

The logo for Userlytics features the word "userlytics" in a lowercase, sans-serif font. The "user" portion is in a vibrant green color, while "lytics" is in black. A small "TM" trademark symbol is positioned to the upper right of the "s". To the right of the text is a green speech bubble icon with a white tail pointing towards the bottom left.

userlytics™

EMPOWERING USER-CENTERED DESIGN

# Uncovering the **WHY** of User Behavior to Improve Web Design

*User research methodology uncovers behavior of site visitors and strategies for ongoing improvements in Web design, development and optimization*

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## Stuck in the '90's?

Technology has made incredible leaps since the '90s. Remember having to wait for a dial-up connection? Waiting to synch your Palm Pilot via a serial port? Carrying a phone that had no touch screen or camera? Remember the Web before YouTube, Facebook, or Flash?

User centered design testing has evolved as well. We stopped using Super VHS, or yes, gasp...Beta Max, and got tapeless all digital usability labs. We now have website analytics instead of text based log files. But how many of us are still trying to run user research in labs with one-way mirrors?

Things change, including the methods of gathering user experience feedback. You don't need to ask participants to come down to a lab to see your product to gather quick insights anymore. You also no longer need to rely solely on the click metrics or conversion scores provided by web analytics packages that fail to answer **why** users behave as they do. This is 2011: Maybe you're using GotoMeeting or WebEx to run your user studies remotely? But how much time and scheduling complexity does that take? There are now easier, faster, and more efficient ways.

## Introducing The Future—Today

Userlytics lets you leverage the latest in cloud-based Internet technologies to gather user feedback on your products or services on an Agile timeframe. This can be accomplished not in weeks or months, but in hours, or at most, days. Userlytics is based on proven methods that have been tested by Internet and consumer-software companies for years, however, Userlytics takes it to the next level.

It used to be that only the largest, most sophisticated companies had the specialized "in house software" needed to run "automated usability studies." Companies like Microsoft have run automated CIF compliant benchmark studies for years. Keynote swallowed early pioneers of automated web-based user studies like Vividance and Netraker 6 years ago, allowing large corporate websites to gather usability metrics in a scalable way. That's a long time ago in terms of technology lifecycles, and like all technology, as time passes, things get easier and better, and new possibilities and paradigms appear.

Imagine what it would be like to define a new design one day and have actionable, valid, user feedback and behavioral data the next day. Not basic click logs, or heat maps, but complete video highlights of end-users struggling with the key problem spots in the UI, like the old days of video tape-based usability labs. Now imagine those video highlights are already organized by task and points of interest, with quick summaries of the tasks that users struggled with, including task completion, SUS scores, and time on task metrics, all ready to view by the entire team on your project Wiki or website...the next day. Now imagine that this is all possible at a cost that you can add to an expense report. Userlytics just made that possible: It's as simple as going to the Userlytics site, uploading your prototype (or linking to your live site), entering a few settings and that's it!

Real, actionable qualitative and quantitative data. Ready to use, in the cloud.

## So What's The Catch?

You might ask, how useful is the data? What type of data does Userlytics provide?

Is it only quantitative data? Like how many people click on a button or link? Or conversion rates, like how many users buy after viewing your product or service on the site? What about qualitative data, the stuff that any good user researcher knows helps you understand why people do things, not just what they do? The good news is Userlytics provides both.

Some players in the "Customer Experience Management" market use the terms "qualitative" and "quantitative" as a superficial distinction between methods, confusing the size of the sample and the type of data gathered. As a result, there is a lot of confusion in the field of user experience research and design about the difference between quantitative and qualitative research. Since Userlytics allows you to capture much more qualitative data than any other remote method, it's important to understand what these terms really mean.

Qualitative data is data that cannot be adequately represented by numbers (such as a user's facial expressions or freeform comments) no matter how large the sample, whereas quantitative data is data that lends it self to numerical representation and analysis (such as time on a task; see S. S. Stevens 1946 and the classic paper on this topic.).

Most usability and user centered design experts acknowledge (cite xxxx) that a mixed methods approach to user research that allows for triangulation, or

comparison via multiples sources, is critical for understanding usability problems and determining how to address them. Inclusion of qualitative factors has long been recognized by the mainstream scientific community as critical to both hypothesis formulation and analysis of any data in science. Thomas Kuhn, the famous physicist and author once wrote in *The Function of Measurement in Modern Physical Science*:

“Large amounts of qualitative work have usually been a prerequisite to fruitful quantification in the physical sciences.”

Strictly qualitative or quantitative approaches lose this advantage, making the data subject to questions of validity or interpretation. Those questions are the main reason many usability problems identified during A/B research and multivariate analysis go unaddressed.

