



Empirical Path

# Personalizing a Dashboard for 200 Users

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**DIGITAL ANALYTICS CONSULTING**

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## Introduction

Dashboarding and visualization tools like Klipfolio allow distributed teams and organizations to stay aligned and make data-driven decisions using a shared, centralized report. But, what about those situations in which many different stakeholders need access to their own, individualized subsets of the same data? These situations occur when different business units, geographies, departments or, in this case, affiliated content providers require personalized or localized views of their own key metrics and performance. As a Klipfolio Registered Partner, Empirical Path was engaged to deliver such a distributed dashboard for a client and its network of third-party content providers.

## Situation

A well-known consumer publisher needed to communicate personalized content performance metrics to their network of 200 affiliated content providers. These affiliated contributors submitted articles and videos for publication on our client's mobile apps and website, and each contributor needed a filtered dashboard view showing only their KPI charts and graphs in Klipfolio. Our team not only needed to put together an effective overall content performance dashboard; we also needed to deliver personalized views of engagement metrics such as page views by user device, user demographics, and top content categories and views to each unique stakeholder.

As for the technical environment, the client had been using standard, out-of-the-box Google Analytics reports for tracking its website as well as its iOS and Android apps. Additional dashboard data was sourced from the client's Microsoft Azure database.

## Approach

Before diving into the dashboard, our team took the opportunity to simplify administration of the existing analytics for the customer by implementing Google Tag Manager. This made configuration across the desktop and mobile platforms much easier to manage and provided a solid foundation on which to build the reporting layer. With Tag Manager in place, we customized Google Analytics in order to capture events, content groupings, and custom dimensions. We also reorganized the account structure for more intuitive Properties and Views.

From there we followed the process outlined below--one we recommend to anyone wanting to build a personalized and filtered dashboard solution in Klipfolio.

### *Step 1: Definition*

The most critical and important step in building any kind of successful dashboard is to start by clearly defining the business goals and related KPIs. Experience has shown us that the

temptation to take shortcuts during this phase leads to dashboards that don't deliver business value and actually end up creating extra hours of re-work.

For our client, we started by spending time brainstorming with stakeholders and reviewing requirements to ensure we clearly understood the end goal. By listening to our client and learning about their organization's marketing goals, approaches, resources and decision-making processes, we were able to specify exact metrics, dimensions, ratios, baselines and segments to be reported. Next, we proposed structured definitions for each KPI--the precise baselines and GA metrics, dimensions, ratios and segments--and prioritized them based on a client-specific weighting of relevance to goals, technical feasibility and action-ability. Finally, we settled on a list of 7 KPIs that would best support the needs of their 200 distributed content providers. Pro tip: we generally aim for a maximum of 4-6 KPIs, as that range helps balance the breadth and focus of the report for many of our customers.

### *Step 2: Design*

Next comes mocking up your layout and, for Klipfolio users, defining Klip chart types and widgets that will best communicate each of your metrics. This phase applies the wisdom of beginning with the end in mind. Just like developing a web site, or a skyscraper for that matter, it's important for all parties to see a model of the final product and agree it is what everybody wants in the final delivery. For our dashboard, we used the following tools:

1. A mockup or wireframe ([like this one](#)) that showed the layout of the dashboard and the Klips and individual data representations that make up a complete panel.
2. A spec sheet detailing the specific attributes and data sources of each Klip (metrics, dimensions, data source and more). [Download our Google sheets template](#).

In putting together both documents, you'll want to cover these details:

- What data sources will you need to query?
- What dimensions, metrics and filtering will you need?
- How often do you want the data refreshed?
- For what time periods do you want to look at time series data (daily, weekly, monthly)?

For our client, we spent a good bit of time going through these considerations using one of our favorite tools--a regular whiteboard--sketching (and erasing) ideas until everyone had a clear, visual goal in mind and a solid understanding of how each dashboard widget would be supplied.

### *Step 3: Construction*

If you've done a good job on the first two steps, this final part should be relatively painless. The reverse is also true, so proceed only when ready. It's now time to give your in-house or agency Klipfolio expert the blueprints you have so methodically prepared. Again, the more precise your definition and design, the quicker the construction. If you have properly defined the scope of the dashboard, the documents created in the design phase (the wireframe and spec sheet) can simply

be handed off to your Klipfolio developer(s), and they can start right away with very little discussion.

Here we can share a simple and efficient method our developers used to quickly setup the Klipfolio backend for user-login filtering for our client's 200 users.

All you need is a Google Sheet as a Data Source for your Klipfolio dashboard. Within the Google Sheet, create a tab that looks like this:

user_login	dimensionN	publisher_name	first_name	last_name	password
<i>The email associated with the user login account</i>	<i>The dimension that exists in data source to be filtered on</i>	<i>A name to identify the user's publisher or company</i>	<i>User's first name</i>	<i>User's last name</i>	<i>User password</i>
jsmith@website.com	00001	Publisher A	John	Smith	*****
mjones@website.com	00002	Publisher B	Marie	Jones	*****
(next user row...)	...	...	...	...	...

Using this sheet, Klipfolio will then be able to filter the data based on the "dimensionN" field. So, when John Smith (00001) logs in, the Klips he sees will only contain data that has dimensionN = 00001. For example, if Klipfolio sees the following data within a Data Source for total sessions from Nov 15 - Nov 16, 2015, John Smith will see his total as 4,000. The next user, Marie Jones (00002), would see a total of 2,100, and so on down your list--in our case, another 198 rows.

date	dimensionN	sessions
2015-11-15	00002	1,000
2015-11-15	00001	2,100
2015-11-16	00002	1,100
2015-11-16	00001	1,900

Full Klipfolio documentation on user-level filtering [can be found here](#).

#### *Step 4: Quality Assurance Testing*

Once construction of the individual Klips is complete, it's a good idea to set up some test logins and put yourself in your end user's shoes for testing. Pretend you are logging in for the first time and ask yourself questions like:

- Is the data accurate in comparison to the source Google Analytics reports or database?
- Are the values as expected, overreported or under-reported?
- Does the dashboard clearly communicate the status of the KPI's we need to monitor?

During testing, we recommend using [Google Analytics Query explorer](#) to see the same raw GA data that your Klipfolio dashboard relies on. Similarly, for other data sources, we recommend using your favorite SQL workbench to directly query dependencies to see the raw data and make any tweaks necessary before adding the final query to the related Klipfolio datasource.

Once you have completed testing and you are confident in the data your users will be seeing, you are finally ready to add remaining users to the Google Sheet table and provide them with user seats from Klipfolio's admin screen (see pricing details on Klipfolio users [here](#)).

Beyond getting your users access to their filtered dashboard, our team recommends providing basic training and documentation or links to Klipfolio tutorials that will help them take full advantage of all the clever work and planning you have done on your dashboard. In our experience with clients, we have found that a little training goes a long way toward promoting user engagement and enthusiasm for this powerful and intuitive reporting tool.

Here at Empirical Path, we find Klipfolio dashboards to be one of the best ways to help organizations understand the story behind their numbers. If you have questions or are interested in getting expert help with your implementation, we would be happy to talk with you. Contact us at [www.empiricalpath.com](http://www.empiricalpath.com).