In this chapter, you will learn:

» The importance of analytics to digital marketing.
» What metrics you can and should be tracking.
» How to capture web analytics data.
» Techniques and guidelines for analysing data to better understand your users.
» How to present data clearly and how to use data visualisation to help users understand it.
21.1 Introduction

Picture the scene: You’ve opened up a new fashion retail outlet in the trendiest shopping centre in town. You’ve spent a small fortune on advertising and branding. You’ve gone to great lengths to ensure that you’re stocking all of the prestigious brands. Come opening day, your store is inundated with visitors and potential customers.

And yet, you are hardly making any sales. Could it be because you have one cashier for every hundred customers? Or possibly it’s the fact that the smell of your freshly painted walls chases customers away before they complete a purchase? While it can be difficult to isolate and track the factors affecting your revenue in this fictional store, move it online and you have a wealth of resources available to assist you with tracking, analysing and optimising your performance.

To a marketer, the Internet offers more than just new avenues of creativity. By its very nature, the Internet allows you to track each click to your site and through your site. It takes the guesswork out of pinpointing the successful elements of a campaign, and can show you very quickly what’s not working. It all comes down to knowing where to look, what to look for, and what to do with the information you find.

At the beginning of this book, you learned how important it is for a business to be data-driven and client-focused. You also learned about a few of the forms and sources of data. Each chapter mentioned some elements you should track to measure the success of a particular area of digital marketing. Now you’re going to learn more specifics about data analytics and how to analyse the data you’ve gathered.

21.2 Key terms and concepts

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>A/B test</td>
<td>Also known as a split test, it involves testing two versions of the same page or site to see which performs better.</td>
</tr>
<tr>
<td>Click path</td>
<td>The journey a user takes through a website.</td>
</tr>
<tr>
<td>Conversion</td>
<td>Completing an action that the website wants the user to take. Usually a conversion results in revenue for the brand in some way. Conversions include signing up to a newsletter or purchasing a product.</td>
</tr>
<tr>
<td>Conversion funnel</td>
<td>A defined path that visitors should take to reach the final objective.</td>
</tr>
<tr>
<td>Cookie</td>
<td>A small text file that is used to transfer information between browsers and web servers. They help web servers to provide the right content when it is requested.</td>
</tr>
<tr>
<td>Count</td>
<td>Raw figures captured for data analysis.</td>
</tr>
<tr>
<td>Event</td>
<td>A step a visitor takes in the conversion process.</td>
</tr>
<tr>
<td>Goal</td>
<td>The defined action that visitors should perform on a website, or the purpose of the website.</td>
</tr>
</tbody>
</table>

Table 1

21.3 Working with data

In the days of traditional media, actionable data was a highly desired but scarce commodity. While it was possible to broadly understand consumer responses to marketing messages, it was often hard to pinpoint exactly what was happening and why.

As the Data driven decision making chapter showed, in the digital age, information is absolutely everywhere. Every single action taken online is recorded, which means there is an incredible wealth of data available to marketers to help them understand when, where, how and why users react to their marketing campaigns.

Remember, this also means there is a responsibility on marketers to make data-driven decisions. Assumptions and gut feel are not enough – you need to back these up with solid facts and clear results.

Don’t worry if you’re not a ‘numbers’ person – working with data is very little about number crunching (the technology usually takes care of this for you) and a lot about
analysing, experimenting, testing and questioning. All you need is a curious mind and an understanding of the key principles and tools.

Here are some data concepts you should be aware of.

21.3.1 Performance monitoring and trends

Data analytics is all about monitoring user behaviour and marketing campaign performance over time. The last part is crucial. There is little value in looking at a single point of data, you want to look at trends and changes over a set period to encourage a dynamic view of data.

For example, it is not that helpful to say that 10% of this month’s web traffic converted. Is that good or bad, high or low? But saying that 10% more users converted this month than last month shows a positive change or trend. While it can be tempting to focus on single ‘hero’ numbers and exciting-looking figures such as 'Look, we have 5 000 Facebook fans!', these really don’t give a full picture if they are not presented in context. In fact, we call these ‘Vanity metrics’ they look good, but they don’t tell you much.