Tools such as Google Analytics, Omniture and Keynote can help identify valuable trends via quantitative metrics. However, most user researchers and designers find them lacking in explanatory value. These types of tools fail to provide “the why” behind the numbers. At most, they provide survey data, which have specific limitations. This is in contrast to traditional in-person usability testing that provides both quantitative data and rich qualitative data, although at a heavy cost in resources, complexity and time.

The strength of traditional usability testing is its precise ability to tie qualitative data (i.e., observations of user’s interactions with the software) with quantitative metrics (e.g., this happened to 8 out of 10 users we observed) to make quick informed inferences (e.g., the problems identified are likely to happen in roughly that proportion in our target user base). While the confidence level associated with these small sample inferences is not as great as with larger samples, it’s much better than working with no data at all.

The challenge has always been that traditional in-person studies are complex, time consuming and expensive, when you consider the logistics and complexity involved in bringing participants in-house (or in-lab) and analyzing the data. This is true even if the scope of a study is constrained to only a small number of participants, so called “discount usability testing,” as Jakob Nielsen first called it in the early ‘90s (see Nielsen, 1993). That means user research is often only conducted on mission critical design projects, or, at most, at the end of a design and development project when the only value may be validation, or alternatively, “patches” to fix identified problems.

As a result, many teams that want to apply user centered design principles are forced to make (un)educated guesses that produce less than desirable results as they lack a good user experience feedback loop. Additionally, time constraints cause teams to delay running any user studies until the end of the project, when it's too late and too costly to truly fix the problems.

What's been missing for user centered design to become a mainstream reality for many teams is an easy and efficient way to get rapid user experience feedback, thus providing both qualitative and quantitative results in an agile fashion. This process enables iterative testing and refinement based on qualitative insights, versus the simple gathering of large samples of quantitative data once the designs are final.

## **Remote, But Better**

In the past, many companies invested heavily in infrastructure such as specialized labs with one-way mirrors. Now, much of the same benefit can be achieved without the need for such a big upfront investment. More UX folks currently leverage remote meeting technologies such as GotoMeeting to reduce or eliminate the costs and hassles of having participants come into a physical lab to evaluate a website or digital prototype. The benefits of remote testing are now widely recognized in the user experience community, but the tools have not been well designed for the job...until now.

In addition to lower up front and going costs, there are many other benefits to running studies remotely. You can recruit participants without any geographic limitations, making it easier to ensure they represent your target audience. Previously researchers would travel to do this, often renting local lab facilities, or they would carry around "portable usability lab" equipment. With the latest in web conferencing technology, you can reach out over the Internet and interact with those users as easily as making a phone call. Another benefit, you gain "ecological validity," as you work with users in their normal environments, and not in some sterile lab.

Despite these advantages, web conferencing tools were not designed for conducting user research. Anyone familiar with web conferencing tools used in this way can list off several things that makes them less than optimal for running user centered design testing. That's what makes Userlytics different. It isn't a web

conferencing tool, it's a web based user centered research service—designed specifically for user centered design research.

Just like web conferencing tools, Userlytics improves your ability to recruit locally, since participants don't need to schedule time to drive to your offices. Instead they can simply click on a link and participate from their desks or living rooms. This is much more convenient for both you and your participants. Moreover, you can easily test a PDF mockup with hyperlinks, a static set of HTML pages, or web pages that are already live on your site.

Since Userlytics is a service designed for running user centered design research, it also helps you with all the elements of running a study. Consider the following phases of running a study:

- Planning
- Recruiting & Scheduling
- Data Collection (screen, interactions, and videos of users)
- Analyzing
- Reporting
- Archiving (ease of storing and sharing)

Userlytics supports the full study process because it's designed for user centered design research, not conference calls. Let's review what this means:

## **Planning**

Userlytics walks you through setting up a study. You simply fill out an online form to define your tasks and target participant profile.

**1 test info**

Test name:   
(Project X..., Release A...)

Upload A Prototype to test

Enter A URL To Test

URL:   
(for example http://www.SiteToTest.com)

**SAVE**

**2 choose a goal** [edit](#)

Test Goal

**3 ask questions** [edit](#)

**4 pick your testers** [edit](#)

**Number of testers:** 5  
**Target tester residence:** *United States (USA)*

**Gender:** *Any*  
**Age:** *Any (Highest Rated)*  
**Education:** *Any (Highest Rated)*  
**Employment Status:** *Any (Highest Rated)*  
**Family Status:** *Any (Highest Rated)*

Test Price:  
**\$299.00**

**Purchase**

Even if you've never set up a study before, our expert support staff can walk you through how to do it. We know you're not just trying to setup a meeting to share your sales presentation!

