



Behavioral Analytics





In order to understand your performance, You should also be looking at user behavior insights.

What are those? Well, they are features that allow you not only to see that users - to take an example - bounce off of one of your pages. You can also find out why.

So, in this chapter, when we say [user behavior insights](#), we mean three features that are available in the Visitor Analytics app: **session recordings, heatmaps and conversion funnels**. Each of them will add precious info to your website stats.



Session Recordings

A friend and a collaborator of mine once told me about a [landing page](#) he had created in order to promote the booking of test drives of a luxury car model. After 24 hours he had over 500 clicks on the page, but not a single booking. He had no idea why. The visitors seem to be within his target group and he thought that the design of the page complied with just about every conversion-optimized web design standard you could think of, but something still was obviously wrong. So, to discover what was wrong, he installed a visitor [session recording tool](#) or sometimes it's called the session replay tool in the industry.

What he found out was that users were clicking on the logo, on the picture of the car, even parts of the text on the page, but nobody was clicking on the big button saying "Book test drive". Armed with this valuable information, he proceeded to make changes to his page starting with changing the color and the position of the button. Within 20 minutes of the first changes, the first test drive was already booked. The landing page later led directly to the sale of four luxury cars, which was a major success for him.



So you see how important a feature can be? [Visitor Analytics](#) gives you the possibility to actually watch videos. Technically, they're not actual videos, but they're live reconstructions of the activity of all users navigating your website. You can go to **Behavior**, click on **Visitor Recordings** and then go to the small wheel to set up the entire process. You can click on Start recording and then you will be asked to choose whether you want to record all the pages of your website, or just some specific pages that you're interested in, like in the previous case, there was just one landing page. You could type in the name by pressing the Add page button. Then you can choose conditions to record. You can also choose to record sessions that are longer than a set time as you may feel that those are more relevant. Like here, I have only sessions that are at least 5 seconds long or you can decide to record only the sessions where there are clicks and scrolls.



This can be useful if you don't want to record accidental visits where people stay idle for a long time and nothing happens and those will obviously provide, you know, useful data whatsoever. After you are done with the settings, you should just click Update. In a short while, as **visitors reach your site**, you will be able to see a list of recordings in your window. You can just choose any of them and press Play. You will now see every detail of that user interaction with the site.



Today Last 7 days **Last 4 weeks** 12/06/2017 - 01/04/2018

Number of recordings: **500 / 500**

Choose an action

<input type="checkbox"/> User & Date / time visited	Referrer	Entry & Exit page	Pages	Duration	Browser/OS/Device	Tags	Actions
RETURNING							
<input type="checkbox"/> 14.03.2019 11:59:00	www.loremipsum.de/123...	/Login/lorem/ipsu... /login/forgotpass/lorem/ipsu...	10 ▼	3.1 min		My tag Userflow #1	
NEW							
<input type="checkbox"/> 14.03.2019 11:59:00	www.loremipsum.de/123...	/Login/lorem/ipsu... /login/forgotpass/lorem/ipsu...	10 ▼	3.1 min		My tag Userflow #1	
NEW							
<input type="checkbox"/> 14.03.2019 11:59:00	www.loremipsum.de/123...	/Login/lorem/ipsu... /login/forgotpass/lorem/ipsu...	2 ▲	3.1 min		My tag Userflow #1	
URL		Timeline		Edit Comment			
#1 /123/Login/lorem/ipsu.../dolor/sit/amet		14.03.2019 - 11:59:00 1 min		<div style="border: 1px solid #ccc; padding: 5px;">Lorem ipsum dolor sit amet, consetetur sadipscing elitr, sed diam nonumy eirmod tempor invidunt ut labore et dolore magna aliquyam erat, sed diam volu.</div>			
#2 /login/forgotpass		14.03.2019 - 12:00:00 20 sec					
RETURNING							
<input type="checkbox"/> 14.03.2019 11:59:00	www.loremipsum.de/123...	/Login/lorem/ipsu... /login/forgotpass/lorem/ipsu...	10 ▼	3.1 min		My tag Userflow #1	
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<input type="checkbox"/> 14.03.2019 11:59:00	www.loremipsum.de/123...	/Login/lorem/ipsu... /login/forgotpass/lorem/ipsu...	10 ▼	3.1 min		My tag Userflow #1	

