

What users want

User research
as a tool for
radical
innovation

Designit business briefing series

September 2013

Three Questions Answered

01

What are the advantages of user-led innovation models?

Users should be involved in the design process from the beginning to the final stages. According to the latest research, when it comes to developing incremental innovation, the frequency of contact, equal involvement and the content of suggestion all have positive influence on the outcome.

02

How can user research be harnessed to face the challenges of radical innovation?

User research can be repurposed to create radical results if one transcends the barriers between generative and evaluative research and creates a working hybrid of the methods. Next, by rehashing the order in which designers and researchers work on a project it is possible to effectively harness their superpowers so that they are able to shed new insights onto problems.

03

What should the future of user research look like?

Firstly, user research should focus on getting beyond inquiring about user needs and expectations, because they produce weak generative power. The key is to delve into deeper issues and to investigate people's fundamental motivators. Secondly, it's vital to share research findings in a more urgent and dramatic manner in order to transform them into inciters of profound change.

According to Apple and IKEA, user-involvement cannot lead to radical innovation. After all, consumers don't know what they want until it is in front of them. Or do they? César Astudillo, managing partner of Designit's Madrid office, explains why generative and evaluative user research works wonders, and how to get the most out of it.

How much user-involvement is too much? For the design world, user-centred design is gaining ground as a vital practice for facilitating innovation across sectors. In the last couple of decades, the practice has been adopted by more and more companies worldwide, despite an on-going debate in the design world about whether to lead users, or be led by them. Corporations have overall become more aware of the value of putting human factors at the centre of design efforts. Consequently, they are calling upon human-centred design professionals earlier in the cycle of product and service development than previously.

Designit firmly believes that “the magic is in the mix” of applying both user research and a wide range of other methods, which allows the user to be involved in the design process and subsequently yields better results. An investment in the acquisition of a deep understanding of the users' latent and expressed needs and a thorough interpretation leads to more fulfilling designs and higher user satisfaction. It is, however, not enough to merely place the user at the centre of decision making by trying to walk in their shoes. Aside from requirement gathering, they also need to be involved in the process from the earliest stages to drawing up final solutions. It's simply never too early or late to get them involved.

To inquire or not to inquire.

Conventional wisdom tells us that user research is great for incremental innovation while not applicable if you're looking for the next big thing. César Astudillo's experience indicates that getting to know the end-users well is well worth the effort also when it comes to new ideas. This white paper explains the thinking behind César Astudillo's conclusion.

USER-LED VS. BRAND-LED

While the value of user-involvement is by now widely recognized, it is quite common among design practitioners to argue that user-involvement cannot deliver radical innovation. Your choice of methods should basically depend on which type of innovation you're looking for. Some companies firmly believe that if you want forward thinking, ground breaking and innovative results, you should figure it out yourselves rather than inquiring among the users. In his research paper entitled 'Customer co-creation in service innovation,' Anders Gustaffson from Karlstadt University highlights that when it comes to developing incremental innovation, the frequency of contact, equal involvement and content of suggestions all have a positive impact on the final result. On the other hand, when it comes to radical and disruptive innovation, only the frequency of contact has a positive knock-on effect, while the content of the suggestions bears a detrimental outcome to success.

This is one of the reasons behind the approach of giants like Ikea and Apple, who base their design

processes entirely outside the realm of user research. According to Apple designers, the innovation giant's mantra goes something like this: "we don't waste our time asking users, we build our brand through creating great products we believe people will love." While the track record of this team speaks for itself, it's risky business to merely rely on the instinct of a few select designers when it comes to creating a game-changer. This is because game-changing products and/or services not only revolutionise the market, but they should also seamlessly fit with the end users' needs.

Skibsted and Hansen also champion this view in their opinion piece 'User-led Innovation Can't Create Breakthroughs' written for Fast Company. They believe that "user focus makes companies miss out on disruptive innovation," as people are naturally opposed to change. Unsurprisingly, truly revolutionary stuff is often irrational and its success cannot be predicted.