21.3.2 Big data

Big data is the term used to describe truly massive data sets, the ones that are so big and unwieldy that they require specialised software and massive computers to process. Companies like Google, Facebook and YouTube generate and collect so much data every day that they have entire warehouses full of hard drives to store it all.

Understanding how it works and how to think about data on this scale provides some valuable lessons for all analysts.

• Measure trends, not absolute figures: The more data you have, the more meaningful it is to look at how things change over time.

• Focus on patterns: With enough data, patterns over time should become apparent so consider looking at weekly, monthly or even seasonal flows.

• Investigate anomalies: If your expected pattern suddenly changes, try to find out why and use this information to inform your actions going forward.

21.3.3 Data mining

Data mining is the process of finding patterns hidden in large numbers and databases. Rather than having a human analyst process the information, an automated computer program pulls apart the data and matches it to known patterns to deliver insights. Often, this can reveal surprising and unexpected results, and tends to break assumptions.

Data mining in action

Krux (2016) offers the example of examining an enormous dataset for an automotive brand that wanted to improve brochure downloads and increase requests for test drives. The data they analysed related to consumers, consumer attributes, and marketing touchpoints.

To determine a pattern, they had to explore 47,000,000,000,000,000,000,000 combinations of factors, obviously, too many to evaluate without using machines. These combinations came from 35 touchpoints, including the website, campaigns, and other marketing channels, and 37 analytics points, including auto buyers and smartphone users.

The brand was able to spot relevant patterns, such as that consumers who bought a certain brand of car were more likely to download brochures, but not more likely to request test drives. This allowed them to segment the consumers who bought cars into those who started the purchase process by downloading a brochure, and those who started with a test drive.

The first group was detail-oriented, so ads featuring specific models with links to the specifications page helped to drive conversions.

The second group wanted to know how driving the car felt, so they were targeted with ads that appealed to their senses and included a call to action about scheduling a test drive. This helped to drive media efficiency and campaign performance.

21.4 Tracking and collecting data

A key problem with tracking users on websites used to be that it was impossible to track individual users - only individual browsers, or devices, since this is done through cookies. So, if Joe visits the website from Chrome on his home computer and Safari on his work laptop, the website will think he’s two different users. If Susan visits the site from the home computer, also using Chrome, the website will think she’s the same user as Joe, because the cookie set when Joe visited the site will still be there.

Email opens aren’t tracked with cookies. Instead, when the images in the email load, a tiny 1×1 pixel also loads and tracks open rate. This means that if the user is blocking images, their activity will not be tracked.

To track if those who did open your email then visited your page, or eventually converted, links within the email include utm tags. UTM tags are codes in the url that enable your analytics software to track where a user has come from.

In this link: https://www.redandyellow.co.za/5-ways-design-can-used-empower-women/?utm_source=newletter&utm_medium=email&utm_campaign=AugNewsletter

The campaign tracking tag appended on the end of the URL is: ?utm_source=newletter&utm_medium=email&utm_campaign=AugNewsletter

An additional concern was the decline of cookies. Most modern browsers allow users to block them. With growing consumer privacy concerns, and laws like the EU Privacy Directive, which requires all European websites to disclose their cookie usage, cookies began to fall out of favour, making tracking more difficult.

Google’s Universal Analytics changed all that. Because of Google’s dominance in the search engine market, we will focus on them for this section.

21.4.1 Universal analytics

Google’s universal analytics allows you to track visitors (that means real people) rather than simply sessions. By creating a unique identifier for each customer,
universal analytics means you can track the user’s full journey with the brand, regardless of the device or browser they use. You can track Joe on his home computer, work laptop, mobile phone during his lunch break, and even when he swipes his loyalty card at the point of sale allowing you to combine offline and online information about users.

Crucially, however, tracking Joe across devices requires both universal analytics and authentication on the site across devices, in other words, Joe has to be logged in to your website or online tool on his desktop, work laptop and mobile phone in order to be tracked this way. If he doesn’t log in, we won’t know he’s the same person. Users who use Gmail are easy for Google to track because they’ll be logged in across devices.