SUPPORT



Maybe what you find will be a normal session, but like in the example with the car dealership, you may find user obstacles in the recording. Maybe a user is clicking on unclickable elements that look like buttons. That could be annoying for them. Or would be something to fix. For example, by changing the look of the elements you will be able to see the page as the user see it. You might discover that on some devices, parts of the page don't look well enough. Maybe you see in the recording that the user hesitates on an element, or they scroll chaotically up and down, or they do not scroll enough to get to a key content element.



These are all indications that something is not perfect on the page and steps should be taken to fix it. This is why having this feature is so important. Use it as much as you can. By all means, don't watch thousands of recordings or watch all of them. You have options to filter them by country, device, visitor country, entry page, exit pages, etc. Just click the Filter button right over here and you can see all the general filters that you have on the left and some more navigational filters on the right. It might be relevant to just check, for example, sessions where users exited from a certain important page. Filter and just look at those [recordings](#) to try to find out why they dropped out there.



Heatmaps

A user behavior feature tightly connected to session recordings is [heatmaps](#). Going through thousands of recordings and watching them all is impossible. But if you use heatmaps, the information from those recordings and the aggregated into click, movement and scroll maps instantly show you patterns of usage inferred from all those recordings.

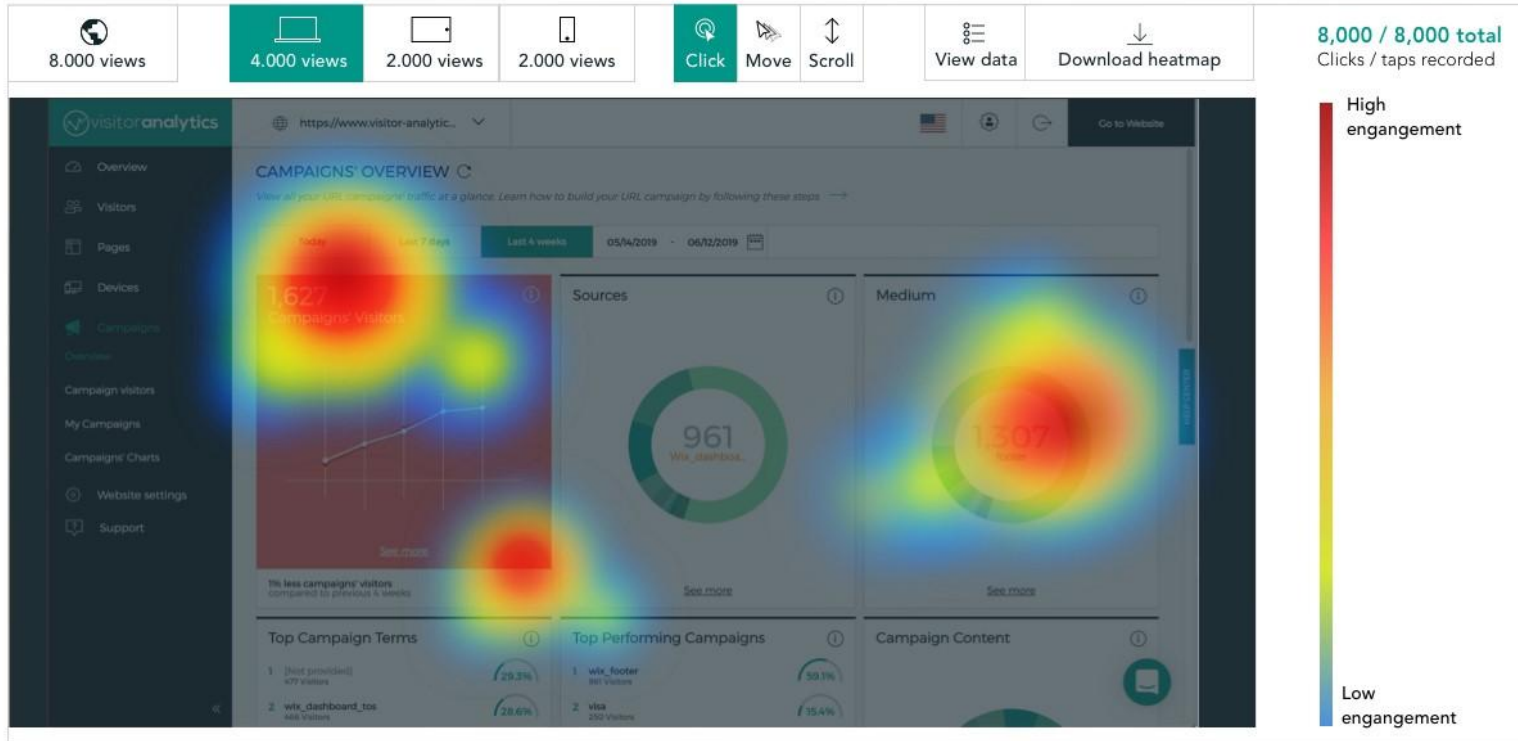
For example, you might see 2 or 3 recordings of people clicking on an element on your page. But this is not enough to decide if that is a pattern. Doing **heatmaps** of that same page, you see if the majority of **users interact** with that element the same way, so maybe you have hundreds of people actually clicking there. If in the heatmap the color of that element is dark red, then there is high activity on it. If it's blueish, then there is little to no activity on it.