MIXING UP THE METHODS

There is, however, a solution to this schism, which is tried and tested through many years of professional experience. It is, after all, possible to bridge the gap. User research can effectively be repurposed to face the challenges of radical innovation. It only needs to be done right. The secret lies in creating the right cocktail of evaluative and generative research and adding the correct ingredients in good time by the right people. You need to transcend the barriers between generation and evaluation in order to create a working hybrid. After all, not conducting some kind of research before the prototype stage is a bit like shooting an arrow at a target while blindfolded, out of fear that being able to see is going to distract you and make you miss.

This approach demonstrates that by letting designers and researchers do what they're best at in a rehashed order generates more value than the traditional 'researcher comes before designer' model. Counter-intuitively, you first hand over an incomplete and ill-defined problem to a designer, who wrestles with the brief for a short while, only after which the researcher can come in and ask about the assumptions and reasons behind the design. This way she can consolidate and refine the findings in the field by testing the hypotheses and filling out the gaps of information. You can also use the 'uninformed' design as a basis for the stimulus for the user during research, where you progressively disclose more information and build on the user's reaction.

PLAYING BY THE BOOK

Last year, a textbook publishing company approached Designit with the task of conducting a usability study of their website that sells digital textbooks and digital resources for teachers. After having evaluated the site, Designit intuited that the company's problems went

far and beyond website usability. It became apparent that they hadn't considered the teachers' needs, expectations and context of use of the products. The company was misled in terms of their whole product strategy and next year's objectives. At the outset of the project, Designit was not in a position to criticize and change their overall direction right away, so the team offered them the usability evaluation, only with a twist.

“ That is the beauty of radical innovation - showing people something that is self-evident, but which nobody has ever seen before. César Astudillo

Within all the twelve sessions with users, Designit deliberately inflated the pre-test interview and deflated the actual usability test. In the pre-test interview, we inquired heavily about the needs, expectations, context of use and other factors. We essentially turned the usability test (an evaluative technique) into a Trojan horse and placed a large in-depth interview (a generative technique) inside. A client workshop in two parts followed: in the first one we showed them the usability problems we detected, and prioritized them according to frequency and severity. That was the original plan. In the second workshop, however, we gave them information about the needs, expectations and context of use of their products, which we used to challenge the implicit assumptions of their current strategic plan.

We discovered in the workshop that changing their digital asset access model matched more closely with their business objectives and worked seamlessly with the teachers' needs. It was a matter of simply redefining the access model. Small changes, no matter how late in the process, have the ability to change the course of a product in a positively disruptive way. The client ended up extremely pleased with the results, despite its radical difference from the original brief.

THE RIGHT TARGET

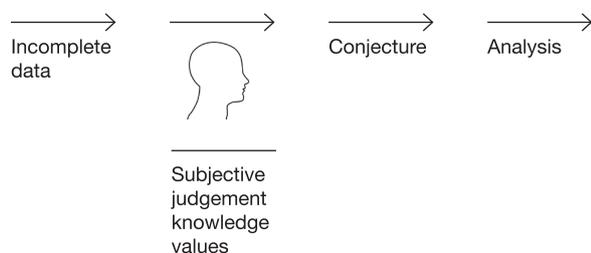
Cases of resounding successes conducted without or against user research prove especially provoking, because they are tremendously counterintuitive. Ultimately, real customers must adopt the final products or services. When you eventually put them into the market, customers have to let go of their hard-earned cash to purchase them, which provides the ultimate evaluative research. If you get it wrong, the failure comes with a large price tag. If you can avoid such a situation by conducting user research, how could spending time with your future customers

before introducing a new product possibly be the wrong move?

If generative research could possibly be detrimental to innovation, it is only so because we're doing it wrong and because we're doing it in such a way that it sucks creative energy out of the process. It shouldn't be so. We believe generative research shouldn't be like a playpen. Instead, it should be like a springboard. It shouldn't emasculate designers; it should give them wings.

