



# UX IN AN AGILE WORLD - INTERVIEWS FROM FOUR TOP MINDS IN THE INDUSTRY

In a traditional waterfall work flow, User Experience (UX) specialists have plenty of time up front to research and incorporate important user insight into the planning stages of software development. After the software is released, more feedback comes from the trenches as customer service gets complaints or compliments on how easy and intuitive the application is to the uninitiated.

However, in an Agile world, that upfront time is cut down. Although the entire design and development process becomes much more collaborative, UX sometimes gets the short shrift. As stories are completed and sprints move forward, the speed of iterations can preclude spending adequate time and effort on fine tuning the user experience. Since UX is so vital to a pleasurable outcome for customers, this challenge can create big problems.

Is it possible to go Agile without losing the value of UX? cPrime interviewed four UX experts to find out. These UX specialists have experience transitioning from traditional to Agile development methodologies in various industries and disciplines. As you review their responses, consider your own organizational situation and think about how UX can be more fully integrated into your Agile process.

## MEET OUR PANEL OF EXPERTS

**Jon:** I'm a UX specialist that has been working in Silicon Valley for over 20 years. The teams I worked on adopted Agile methods very early (almost 15 years ago), and as a UX leader at some of the Valley's largest software companies I was tasked with adapting UX methods to a wide variety of projects. I currently work as consultant/adviser with early stage startups and large teams new to Agile to help them design products using Lean UX and Agile methods.

**Steve:** I'm a consultant providing UX and Product strategy, design and research along with process and team development and organizational change for clients of all sizes in many different industries. I got my start about 20 years ago as an engineer and moved through several technical roles and then project and product management before focusing on experience design.

**Anna:** I started my career working in the non-profit sector providing employment and educational services to disadvantaged youth in San Francisco. I've always been passionate about working with the community and education but I also have a strong interest in art and design. After working in non-profit for 5 years, I decided to explore a career in design. I found a job at eBay and this was the stepping stone for me to learn about eCommerce, UX design, design systems, development processes, and experience working in a large corporation. At some point, I still had a desire to go back into education so I began searching for new opportunities. I was lucky enough to find a job where I was able to combine both my love for education and design into one place and that's where I am now.

**Richie:** I work as a senior UX designer at a major online retailer and I have been working for the past 8 years in the field of UX. I have a Masters in Human Computer Interaction. Enterprise software, eCommerce, eRetail work. I've worked with Wal-Mart's global eCommerce. At my current position I work on everything from responsive design to

omnichannel technologies to mobile, tablet, and app-based features.

## HOW DOES THE UX FUNCTION CHANGE IN AN AGILE DELIVERY MODEL COMPARED TO A TRADITIONAL WATERFALL DELIVERY MODEL?

Jon: In the waterfall model, UX took traditional marketing requirements, refined them into detailed user-centered requirements (user stories), and delivered high-fidelity mockups and interactive prototypes to development to assist them in building the UI of the product. At companies that were good at this, the designs would go through iterations based on user research before development started to ensure that the developers were building designs customers both wanted and understood. While not perfect, this was a big improvement over waterfall without any formal UX function.

With the introduction of Agile, the time between the definition of requirements and delivery of the working software is compressed. Ideally the Agile team collaborates closely in a cross functional way to iteratively define and deliver customer valued functionality. This collaboration should remove some of the need to create "intermediate artifacts", but it confuses designers who are used to working in a large or distributed team (including agencies) where they defined their roles largely as creating elaborate design documentation well ahead of development work.

Agile-savvy designers conduct backlog grooming sessions with teams that include collaborative whiteboard sessions to define key UIs and identify design risks before development sprints begin. When working on features, an Agile savvy UX pro knows how to collaborate with the team to build prototypes, conduct A/B tests, fake door tests, etc. They get much better user feedback than previously feasible, all in a much more sustainable way.

It takes some practice, but many teams now manage to design new features and test them with users in a matter of weeks. The best ones track objective UX metrics in a manner visible to everyone including the executives. I like this model better because I feel there is more opportunity to iterate with user input and collaborate effectively to create a great product.

Steve: Almost everything is different. While Agile solved many problems and frustrations engineers had with waterfall, it almost completely removed design and research from the process.

The designer can no longer think and solve systematically. A sprint scope often doesn't include a complete user scenario or even an end-to-end work flow, let alone an entire digital experience.

The designer is still the owner, but their role changes from a controller making decisions alone to one of collaborative facilitator. I think this is a great thing, but this is often seen by designers as a loss of power. More importantly, it requires a very different disposition and personality than many designers possess and the transition is painful for some, impossible for others.

Anna: In a traditional waterfall method, a UX designer plays more of a UI or visual designer role. Requirements and part of the UX are outlined by the product manager, then handed to the designer. Once the design is complete it gets handed to the developer and changes are less likely to happen unless you identify a use case that wasn't accounted for in the requirements.