You can see:

- How visitors behave depending on the device they use (browsing for quick ideas on their smartphone, but checking out through the eCommerce portal on their desktop).
- How visitor behaviour changes the longer they are a fan of the brand, do they come back more often, for longer, or less often but with a clearer purpose?
- How often they’re really interacting with your brand.
- What their lifetime value and engagement is.

Another useful feature of universal analytics is that it allows you to import data from other sources into Google Analytics, for example, CRM information or data from a point-of-sale cash register. This gives a much broader view of the customers and lets you see a more direct link between your online efforts and real-world behaviour.

How does universal analytics work?

Universal analytics has three versions of the tracking code that developers can implement, helping them track users on:

1. Websites
2. Mobile apps
3. Other digital devices such as game consoles and even information kiosks.

It collects information from three sources to provide the information that you can access from your Google Analytics account:

1. The HTTP request of the user: This contains details about the browser and the computer making the request, including language, hostname, and referer.
2. Browser and system information: This includes support for Java and Flash and screen resolution.
3. First-party cookies: Analytics sets and read these cookies to obtain user session and ad campaign information.

This information is sent to the Google Analytics servers as a list of parameters attached to a one-pixel GIF image request. You don’t need to know the technical details of how tracking works, but if you are interested, you can read about Google Analytics tracking here: https://developers.google.com/analytics/resources/concepts/gaConceptsTrackingOverview

How to set up Google Analytics

First, you need a primary Google account, used for services such as Gmail or YouTube. You can use this to set up your Analytics account. This should be set up using a Google account that will always be available for your business.

Next, go to www.google.com/analytics and follow the steps to sign up. You can set up multiple accounts here if you want to track a website, an app, or multiple websites and apps.

After the sign-up process, you will be issued a Google Analytics tracking ID. This will be UA followed by a series of numbers. You need to add this code to the HTML file of your website, before the <head> tag, on each of your pages.

Now Google is tracking every visitor to your website!

Google Analytics is, obviously, not the only analytics package available. Other packages exist for detailed tracking of social media accounts, emails, and website data. Website analysis should always account for any campaigns being run. For example, generating high traffic volumes by employing various digital marketing tactics such as SEO, PPC, and email marketing can be a pointless and costly exercise if visitors are leaving your site without achieving one or more of your website’s goals. Conversion optimisation aims to convert as many of a website’s visitors as possible into active customers.

21.4.2. Gathering data

Google Analytics can measure almost anything about the customers that visit your website. To gather the kind of data that can help you optimise your site, you’ll need to know a little about where to look. When you log into your analytics account, you will see seven main menu items on the left. They are:

Views

The Views button lets you switch between various pictures of the data.

Customization

The Customization tab lets you create dashboards that give you an overview of different data elements, custom reports, shortcuts, or custom alerts.

NOTE

You will need to make adjustments to your Analytics account so that you can get the most out of tracking your users. You can learn a little more about that here: moz.com/blog/absolute-beginners-guide-to-google-analytics.

NOTE

Try it now – go to a random website, such as www.redandyellow.co.za, and right click on it, then click ‘view page source’ to view the HTML code for the site. Do a search for ‘UA-’ to view the tracking code for that site. The tracking code for the website above is UA-43748615-1.

NOTE

Read more about this in the Conversion optimisation chapter.
Real time
Real time allows you to monitor activity as it happens on your website. Data updates continuously so that you can see how many users are on your site right now, where they are from, the keywords and sites that referred them, which pages they are viewing, and what conversions are happening.

Overview
Figure 3. Part of Google’s Realtime overview tab.

Audience
The audience section helps you understand the characteristics of your audience, including their demographics, interests, behaviour (level of engagement). The mix of new and returning users and how their behaviour differs, and the browsers, networks and mobile devices they are using to access your site.

Figure 4. Part of Google’s Audience overview tab.