And why is it frequently not the case? David Ogilvy nailed the answer to that question back in the sixties,

Theory of primary generator



Ariel Guersenzvaig (desn.it/primgen)

when he commented on the role of research: "I notice increasing reluctance on the part of marketing executives to use judgment; they are coming to rely too much on research, and they use it as a drunkard uses a lamp post for support, rather than for illumination." We must stop using research for support and start using it for illumination.

The Brits claim there's nothing more practical than a good theory. An extremely useful theory formulated by Jane Darke in the late seventies can help us find the answer to how designers can help determine information needs for research. It is called the Primary Generator Theory. According to Darke, the superpower of designers comes out in full force when you give them incomplete data about a problem, so that they can process that data using their judgment, which comes from their experience and values. It also results from the abductive reasoning process, which produces a candidate solution to the problem. If not, the designers can conjecture about the right approach for the solution, or about some critical aspects of it. Curiously, the designer's way of analyzing an ill-defined problem is to formulate a candidate solution for it. The problem is that we previously erroneously used to ask the designers for information demands, which is not their forte.

BANKING ON THE RESULTS

Last year Designit received a request for a proposal (RFP) for a research project from the Spanish national lottery. They wanted to compare their current website with other private gambling companies and national lotteries abroad and measure their levels of usability and persuasive design. They also wanted us to come up with a set of recommendations to build the ultimate lottery site. These recommendations would later be handed to another contractor, who would take care of the design and development. We applied for the RFP, but we challenged the method and gave them a counter brief instead. We told them that firstly, we would like to work with the design contractor, not before them. We wanted to involve them in the process. Together with them, we'd define a benchmark - not to measure any dimensions, but to cherry-pick good ideas to steal.

Only after that stage we would create several quick candidate prototypes for the new website. We extracted a few information demands from candidate solutions that resulted from the close collaboration between the designer and us and used them as stimuli for in-depth interviews with real users. The results and the users' reactions to stimuli were subsequently used to build personas of target users and to refine our candidate solutions. Next, we analyzed the refined candidate solutions. Some principles were extracted out of that analysis that both the design contractor and Designit believed should be used in the final design. It is clear that Designit's approach differed radically from the one requested by the client. It was, nonetheless, implemented successfully and the client was delighted with the final result.

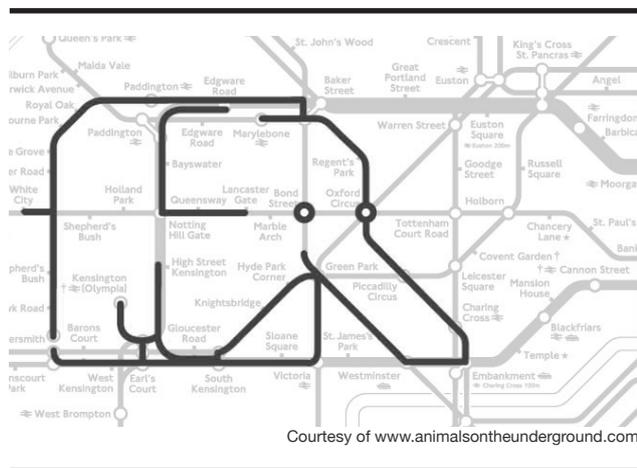
The key insight from this example is that the superpower of a designer is to shed light on a problem by imagining a solution for it. Concurrently, the superpower of a researcher is to shed light on a problem by obtaining new data about it and making sense of it through categories of analysis that defy common sense and are rooted on social and behavioural science.

ELEPHANT IN THE ROOM

You may at this point be wondering - how can ignoring most of the data possibly help us come up with radical innovations? The map of the London underground surprisingly provides the answer. In 1988, Paul Middlewick saw an elephant on the plan of the underground and he traced its outline onto the map. As a result he set in motion something unstoppable that stood the test of time, a powerful driver that inspired creative people to see patterns where others couldn't.