## Recruiting & Scheduling

Next, choose the demographic profile of the kinds of participants you want to use, or, alternatively, upload your contacts to our server. We do the all the grunt work of recruiting and/or scheduling for you. Just sit back and let us screen and schedule based on your study plan.

Our Userlytics community of study participants meets common profiles. Need some e-commerce consumers from middle America or the UK to participate in your study? Not a problem, we have those ready to go. No need to call that

marketing agency and pay them a small fortune for a list of names of middle-class moms in Minnesota or Iowa.

4 pick your testers

Please enter the number of testers you would like to perform this test. 5 testers is the minimum.

Number of testers: 
Use Userlytics Testers

Residence	Gender	Age	Education	Employment	Family status
Any	Any	Any	Any	Any	Any
United States	Female	18-35	some college	employed	married
United Kingdom	Male	35+	college degree or better	unemployed	single

SAVE

## Data Collection

With Userlytics, you can run multiple participants at the same time. So instead of waiting days to collect data on a dozen users, you can do it in a single evening. In fact, you can collect data in the evening when participants with jobs are available, without you and your colleagues working that evening. Try that with WebEx! You just login the next morning and watch from anywhere. Every user interacting with your site is like a channel on cable TV. You can channel surf, navigate through hyperlinks to the most interesting videos and sections of the videos, and watch them at your leisure.

Here's one of our key features. Instead of watching everything and waiting (and waiting...) for that key moment where the participant stumbles and you find out what's wrong with the design, Userlytics watches for you and let's you know if something interesting is happening. It's like having a TiVo that knows how to edit out the uninteresting part of participants' behavior. Instead of cutting commercials, we allow you to bypass all those boring hours of when the user clicks on "the right link"—and we highlight the interesting stuff and let you play those highlights back later. Since we record it, you and your team can watch all the key highlights the next day on your schedule instead of your participants' schedule.

## Analyzing

Since Userlytics is designed for user centered design research, analysis is easy and straightforward. Once your participants are finished, we aggregate the data on a project dashboard, summarizing the results.

[Dashboard](#) » Fotofuze Usability Test

**Task:**  
Starting at the homepage of the website, complete the steps involved in creating a new account. Stop once you are confident that you account has been created.

[FAQ's & Contact](#)

### Video results

<b>m40</b> Male, 34 years, United States (USA) Graduate Degree, Self-employed	<b>John30</b> Male, 36 years, United States (USA) Bachelor's, Employed full time	<b>Marry17</b> Female, 19 years, United States (USA) High school or equivalent, Employed full time
<b>Elisabeth11</b> Female, 50 years, United States (USA) Graduate Degree, Employed full time	<b>Nathan8</b> Male, 42 years, United States (USA) High school or equivalent, Self-employed	

**Marry17**

00:31 / 05:11 [Full Screen]

**Questions** 1 of 1

Did you find our website interesting?

Tester said:

- Yes

**Ratings** 1 of 4

On a scale of 1-5 (1 easy, 5 difficult), how would you rate this site's design and content?

Tester assigned a rating of: 4 out of 5.

[Next rating question](#)

Note that for every usability issue, we provide links to the participants who experienced the problem so you can see it from their perspectives. Another key

feature is we capture web-cam enabled video feedback. So you don't simply get the participant's screen or some number showing a click-through rate. You get to hear and see the participants describe the problem in their own words as they point to items on the screen (with the screen included in the video). As a result, you'll see their expressions just like professionally produced usability highlight tape from a lab study, only without spending days editing video.

If you want to use Userlytics in combination with A/B or multivariate testing methods, we make that easy as well. This enables you to compress development and testing cycles by providing actionable qualitative insights that end debates and "shoot in the dark testing."

## Reporting and Archiving

Once you've finished your analysis, you can send an email out to the team or your clients with a link to the project dashboard. They'll have password-protected access to the project dashboard. Or, if you prefer, you can download your results to your favorite productivity application to customize your report. We provide key summary findings in .CSV and HTML format so you can easily import them into Word, Excel, or Pages or post them to a project wiki, intranet or private client site where you share your designs. URLs are included so you can point to the videos in your reports with no need to figure out how to store large video on some server and stream it to others. As long as your Userlytics account is active, you'll have access to all your data, securely stored in the cloud.

## In Conclusion

So what are you waiting for? Try Userlytics today. Stop wasting time and money arguing about new design proposals. Include the user in your team! Validate your designs. Test and iteratively improve that new design proposal if you have questions before you go down the path of committing to your project sponsor based on your best guess. It's easy, affordable, and fast! How often do you get to combine those three things? Besides, as we all know, the team with the best user centered design wins!

[Include the user in your team. Contact Userlytics today.](#)

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