear and free. We also offer higher levels of support, please see our paid plan options. To access the API you need to sign up for an API key if you are on a free or paid plan.

**Current weather data**
- Access current weather data for any location including over 200,000 cities
- Current weather is frequently updated based on global models and data from more than 40,000 weather stations
- Data is available in JSON, XML, or HTML format
- Available for Free and all other paid accounts

**5 day / 3 hour forecast**
- 5 day forecast is available at any location or city
- 5 day forecast includes weather data every 3 hours
- Forecast is available in JSON and XML
- Available for Free and all other paid accounts

**16 day / daily forecast**
- 16 day forecast is available at any location or city
- 16 day forecast includes daily weather
- Forecast is available in JSON and XML
- Available for Developer, Professional and Enterprise accounts
geoPlugin

plugin to geo-targeting
and unleash your site's potential.

geoPlugin is a free and easy webmaster resource to provide geolocation technology to your pages.

Geolocation and geocoding technology on the web is locating your visitor in the world, down to the city they are in, based on their IP address, also known as IP Location.

goPlugin is the easiest way for you to know where your visitors are from so that you can provide them with content more relevant to their geographical location.

goPlugin is unique in that it allows you to do this in a hassle-free way, and in multiple different programming languages. There is no software installation required, and whether your programming language of choice be javascript, php, xml or whatever, geoPlugin has a way to simply and efficiently geo-localize your visitors.
Talk to a `geolocation API` to find where the user is.

Talk to a `weather API` to discover their local weather.

Push this to your `dataLayer`.

Pick this up in GTM, and fire it as a session-level `Custom Dimension`. 
(Full credit to Simo Ahava for this technique - link)
Wrap up
CTM

Make REPORTING great again!
You still need to be familiar with the entire reporting process.

Not just data collection, but also property and analysis.
By demonstrating success and deriving actionable insight, you can justify more than just ‘more content’...

Bigger budgets,
More innovative projects,
More hires,
Whatever you need!
Thank you!

Enjoy the rest of BrightonSEO.
Resources

https://builtvisible.com/google-analytics-resource-guide/
https://builtvisible.com/getting-started-with-content-grouping-in-google-analytics/
https://www.simoahava.com/analytics/data-layer/
https://developers.google.com/tag-manager/devguide
http://www.lunametrics.com/blog/2016/11/30/understanding-scope-google-analytics-reporting/