Isn't it fascinating how by focusing ourselves in only some pieces of the data, we can see what nobody saw before, and make everybody else see it as well? Importantly, this is not done by ignoring the data,

but by pointing to the significant parts of it that are illuminated by a previous intent in a way that is compatible with reality. That is the beauty of radical innovation - showing people something that is self-evident, but which nobody has ever seen before.



THE FUTURE OF USER RESEARCH

There are two promising directions in which user research can develop in the future. The first involves getting beyond inquiring about user needs and expectations, which after all produce weak generative power. This is because they only scratch the surface of the problem and do not reach far enough into the human psyche. The key is to delve into deeper and more powerful issues, such as investigating people's fundamental motivators and specifying where true value lies for them. Understanding the underlying drivers on top of the needs and expectations provides a more holistic overview of the user's profile. One should ask not only about what they'd like or need, but also about their capabilities. While such results are likely to be more abstract and vague compared to definitions of needs and expectations, these insights can spawn valuable inspiration for new solutions or new problems to be investigated. Secondly, the research output provides an enticing window looking forward to things to come and serves as a provocation to solve inherent problems so that we can look at things not as they are, but as how they could be. At the end of the day, we don't want to be driven by what we observe, we want to be inspired by it.

In order to visualise reality not as a static present, but rather as a future begging to exist, when we analyze data we can't solely rely on the detachment and distance typical of social and behavioural researchers. We have to prime ourselves with a definitive obsession. This is because people, who have had an obsession with solving the problem at hand often created historically great innovations. In this context, obsession is defined as an extreme state of an attitude, where attitudes are special modes of thought that predispose us to act in a certain way,

when confronted with a given stimulus. An obsession is an extremely powerful driver that facilitates higher levels of energy being channelled into the possibilities of the future.

Next, it is imperative we change the way we in which we share the findings, if we are to use them as inciters of profound change. Rather than pigeonholing them into neat scientific models used by researchers to appeal to our logical side, we should conceptualize them as dramas that make us buzz. Such a narrative approach makes us care more and transforms the research into a pressing issue imbued with a sense of urgency and excitement. We simply start caring more. You rarely see people getting excited about models, but good storytelling is, well, a different story with the power to inspire, motivate and move. An inspiring resource for rethinking research outcomes in the form of dramas is the list of dramatic situations compiled by the French writer, George Polti. According to Polti, there are 36 possible dramatic situations in storytelling. He made an inventory with all the names for the possible options, including 'revolt' or 'rivalry of superior versus inferior.' We can present research outcomes that inspire change and action by utilizing narratives with compelling conflicts and relatable characters, who have goals, frustrations, things to do and obstacles to overcome. We need to present findings that ignite us, set us in motion and make us say: "Something must be done, something must be done now."

SUPERPOWERS UNITED

To summarize, we can use user research as a daring tool fit for radical innovation if we transcend the barriers between generation and evaluation, if we let researchers and designers unite their superpowers and if we dare to employ obsession as an analysis tool to extract potential futures from data. All in all, it is possible to arrive at radical innovation through user research, but only if it's done right.

The approach requires sophisticated understanding and experience of its methods in practice, and it cannot stand alone as a practice for obtaining insights. By treating the approach as a mapping tool, it is possible for it to show us where the easy paths are, where the obstacles lie and where there are benefits to be reaped. Rather than taking the findings at face value, it is essential to use them to help find better ways and equip an organization with an enriching experience. It is not an end to all other approaches, but experience acquired over decades shows that it works. At Designit, we cannot find strong arguments for why we should settle for less than the best possible package of insights when designing meaningful experiences. User-involvement is an essential tool to help us put that package together.

About the author



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César Astudillo is a strategic designer with an eclectic background. A drop-out from software engineering school, master in Marketing and Multimedia Communication and currently working on his Psychology degree, César's professional record includes an award-winning trajectory in video game music composition, comic strips for computer magazines, leading research and design projects and being part of the design team of the most internationally successful video game in Spanish history. César is a partner in Designit's Madrid office since 2006. He also teaches User experience and Strategic design.

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