Have a new UI on this page?

Reset & update heatmap

< VISITOR HEATMAP DETAIL VIEW - www.example.com/lorem/ispum





Heatmaps are a lot more visual than your usual analytics reports. It makes them more accessible. Particularly, for people who are not accustomed to analyzing data, heatmaps colors range from dark red to cold blue to indicate the level of interaction with the page element. You can easily see your website hotspots, the way users navigate and the areas that are most of least interacted with. The warmer the color, the more the interest. Based on this color scheme, you can adjust the website design to match the attention focal points shown in the heatmap. Moving important elements from the cold bluish areas to the hot red areas would certainly be advised.

Creating a new heatmap for a page on your website is that easy. In the main view, click on Create heatmap. **There are two types of heatmaps** that can be created: heatmaps for simple pages or heatmaps for multiple pages, turning similar layouts, like for example, if you have product pages that are exactly the same, regardless of the product.



In our example, we **create a heatmap for a specific page**. Add a name to your heatmap, select the number of page views it should record, select the page you want to analyze. Lastly, click on Create. Your heatmap is now collecting data. Wait for visitors to interact with the page and check out the results in a few days after enough data will be gathered (it all depends, of course, on how much traffic you have on your website). Let's now look at some heatmap examples.

The beauty of [Visitor Analytics](https://www.visitor-analytics.io) is that you can easily switch between types of heatmaps of the same page from **click, to move, to scroll**, so you can go from a map of the clicks to a scroll map, only the same window.



Now, let's look at what we have here as an example. This is a click heatmap and we can easily see that the most clicked areas are the sign-in button and the flag that we have on the page. The other areas have colder colors so we can assume that we get not so many clicks. It's a bit of a problem that we don't have too many clicks on the try free plan button and this area is quite cold. Now, if we move and go to the **Move heatmap**, we're going to be able to see where the mouse has moved preponderantly and we have red areas right here in the menu in the header again on the flag, the sign-in button, the entire menu section of the page is very hot. So is the first paragraph you right here on the left and we seem to get quite a bit of red areas right here on the right and I would assume that this is because this is where users click and then scroll.



Again, maybe not so much activity as we would like on the big button saying Try free plan. We're now going to look at the scroll map as well. This measures how far our users scroll on average on the page. Obviously, the first part, the top part of the page will always be hotter like in this example. Dark red, that's where all the users start from. But then, as we scroll down below this Try free plan things start to get a bit yellowish. This means that fewer people have reached this part of the page and as we go even further down quite soon, we get into a greenish, bluish area and then it gets really darker and darker blue which means that by this time this part of the page was not reached by almost anybody.



