User Experience Careers

What a Career in UX Looks Like Today

2nd Edition

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The research for this report was done in 2019, however, the information presented is not just a snapshot in time. It is a compendium of professional advice based on experience gained over many years.

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Executive Summary

Our first version of this report was created in 2013 and included results from a survey we conducted of 963 UX practitioners. In 2019, we replicated and extended this study in order to provide a richer and more up-to-date picture of the UX-career landscape. In addition to an updated version of the survey administered in 2013, we conducted 2 focus groups — one in Hong Kong and one in Los Angeles — with UX professionals at our <u>UX Conference</u>, as well as 17 remote, semi-structured interviews with UX professionals from 9 countries.

HIGH-LEVEL FINDINGS

Most UX Practitioners Are Satisfied with Their Career

UX practitioners are just as satisfied with their careers as in 2013. Respondents cited many reasons why they enjoyed their careers: feeling like their work was having an impact, working with talented people, doing an intellectually stimulating job, and more. For the minority that were unsatisfied with their careers, reasons given were often related to:

- Not enough time to implement UX activities or processes
- Not enough support from their organization
- No access to mentors
- Feeling not valued in their organization

Many of the reasons given seem to be symptomatic of working within low UX-maturity organizations, and some of our respondents even admitted that this was so. Respondents who experience these problems in their organization often reported to us that they felt burned-out, tired, anxious, or lost.

As You Gain More Years in the Field, Satisfaction Increases

People with more years of experience tended to be slightly more satisfied with their careers and their pay than those with fewer years of experience. This finding could be due to feeling more confident in their work as a result of their experience, and consequently having more respect from coworkers, as well as higher pay.

UX Practitioners Come from Many Different Backgrounds

UX practitioners come from a wide variety of backgrounds, although a large majority (82%) have a degree. However, when we analyzed by job role, there were some differences in formal higher education for designers versus researchers versus UX writers. Many professionals did not have traditional, UX-related degrees — which suggests that the field still values experience and soft

skills over formal education. Still, a relevant degree can't hurt and can get you a foot in the door if you're new to the field.

The Most Important Set of Skills in UX Are Soft Skills

UX practitioners and hiring managers believe soft skills are the most important set of skills needed to be successful in the field. These are also skills hiring managers actively recruit for. They include empathy, curiosity, problem-solving, and communication skills, amongst many others. This is not surprising as a UX job requires practitioners to constantly question the status quo and themselves, work with others, and put users first.

Job Titles Are Still as Varied as in 2013

Our respondents had 134 unique job titles related to UX, with interesting, new combinations appearing. Even after grouping roles by title, the activities and responsibilities of these roles varied, particularly for non-specialists and designers.

The Designer Role in a Snapshot

Those with a designer role often have a broad spread of responsibilities, from designing prototypes to collaborating with subject-matter experts, to carrying out qualitative usability tests. Designers tend to have a design-related education and have skills in using prototyping tools, performing visual design, and writing front-end code.

UX designer

"The role of UX designer is a dream job for creative people who love to invent and get products into people's hands. In the best environments, it's pure creativity and invention, which is mostly unattainable with any other role." — Respondent



Background

Undergraduate degree, often in graphic design, product design, industrial design, digital media, visual communications, or fine arts

Regular Activities

- Prototyping and wireframing
- Constructing user journeys or flows
- Contributing to design systems and style guides
- Designing visuals

Top Skills

- Prototyping
- Visual design
- Research

Most Desired Skill

Data analysis

Advice to New Designers (Quotes from Respondents)

"Make evidence-based decisions based on user research and best practices rather than opinion. Learn how to articulate and defend design decisions. Be an advocate for your users."

"Be curious, enthusiastic, open, and social. You need a lot of soft skills to be a UX designer. It's not all about your software skills."

A Researcher Role in a Snapshot

Those with a researcher role in the UX field are more likely to have fewer responsibilities than designers, focusing more on UX research, as opposed to information architecture, content strategy, and any kind of design work. Researchers tend to have fairly strong communication skills, used for either writing or public speaking — much more so than designers. They're less likely to have front-end coding skills in HTML and CSS.