The process feels more linear and you run the risk of using all of your resources and a large amount of time to release a product that might not be successful in the market. I would only use this method when there is a crystal clear picture of what the final product will be.

In an Agile delivery method, it's more about collaboration and looping in different teams early in the process.

Richie: There's a big difference in how we work in Agile. It's much more rapid and much more high-touch collaboration.

I work with the Product Manager in sizing the stories, prioritizing the stories, helping the teams plan their iterations and their spikes. I have an initial draft of a text document, but it won't be final when I hand off. It will just be used as a starting point. I work with the developers closely to adjust the design, test it on the fly and close the story to move on to the next.

With Agile you are collaborating on a much more rapid frequency. You don't have as much up-front time to do the design and research. There's a lot of work that happens in very tight collaboration with developers.

Companies developing for B2B or internal IT systems often find it challenging to justify UX resources. How would you convince an executive that UX is of value?

Jon: Most of the times when companies don't invest in UX it's because nobody has spent the time to develop a solid business case for doing so. As a UX person, you need to collaborate with the internal user champions and product owner to develop the business case for investing in UX. This is something many designers in IT projects fail at, and it's because they don't view it as their job. In my view this is just short sighted.

When developing B2B or IT applications, UX often gets less attention because the customer is not the end user. In the case of B2B apps, I ask stakeholders to consider what might happen if the end users fail to adopt the final application. I also ask them to consider the impact on sales and support.

"Easy to use" is easy to sell, and it costs less to support. I try to generate a business case for working with sales, marketing or support leaders. One trick is to get the key executive to become actively involved in the process by attending the demos, or - even better - participating in usability tests, including test driving the application itself.

With internal IT apps, the easiest thing to do is to leverage the internal user base to raise awareness of the importance of UX. Defining UX metrics working with the product owner is the easiest way to start. I've had good success in using surveys or gathering usage metrics. If the entire team realizes it's not enough to just deploy the solution; that they will be measured by how effective it is, including considerations like user adoption and satisfaction, everything gets easier.

The key to all cost justification efforts is to present a well thought out business case. Good business leaders pay attention to objective metrics and customer feedback.

Steve: A retail client of mine recently told me they were having difficulty hiring and retaining sales people because their digital tools were so poorly designed and difficult to use. When I interviewed some sales people, they said they were using their own devices to manage customer data as workarounds without the company knowing. As a business you never, never want that.

I'm sure this story could be quantified and there are many case studies all over the Web detailing the savings and ROI of UX investment that more than justify adding the UX discipline as a peer, if not leader, to the team and organization. Businesses are realizing that the interfaces and experiences of these systems are touching the same people who now expect all software they use to feel and function as simply and easily as their consumer sites and apps - particularly, younger generations.

The best way I've found to convince an executive to change their thinking and invest in UX, whether B2B or B2C, is to simply bring them video of real people trying to use their product. After their initial embarrassment of seeing real customers complaining, frustrated, swearing, and vowing to never use their product again (this is not uncommon), they'll very likely be open to at least discussing what can be done about it. Once the door is open, you can prove yourself.

Anna: In order to create a successful product, it's important to understand the needs and pain points of the user before moving forward with any type of development. This could be done with user research which includes interviewing users, concept testing, and beta testing. In the end, I see this saving a company time and money because research is more affordable than having a team of developers build something that might not be a viable product.

Richie: UX is not just about delighting customers and pushing sales. It goes much deeper than that. We look at really understanding the users in their context: what motivates them, what are the obstacles in the way of making them successful at whatever they're tasked with. So our job is to humanize software and make it more usable.

When you have UX professionals working on the end to end experience, it makes for a compelling application. As an example, one project I was recently working on involved creating new designs that were not customer-facing, but were for the sales representative and backend sales staff on the shop floor. When I go in as a designer we do very thorough research around the kind of environment the sales staff works under, the interactions they have to conduct with the customer.

A lot of sales on the floor can be saved if you put things like the product detail info and the review info in the hands of the sales staff. It can empower people who are on the ground to do their jobs more effectively and efficiently, which doesn't just effect the bottom line. It also results in satisfied workers because the software they are being asked to use is friendly and less cumbersome.

In any context - B2B, B2C - UX is about productivity and it humanizes everything, which is always an improvement. When something is a delight for you, it feels natural, you go faster, saving time, and you have happier people.

Agile development is all about collaboration. What are some tools and vehicles you like to use in your teams to collaborate?

Jon: In the spirit of Agile I try to use the simplest tools possible whenever possible. Working with small centralized teams, I rely extensively on whiteboards for communicating designs, taking photos of these and posting them somewhere the team has access to. I like using DropBox or better yet a wiki like Confluence when available. I also use a lot of sticky notes to help the team brainstorm and collaborate.

I like to post simple one-page personas somewhere in the team space to help the team make better design decisions and keep focused. I also like to post key screens that need improvement (hall/wall of shame) and great designs from other products (inspirational).

I rely heavily on GotoMeeting to review designs in progress. I also find it's essential to have a wiki or at least a file sharing solution to ensure we have a way to distribute the designs to the larger team.