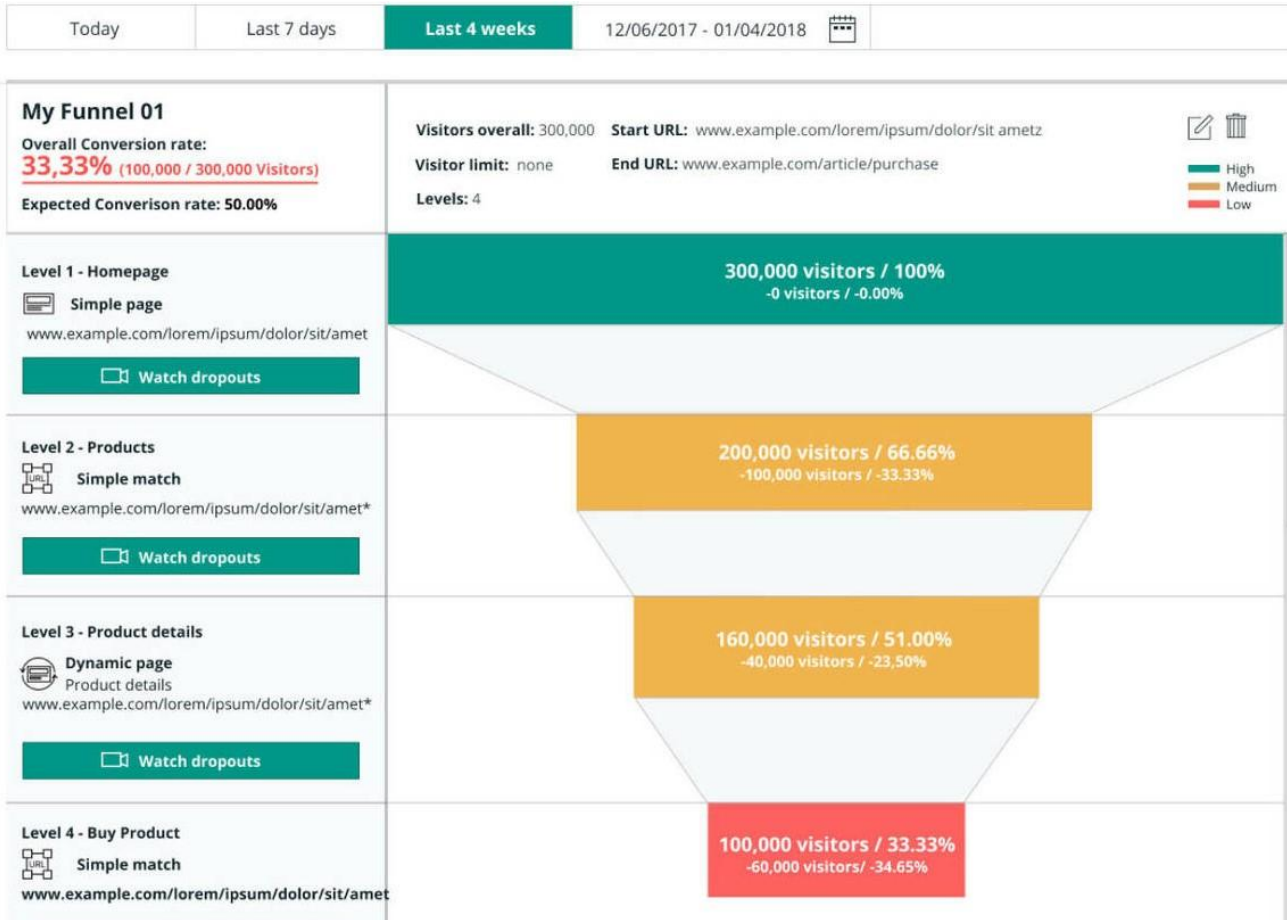
Conversion Funnels

Some time ago when the internet was still in development and the first attempts at e-commerce were being made, website owners and digital marketers did not have all the functionality of the analytics tools that we have today. Tracking sales processes was very difficult at the time.