UX researcher

"I really love what I do as a UX Researcher. I really love the process of understanding the problem space, learning about the different people we design products and services for, and synthesizing those findings to help guide designers and product managers." — Respondent



Background

Undergraduate degree, often in social sciences (psychology, sociology, anthropology) or humanities

Regular Activities

- Qualitative usability tests
- Interviews
- Field studies
- Surveys

Top Skills

- Research
- Writing
- Public speaking

Most Desired Skill

Visual design

Advice to New Researchers (Quotes from Respondents)

"Know when to use which method and understand all the ways to mitigate bias. Don't let others persuade you to conduct research incorrectly in favor of speed. Use your voice often as a proxy for users to guide product development. Always champion for the best possible experience, regardless of technical capabilities or limitations."

"Don't feel inferior to developers. Believe in the value of your work. Be willing to compromise but always clearly state the consequences — 'if we don't test these wireframes with 5 users, we risk going in the wrong direction."

Advice for Those Interested in Pursuing a Career in UX

You can get into user experience no matter what your educational background is, as our data shows. How to get started? Respondents recommended a range of different activities: reading books and articles, taking courses, getting hands-on experience with UX activities through internships or projects, brushing up on soft skills, and finding a mentor.

It can be hard to get started in the field, but it's worth doing. Here are a few pieces of advice from our survey respondents:

- "Be open to learning from others. Education and certifications are good, but you learn the most by working with people who have hands-on experience in the field."
- "Soft skills over hard skills: develop and foster your empathy, collaboration, and critical thinking skills. This will take you further than any software knowledge."
- "Be yourself. Have a point of view. Find lessons in the failures and turn them into your next successes. Always be learning and growing. The industry does not sit still, and neither should you!"

Our Survey Respondents

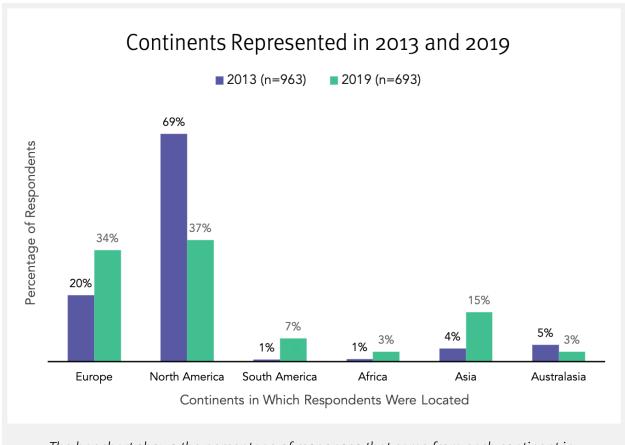
LOCATIONS

We collected 693 responses from 65 different countries, with almost one third of the responses coming from the United States (31%). The next most-represented countries were the United Kingdom, India, Germany, Brazil, and Canada (with 8%, 6%, 5%, 4%, and 4% of the responses, respectively).

In 2013, when we ran a similar survey, we got responses from 38 countries. 70% of 534 people¹ came from the United States, Canada, United Kingdom, and Australia. This time, 43% of responses came from these countries, possibly suggesting that the newer sample was more representative of UX practitioners in the field. However, since 2013, UX has begun to emerge as a field in many more countries around the world. This could be one reason why people from many more countries responded to our 2019 survey, compared to 2013.

The larger representation across non-English speaking countries could be an indicator of how the UX field has grown outside of the Western world over the 6-year period. If we look at the breakdown of responses by continent, North America and Europe had the greatest number of responses (37% and 34% respectively), but Asia also had a fair number of responses (15%), compared to 4% of responses in 2013. These responses came from 22 different countries across South, West, Central, and South-East Asia.