Another key tool I use is an enhanced product backlog where I track the UX priorities metrics against stories, typically in a spreadsheet. Sometimes I print this out in a large poster format and hang it in our workspace. This helps give the team a sense of the big picture and progress to date.

Steve: A tool box is needed, but too often we go in swinging our UX hammer (wireframes) because that's the only UX tool we have. The result is disappointing for everyone. And when you only have one tool, you tend not to be able to even view or evaluate the situation effectively in the first place, because you don't have breadth in your perspective.

Because the job has now evolved to that of design facilitator, I try to consciously embrace that role by getting as many disciplines from the team involved in everything I do. Engineers, visual designers, product managers, marketing, etc. We do field visits, analysis of quantitative results, user interviews, market definitions, sketching workshops, prototyping, you name it. I give them very specific activities or roles and time box each effort: two 20-minute phone interviews, one 60-minute sketching workshop, etc.

Everyone isn't always comfortable and will make up excuses for not wanting to participate at first, so don't take "no" for an answer and work them each in at their own pace. I find the investment of their time more than pays for itself not only because this early firsthand knowledge increases the team's productivity later, but they also contribute great ideas giving them an increased sense of ownership and providing me with new/additional possibilities I never could have thought of myself.

Anna: We use a variety of tools such as Google docs and spreadsheets to share requirements, research goals, road maps, etc. We use Lucid Chart to build flows and Invision to build a quick prototype. And, of course, JIRA for

development, QA and UXQA.

Rich: To be very honest, we use a bunch of them. Wikis, JIRA, Confluence, a lot of text messages, Slack messaging portal. We have a slew of tools for documentation, project management, communication, time lines and scheduling. It depends on the project and how it's structured. These are examples of all the tools that we use, not necessarily that they're used all the time on every project. It depends on what the project is and what the scope is and how we're structuring it. I tend to use whatever I'm asked to use to make things more efficient.

How do you evaluate the various UX disciplines and prioritize which ones are most valuable to the company?

Jon: This is a complex topic. Every UX discipline can be evaluated based on quality of work and its impact on the product.

With user research, a good researcher should have a solid grasp of the risky areas that need investigation. The real answer is: does the researcher have solid data, have they done a thoughtful analysis and can they translate that into actionable recommendations?

When it comes to design, the most basic way of determining quality is through metrics from small sample usability testing like task completion rates and site/app analytics (e.g., click through rates, conversion rates, etc.). A good visual designer should be able to point to visual design guidelines (i.e. font, icon style, and spacing) or well organized assets (style sheets, image libraries).

Whoever is doing the interaction design should be able to point to guidelines or artifacts (wireframes, specs, prototypes, etc.).

With both visual and interaction design, if the product is inconsistent and has bad visual and interactions, it's usually pretty obvious that there is a problem. If the assets and specifications are there, but the product doesn't reflect them, it's a sign of poor collaboration or prioritization by the product owner and the developers or QA.

Steve: There are some emerging trends changing the UX value proposition. No longer do polished persona posters, wireframe documents, information architecture diagrams, research conducted in isolation, or almost any high fidelity and time consuming deliverable provide much value. UX now brings value to the equation with guerrilla research, hand sketching, interactive prototyping, basic CSS and scripting ability, and a solid knowledge of technology - all fast, cheap, highly valuable to the team, and fitting well within the iterative nature of the short Agile sprint.

Anna: Each discipline is essential at different points in time of a project and it also depends on the nature of the project. For example, if you're testing a concept, then visual design will be compromised to a certain extent to save time. Also, there are some roles that can be combined such as UI, IxD, and visual. Hence, the emergence of hybrid designers. It comes down to what the company needs at that particular moment in time.

Richie: UX is a lot of teamwork, a lot of collaborative experience together, so it's hard to pick what to prioritize and when. All the specialties exist for a reason. It depends on the nature of the project. What does the person want to achieve by involving UX?

If you want to simply understand if the software is effective and whether it makes sense to people, you probably want a usability researcher there. If you think the design does not look good and needs organization and changes to the color scheme, then you want a visual designer. If you want someone to come up with a brand new concept, imagine something that doesn't really exist yet, and you want someone to do a lot of competitive research and decide what the system should behave like, you want an interaction designer.

It's really difficult to say which is more important. All are important. All are there for a reason, but based on what you want out of a project, you want one expertise involved more heavily than another.

## CONCLUSION

Without a doubt, UX is a vital component in any software development process. How it's integrated into an Agile work flow can have a dramatic impact on the product's success, as well as the company's overall investment.

It seems that companies are still struggling with the right integration, but the situation is improving. Talented UX designers of all disciplines are finding their place in the new Agile world of development and are being actively sought for their skills. This can only improve software development as a whole.

If you're interested in learning how to better incorporate UX into your Agile development process, we recommend taking the SAFe route: the [Scaled Agile Framework for the Enterprise](#).