Acquisition
Acquisition lets you compare traffic from search, referrals, email, and marketing campaigns. It shows you which sources drive the most traffic to your site.

Figure 5. Part of Google’s Acquisition overview tab.

Behaviour
This section shows how users interact with your content, how the content performs, its searchability and its interactivity. You can see how fast your pages load, how successful users are when searching the site, how any interactive elements on your site are being used, popular content, which pages drive revenue, and more.

Figure 6. Part of Google’s Behaviour overview tab.

Conversions
Conversions does exactly what it says on the box, it shows you how users are converting on your site. You can look at:

- The Goals tab, which shows how well your site meets business objectives
- The eCommerce tab, which shows what your visitors buy and can link it to other data to show what drives your revenue
- Multi-channel funnels, which shows how your channels work together to generate sales and conversions (for example, if a customer sees a display ad about your brand, visits your site to do research, and later does a search for a specific product before converting)
- Attribution, which shows you how traffic from various channels converts.
21.4.3 The type of information captured

By now, you should know the difference between objectives, goals, KPIs, and targets. KPIs are what you will be focusing on when you measure data that has been captured. KPIs are the metrics that help you understand how well you are meeting your objectives. A metric is a defined unit of measurement. Definitions can vary between various web analytics vendors depending on their approach to gathering data, but the standard definitions are provided here.

Web analytics metrics are divided into:

- **Counts**: These are the raw figures that will be used for analysis.
- **Ratios**: These are interpretations of the data that is counted.

Metrics can be applied to three different groupings:

- **Aggregate**: All traffic to the website for a defined period of time.
- **Segmented**: A subset of all traffic according to a specific filter, such as by campaign (PPC) or visitor type (new visitor vs. returning visitor).
- **Individual**: The activity of a single visitor for a defined period of time.

Here are some of the key metrics you will need to get started on with website analytics.

**Building-block terms**

These are the most basic web metrics. They tell you how much traffic your website is receiving. For example, looking at returning visitors can tell you how well your website creates loyalty; a website needs to grow the number of visitors who come back. An exception may be a support website where repeat visitors could indicate that the website has not been successful in solving the visitor’s problem. Each website needs to be analysed based on its purpose.

- **Traffic**: The number of users that visit a website
- **Page**: Unit of content (so downloads and Flash files can be defined as pages).
- **Page views**: The number of times a page was successfully requested.

**Session**: An interaction by an individual with a website consisting of one or more page views within a specified period of time.

**Unique visitors**: The number of individual users visiting the website one or more times within a set period of time. Each individual is counted only once.

**New visitor**: A unique visitor who visits the website for the first time ever in the period of time being analysed.

**Returning visitor**: A unique visitor who makes two or more visits (on the same device and browser) within the time period being analysed.

**Visit characteristics**

These are some of the metrics that tell you how visitors reach your website, and how they move through the website. The way that a visitor navigates a website is called a click path. Looking at the referrers, both external and internal, allows you to gauge the click path that visitors take.
- **Entry page**: The first page of a visit.
- **Landing page**: The page intended to identify the beginning of the user experience resulting from a defined marketing effort.
- **Exit page**: The last page of a visit.
- **Visit duration**: The length of time in a session.
- **Referrer**: The URL that originally generated the request for the current page.
- **Internal referrer**: A URL that is part of the same website.
- **External referrer**: A URL that is outside of the website.
- **Search referrer**: A URL that is generated by a search function.
- **Visit referrer**: A URL that originated from a particular visit.
- **Original referrer**: A URL that sent a new visitor to the website.
- **Clickthrough**: The number of times a link was clicked by a visitor.
- **Clickthrough rate**: The number of times a link was clicked divided by the number of times it was seen (impressions).
- **Page views per visit**: The number of page views in a reporting period divided by the number of visits in that same period to get an average of how many pages being viewed per visit.

**Content characteristics**

When a visitor views a page, they have two options: leave the website, or view another page on the website. These metrics tell you how visitors react to your content. Bounce rate can be one of the most important metrics that you measure. There are a few exceptions, but a high bounce rate usually means high dissatisfaction with a web page.