I remember working with **website owners** who were confused about why they had many visits to their websites, but very few sales of the product. Most of the time it was because their websites were convoluted and were confusing customers visitors got lost somewhere between the product page and the actual check out. But where exactly? And how could we better analyze this?



Nowadays, the problem is solved. Most experts use a tool called a funnel or a [conversion funnel](#) or a marketing funnel to get an overview of the entire process that leads to a conversion or the same. It is called a funnel because it looks and acts exactly like a funnel that you would use to pour liquids into a bottle with a tight neck. Some of that liquid may inevitably get spilled and will not make it to the inside of the bottle. In translation, that means that not all of the visitors make it from the top of the funnel to the point of conversion, which in our example was the bottle or the bottom of the bottle.





Before using the [conversion funnel tool](#), you will need to think about how to set it up according to the path. Your users would commonly take on your website in order to reach a **conversion**. A simple example would look like this: this one consists of five steps: visitors landing on the homepage (that's where we started the first step); then visitors going to website shop; visitors reaching a product or a service page; visitors adding that product to the cart; visitors going to check out. So you see there are five steps between the moment the users enter the website and the time they reach the checkout page, which is the conversion page. At each step, you would expect to have fewer visitors staying in the process, but you would hope that the difference between steps is not too big as this would mean that you are losing many customers along the way.



Anyway, by analyzing the funnel, you will be able to see at each step you are losing customers. You can try to find the reasons for that. A good idea could be to watch the session recordings for those who dropped off at that particular step. Find the error, fix it and reset the funnel visitor data to see if results improve. You may be running several **marketing funnels** at the same time, with small variations to the steps you use. Compare the data and see which pages lead to a higher conversion rate, learn from that and try to replicate those pages in the future. This is how the **funnel tool will help you improve your performance in terms of sales**, not just visits.

Now that we know what the **funnel** is used for, let's see how to set it up in Visitor Analytics. I have it open right here. You can click on Create new funnel, name the funnel to recognize it later because you may have several and you can name it something like funnel 1. You have the option to choose a visitor limit like the maximum number of sessions that you want to record for this funnel, but this is just optional.



You don't need to enter anything in it. If you don't, then all of the sessions will be recorded. It's also optional to **set a target conversion rate** right here. I can put in ten percent so that you can compare actual results with your goals by the time you finish the funnel. You need at least two levels to have a valid funnel which you can see here with the names of the pages you think are relevant.

For example, I could choose home as the first level, that can choose a name for it, to go with homepage and then I could just yeah, let's say I have a Blog Page here that I think is relevant. I choose the name blog page. And I just look for it in the list or type the name I want. Over here it is and I can then add other levels to the funnels. The maximum number of levels is 8, but you'd be advised not to overcomplicate the path to conversion by adding so many steps. 4 or 5 steps is ideal. I'm just gonna introduce the last level of the funnel here, which should be our login page.



There are two ways to define a funnel step. The one that I use so far went with particular pages, but I can also introduce in the funnel types of similar Pages, like for example, all product pages because all of the product pages on my website start with the same path, like visitor-analytics.io/products/something.

That's about it for funnels. Make sure to use them especially if you are focused on sales.



You should now have enough information to be able to fully understand what happens on your website and how to identify pain points for users in order to be able to fix them and have the best possible user experience. This is also the end of our beginner's course about **SEO and analytics**. If you want to learn more about the topics we covered in these modules. All of our future courses will provide more in-depth details about all the things we discussed here. For now, we hope this course provided you a solid introduction to the basics of what you need for a successful website.

So use the information wisely, try things out for yourselves and get back to the course contents whenever you feel there is something you did not fully understand. Also, use the additional sources like our blog and [support pages on the Visitor Analytics website](#), where you can find a lot more extra information on all of these things.



Watch the full Behavioral Analytics Course with video explanations [here.](#)