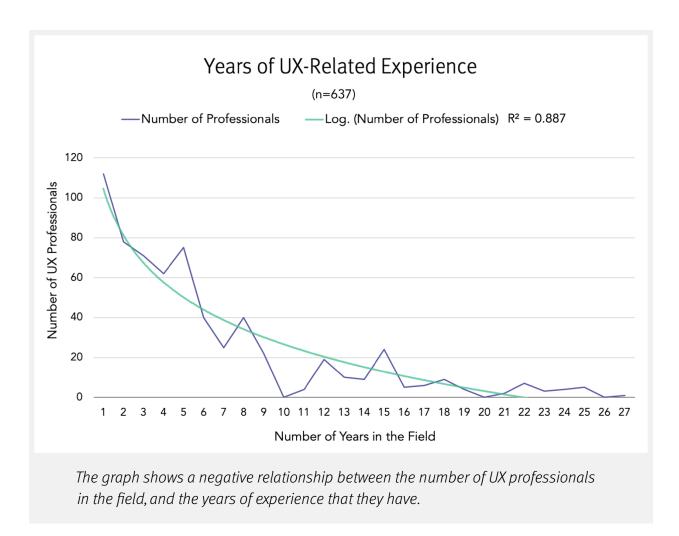
¹ These are the number of people who answered the question, 'In which country do you live?' Unfortunately, this question was located at the back of the survey in 2013, so not every respondent answered it. In our latest survey, this was our first question, so all of our respondents answered this question.



The bar chart shows the percentage of responses that came from each continent in our 2013 and 2019 surveys.

YEARS OF EXPERIENCE

Our survey was answered by respondents with all levels of UX experience — ranging from 1 month to 30 years. The majority of respondents (82%) had less than 10 years of experience in the field. Just over half (51%) of respondents had fewer than 5 years of experience in the field. Only 18% of respondents had 10-or-more years of experience in the field.



Although our sample was not randomly selected, we believe the above trend reflects the composition of the field. The UX field has been steadily growing as it gains acceptance in software development. It has also broadened from the study of interface usability to all aspects of the user experience, and in recent years we see it encroaching on customer experience. The proliferation of new roles introduced in recent years — from UX writers, to strategists, to service designers — reflects the growth and diversification of the field. And, as previously discussed, we see evidence of the field growing in other parts of the world.

The top finding is that many UX practitioners currently practicing UX haven't had many years of experience in the field. For those with more experience, they may be in a position to contend for better roles and higher compensation. For those just entering the field, competition is likely more fierce, but that doesn't mean it's impossible to get a good UX job, as hiring managers often look for individuals who possess excellent suites of soft skills, as we later discuss in <u>Skills Needed for the Job</u> and <u>Hiring UX Professionals</u>.

Managers and UX Leads Have, on Average, 10 Years of Experience

People who were in a manager or leadership role had, on average, 10 years of UX-related experience (n=95, mean=10.4), but the responses were fairly well-spread (SD=6.3); the most number of years in the field for managers was 23, and the fewest was two. Given that UX is still a growing field and more companies are looking to bring UX in house, this finding is not surprising. Moreover, just because someone doesn't have 10 years of UX-related experience doesn't mean she won't be ready for a management or leadership role after two years if she has transferable experience and skills. Some of our interview participants transitioned to UX from careers in marketing, customer insight, graphic design, and development, and rapidly progressed in the field.

JOB TITLES AND RESPONSIBILITIES

We asked respondents what their most recent job title was. Cleaning the data for typographical nuances (e.g., removing hierarchical prefixes like 'senior' or standardizing the order of terms — such as *UX & UI* vs. *UI & UX*) and filtering out people who weren't in UX roles left us with **134 unique job titles** related to UX.

One of the reasons why there were so many unique job titles was that **often our respondents had more than one role in their job title**, for example, *UX / digital designer*, *UI / UX designer*, or *UX researcher & designer*. Another reason is that some of our respondents had roles that were not traditionally UX (such as front-end developer), even though they were carrying out UX-related activities, like user research or interaction design. This may be because the organization in which they worked didn't have carved-out UX roles; instead, people working in design, engineering, or product became responsible for UX.

We grouped respondents by their job title in order to see if there were any general trends in responsibilities. 692 respondents' roles were grouped in the following categories:

- **Designer** (48%): Any role that had the word 'designer' (with the exception of content designer)
- **UX manager, lead, or director (15%)**: Any role that had both 'lead', 'director', or 'manager', and also had 'UX', 'research', or 'design'
- **Nonspecialized UX** (12%): Any role that did not fit into the other UX categories but also had 'UX', 'digital', 'human factors', or 'usability' in the job title; this category also included job titles that had more than one role (e.g., UX researcher and designer)
- Researcher (12%): Any role that had the word 'researcher' or 'research'
- Other roles (11%): Roles that did not fall into the above categories, such as developers, product managers, quality assurance, creative art directors, and so on
- **Content specialist (1%)**: Any role that had 'writer', 'content', or 'copy'

The table below shows consolidated job titles that were grouped into the former 4 categories as listed above: 'designer', 'researcher', 'content', and 'nonspecialist.'