- **Page exit ratio**: Number of exits from a page divided by total number of page views of that page.
- **Single page visits**: Visits that consist of one page, even if that page was viewed a number of times.
- **Bounces (or single page view visits)**: Visits consisting of a single page view.
- **Bounce rate**: Single page view visits divided by entry pages.

**Mobile metrics**

When it comes to mobile data, there are no special, new or different metrics to use. However, you will probably be focusing your attention on some key aspects that are particularly relevant here namely, technologies and the user experience.

- **Device category**: Whether the visit came from a desktop, mobile or tablet device.
- **Mobile device info**: The specific brand and make of the mobile device.
- **Mobile input selector**: The main input method for the device (such as touchscreen, click wheel, stylus).
- **Operating system**: The OS that the device uses to run, such as iOS or Android.
21.5 Analysing data

In order to test the success of your website, you need to remember the TAO of conversion optimisation.

**Track – Analyse – Optimise**

A number is just a number until you can interpret it. Typically, it is not the raw figures that you will be looking at, but what they tell you about how your users are interacting with your website. Because your web analytics package will never be able to provide you with 100% accurate results, you need to analyse trends and changes over time to truly understand your brand’s performance.

### 21.5.1 Key elements to analyse

Avinash Kaushik, author of Web Analytics: An Hour a Day, recommends a three-pronged approach to web analytics:

1. **Analysing behaviour**: data infers the intent of a website’s visitors. Why are users visiting the website?
2. **Analysing outcomes**: metrics shows how many visitors performed the goal actions on a website. Are visitors completing the goals we want them to?
3. **A wide range of data** tells us about the **user experience**. What are the patterns of user behaviour? How can we influence them so that we achieve our objectives?

#### Behaviour

Web users’ behaviour can indicate a lot about their intent. Looking at referral URLs and search terms used to find the website can tell you a great deal about what problems visitors are expecting your site to solve.

Some methods to gauge the intent of your visitors include:

- **Click density analysis**: Looking at a heatmap to see where users are clicking on the site and if there are any noteworthy ‘clumps’ of clicks such as many users clicking on a page element that is not actually a button or link.
- **Segmentation**: Selecting a smaller group of visitors to analyse, based on a shared characteristic for example, only new visitors, only visitors from France, or only visitors who arrived on the site by clicking on a display advert. This lets you see if particular types of visitors behave differently.

#### Outcomes

At the end of the day, you want users who visit your website to perform an action that increases your revenue. Analysing goals and KPIs indicates where there is room for improvement.

![Data analytics > Analysing data](image)

**Figure 14. Site search information on Google Analytics.**

Outcomes

Analytics data cannot give you a definitive answer as to why users behave a certain way. It does provide plenty of clues about intent, it’s up to you to put the pieces together.
improvement. Look at user intent to establish if your website meets users’ goals, and if these match with the website goals. Look at user experience to determine how outcomes can be influenced.

Figure 15. Reviewing conversion paths can give you insight into improving your website.

After performing a search, 100 visitors land on the home page of a website. From there, 80 visitors visit the first page towards the goal. This event has an 80% conversion rate. 20 visitors take the next step. This event has a 25% conversion rate. Ten visitors convert into paying customers. This event has a 50% conversion rate. The conversion rate of all visitors who performed the search is 10%, but breaking this up into events lets us analyse and improve the conversion rate of each event.

User experience
To determine the factors that influence user experience, you must test and determine the patterns of user behaviour. Understanding why users behave in a certain way on your website will show you how that behaviour can be influenced to improve your outcomes. This is covered in the next chapter on Conversion optimisation.

21.5.2. Funnel analysis
Funnel analysis is crucial to understanding where problems in a conversion process lie, and helps you to track whether your website is achieving its ultimate goal. The process of achieving that goal can be broken down into several steps. These are called events or micro-conversions. Analysing each step in the process is called funnel analysis or path analysis.

For example, on a hotel booking website, the ultimate goal is that visitors to the site make a booking on the website with a credit card.

Event 1: Perform a search for available dates for hotels in the desired area.
Event 2: Check prices and amenities for available hotels.
Event 3: Select a hotel and go to checkout.
Event 4: Enter personal and payment details and confirm booking (conversion).

One naturally expects fewer users at each step. Increasing the number of visitors who progress from one step to the next will go a long way to improving the overall conversion rate of the site.

Figure 16. A conversion funnel.

Here are some examples of possible objectives, goals and KPIs for different websites.

Hospitality eCommerce site, such as www.expedia.com
Objective: Increase bookings
Objective: Decrease marketing expenses
Goal: Make a reservation online
KPIs:
Conversion rate
Cost per visitor
Average order value.

News and content sites, such as www.news24.com
Objective: Increase readership and level of interest
Objective: Increase time visitors spend on website
Goal: A minimum time on site
KPIs:
Length of visit
Average time spent on website
Percentage of returning visitors.
KPIs help you to look at the factors you can influence in the conversion process. For example, if your objective is to increase revenue, you could look at ways of increasing your conversion rate, that is, the number of visitors who purchase something on your site. One way of increasing your conversion rate could be to offer a discount. So, you would have more sales, but probably a lower average order value. Or, you could look at ways of increasing the average order value, so that the conversion rate would stay the same, but you would increase the revenue from each conversion.

Once you have established your objectives, goals and KPIs, you need to track the data that will help you to analyse how you are performing, and will indicate how you can optimise your website or campaign.

21.5.3 Segmentation

Every visitor to a website is different, but there are some ways in which we can characterise groups of users, and analyse metrics for each group. This is called segmentation.

### Referral source

Users who arrive at your site via search engines, those who type in the URL directly, and those who come from a link in an online news article are all likely to behave differently. As well as conversion rates, click path and exit pages are important metrics to consider. Consider the page that these visitors enter your website from, can anything be done to improve their experience?

### Landing pages

Users who enter your website through different pages can behave very differently. What can you do to affect the page on which they are landing, or what elements of the landing page can be changed to positively influence outcomes?

### Geographical location

Do users from different countries, provinces or towns behave differently on your website? How can you optimise the experience for these different groups?

### First-time visitors

How is the click path of a first-time visitor different from that of a returning visitor? What parts of the website are most important to first-time visitors?

21.5.4 In-page heat maps

Software such as Crazy Egg [www.crazyegg.com](http://www.crazyegg.com) can show you exactly where users click on a web page, regardless of whether they are clicking on links or not.

Figure 18. Heat map options offered by Crazy Egg.

It produces information that helps you to know which areas of a website are clickable, but which attract few or no clicks, and which areas are not clickable but have users attempting to click there. This can show you what visual clues on your web page influence where your visitors click, and this can be used to optimise the click path of your visitors.

There are many factors that could be preventing your visitors from achieving specific end goals. From the tone of the copy to the colour of the page, anything on your website may affect conversions. Possible factors are often so glaringly obvious that one tends to miss them, or so small that they are dismissed as trivial. Changing one factor may result in other unforeseen consequences and it is vital to ensure that you don’t jump to the wrong conclusions.

Hotjar [www.hotjar.com](http://www.hotjar.com) another popular analytics tool, demonstrates how heatmaps can help you improve your web page. You can find more information here: https://www.hotjar.com/heatmaps

21.6 Data Visualisation

In the Data-driven decision making chapter, we discussed the importance of reporting on data and making sure that the information gets to the right users, in the right way. Not everyone is adept at understanding a detailed financial breakdown,
and analytics reports often intimidate people, so how can a data-focused marketer present information in a way that’s accessible to everyone?

The answer lies in data visualisation, which involves placing data in a visual context to help users understand it. Data visualisation software can help demonstrate patterns and trends that might be easily missed in purely text-based data reporting. It can refer to something as simple as an infographic, or something as complex as a multi-point interactive program that lets users decide what to compare.

**Figure 19. Traditional graphs and charts to represent data.**

**Figure 20. Representing data in different ways.**

**Figure 21. Clever use of the layout of a clock and plotting points for representing what Americans spend their time doing each day.**

**Figure 22. Word clouds are becoming popular ways to visualise data, where the size of the word represents its importance or frequency.**

Many data visualisation online are also interactive. Visit this link to see an interactive data visualisation about voting habits of Americans: [https://www.nytimes.com/interactive/2016/06/10/upshot/voting-habits-turnout-partisanship.html](https://www.nytimes.com/interactive/2016/06/10/upshot/voting-habits-turnout-partisanship.html)

It can be challenging to decide on what data you want to visualise and the information you want to communicate, but as long as you know how your audience is likely to process visual information and what they need to know, you should be able to choose something that conveys the necessary information simply.

### 21.7 Tools of the trade

The first thing you need is a web analytics tool for gathering data. Some are free and some need to be paid for. You will need to determine which package best serves your needs. Bear in mind that if you switch vendors, you may lose historical data. Below are some leading providers:

- Google Analytics – [www.google.com/analytics](http://www.google.com/analytics)
- AWStats – [awstats.sourceforge.io](http://awstats.sourceforge.io)
- Webalizer – [www.webalizer.org](http://www.webalizer.org)
- Hotjar – [www.hotjar.com](http://www.hotjar.com)
- GoSquared – [www.gosquared.com](http://www.gosquared.com)
- Kissmetrics – [www.kissmetrics.com](http://www.kissmetrics.com)
- Clicky – [clicky.com](http://clicky.com)

When it comes to running split tests, if you don’t have the technical capacity to run these in-house, there are some third-party services that can host them for you. Google Optimize, which you would have learnt about in the Conversion optimisation chapter is Google’s platform for running tests and assessing your website’s performance.

A test the significance of basic split tests, a split-test calculator is available at: [www.usereffect.com/split-test-calculator](http://www.usereffect.com/split-test-calculator). When you use cookie-based tracking, you need to add code tags to your web pages and these need to be maintained, updated and changed occasionally. Google Tag Manager ([www.google.com/tagmanager](http://www.google.com/tagmanager)) makes it easy to add and work with these tags without requiring any coding knowledge. Other professional tag management tools include TagMan ([www.tagman.com](http://www.tagman.com)), Ensighten ([www.ensighten.com](http://www.ensighten.com)) and Tealium ([www.tealium.com](http://www.tealium.com)).

### 21.8 Advantages and challenges

Tracking, analysing and optimising is vital to the success of all marketing efforts. Digital marketing allows easy and fast tracking, and the ability to optimise frequently. When you use real data to make decisions, you’re likely to make the best choices for your business and website.

However, it can be easy to become fixated on figures and metrics, instead of looking at broader trends and using them to optimise campaigns. Generally, macro or global metrics should be looked at before analysing the micro elements of a website.

Testing variables is vital to success. Results always need to be statistically analysed, and marketers should let these numbers make the decisions. Never assume the outcome, wait for the numbers to inform you. The next chapter covers this in much more detail.

### 21.9 Case study: eFinancialCareers

#### 21.9.1 One-line summary

eFinancialCareers, the world’s leading financial services careers website, used Google Analytics 360 and DoubleClick Manager to improve its programmatic display remarketing.

#### 21.9.2 The challenge

eFinancialCareers uses dynamic remarketing ads to drive leads to its site, where their goal – the major conversion they hope for – is for the user to fill out a job application. The company wanted to boost the number of conversions coming to them from programmatic ads.

![Figure 23. The eFinancialCareers website.](image)

#### 21.9.3 The solution

With help from Google 360 experts Periscopix, they decided to gather and analyse insights about site visitors, including behavioural, demographic, and geographic information.

They set up event tracking for a number of variables, including:

- Country
- Job sector
- City
- Company
- Job ID number.

After collecting data about their website users for six weeks, they segmented them into:

- Passive users, who have visited the website and potentially registered for job updates, but haven’t viewed or applied for any jobs.
- Active users, who have viewed and applied for jobs.

Once they had this data about each segment, they could tailor programmatic remarketing ads to send the right message to individual users. Messages could encourage passive users to apply for vacancies, while active users could be sent tailored ads based on information such as the job sector in which they had displayed interest.

They created almost 300 different remarketing lists, adding layers of detail to each identified segment.

Because Analytics 360 and DoubleClick can be integrated, updated remarketing lists can be automatically passed to DoubleClick to ensure relevant targeting for programmatic ads.

21.9.4 The results

Because the new system allowed remarketing to reach users within the ideal conversion period, and with relevant messaging that was updated based on the user’s site activity, the ads performed considerably better. eFinancialCareers saw:

- A 21% increase in site traffic from real-time bidding campaigns
- A 423% increase in conversion rates for job applications coming from remarketing efforts.

(Google, 2016)

21.10 The bigger picture

Tracking, analysing and optimising are fundamental to any digital marketing activity, and it is possible to track almost every detail of any online campaign.

Most analytics packages can be used across all digital marketing activities, allowing for an integrated approach to determining the success of campaigns. While it is important to analyse each campaign on its own merits, the Internet allows for a holistic approach to these activities. The savvy marketer will be able to see how campaigns affect and enhance each other.

The data gathered and analysed can provide insights into the following fields, among others:

- SEO: What keywords are users using to search for your site, and how do they behave once they find it?
- Email: When is the best time to send an email newsletter? Are users clicking on the links in the newsletter and converting on your website?
- Paid media: How successful are your paid advertising campaigns? How does paid traffic compare to organic search traffic?
- Social media: Is social media driving traffic to the website? How do fans of the brand behave compared to those who do not engage socially?
- Mobile: How much of your traffic comes from mobile devices? Is it worth optimising your site for these? (It usually is!)

21.11 Summary

The ability to track user behaviour on the Internet allows you to analyse almost every level of a digital campaign, which should lead to improved results over time. The foundation of successful web analytics is to determine campaign and business objectives upfront and to use these to choose goals and KPIs grounded in solid targets.

Web analytic packages come in two flavours – server-based and cookie-based tracking – although some packages combine both methods.

Data can be analysed to discover how users behave, whether outcomes have been achieved, and how appealing the user experience is. Testing to optimise user experience can demonstrate ways in which to influence user behaviour so that more successful outcomes can be achieved. Segmenting the audience allows specific groups of users to be analysed.

21.12 Case study questions

1. Why did eFinancialCareers create so many remarketing lists?
2. Describe what analytics data was gathered to create these lists. Why did they choose to focus on this data?
3. How did the integration of various digital elements improve this brand’s remarketing efforts?

21.13 Chapter questions

1. Why is it so important to use data to inform business decisions?
2. What would you learn from a single-page heat map?
3. What is the difference between a goal and a KPI?

21.14 Further reading

- www.kaushik.net/avinash – Avinash Kaushik is an analytics evangelist, and his regular insight on his blog, Occam’s Razor, is essential reading for any digital marketer.
- Web Analytics 2.0 by Avinash Kaushik – if you are looking to get started in web analytics, you can’t go wrong with this book by the web analytics legend.
- www.analyticspros.com/blog – Analytics Pros has a blog with great advice and thoughts about analytics.
- blogs.adobe.com/digitalmarketing – Adobe has a good blog with a lot of analytics information as well.
- contentmarketinginstitute.com/?s=analytics – Believe it or not, the Content Marketing Institute has some great analytics tips.
- support.google.com/analytics#topic=3544904 – Google Analytics Help Center is an excellent starting point for anyone who wants to get to grips with this free, excellent web analytics service.
21.15 References


21.16 Figure acknowledgments

Figure 1 - 14. Screenshot, Google, 2017.

Figure 15. Stokes, 2013.

Figure 16. Adapted from Stokes, 2010. https://catalog.flatworldknowledge.com/bookhub/reader/13259?e=fwk-105454-ch14_s02

Figure 17. Screenshot, Google, 2017.

Figure 18. Designmodo, 2014. https://designmodo.com/improve-website-crazy-egg


Figure 23. Screenshot, eFinancial careers, 2017.