Job-title category	Job titles UX practitioners have	Frequency
Designer (n=328)	UX designer	171
	Product designer	46
	UX/UI designer	44
	Designer	8
	Interaction designer	8
	Experience designer	8
	UI designer	7
	Graphic designer	4
	UX / product designer	3
	Visual designer	3
	Digital designer	2
	Digital product designer	2
	Service designer	2
	Usability designer	2
	UX design expert	2
	UX interaction designer	2
	Product designer (UX/UI)	2
	Employee-experience designer	1
	Industrial-product designer	1
	Information designer	1
	Interaction-design strategist	1
	Product-design consultant	1
	Product-design strategist	1
	Service & UX designer	1
	Service and product designer	1
	UI / interaction designer	1
	UX / digital designer	1
	UX design consultant	1
	Web designer	1

Nonspecialized UX (n=86)	UX consultant	15
	UX specialist (or UX/UI specialist)	15
	UX architect	13
	UX strategist	7
	UX expert (or UX/UI expert)	6
	UX analyst	4
	UX designer and researcher	4
	Digital strategist	3
	Digital officer	2
	Human-factors engineer	2
	Usability engineer	2
	UX librarian	2
	Customer-experience consultant	1
	Design and research consultant	1
	Digital channels advisor	1
	Digital communications specialist	1
	Digital producer	1
	Digital strategist	1
	UI analyst	1
	Usability expert	1
	UX associate	1
	UX engineer	1
	UX officer	1
Researcher (n=83)	UX researcher	60
	User researcher	10
	Design researcher	6
	UX-research coordinator	2
	Product-research specialist	1
	Research assistant	1
	Research consultant	1
	User-research officer	1
	Usability researcher	1

Content specialist (n=8)	Content strategist	4
	UX writer	2
	Content designer	1
	Web content specialist	1

As you can see from the table above, the most common prefix in a job title is 'UX' (or 'user experience' in full), winning over prefixes like 'product', 'digital', 'human factors', or 'usability.'

Although we asked respondents for their job title, we do not know whether their responses were their *actual* job titles or their own descriptions of their roles. However, it is interesting that combinations like 'UI/interaction designer', 'UX/digital designer', and so on are used in some of these titles — possibly reflecting the need to highlight all the responsibilities and skills of the role.

Unfortunately, the tendency to fashion new job titles contributes to an already large collection of job titles in the industry. The vast number of job titles can be confusing, particularly for new recruits, job seekers, and hiring managers. When UX practitioners have a new job title, they have to work hard to communicate their responsibilities, as well as the rationale for their role. Some of our respondents voiced frustration at the lack of clarity in UX terminology and job titles.

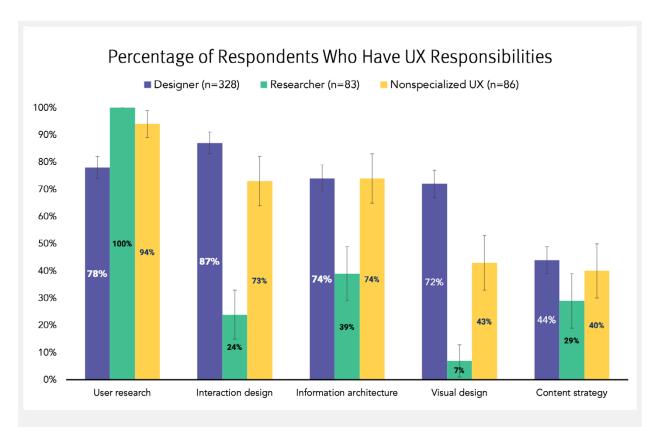
"[There are] so many buzzwords and job descriptions and everything that are just so confusing because everyone says, 'oh, I'm a UX/UI designer.' But that means so many different things with so many people. So, it definitely gets complicated."

"Since I'm a content strategist, and this is still not a totally accepted role, I'd love to hear about how other content strategists are (constantly) explaining their value."

"There are too many companies with too many definitions for UX. Be prepared for a tough job search because everyone wants something different."

We asked respondents which UX responsibilities they had — from content strategy, to visual design, to user research. When we compare responsibilities by role, we see some differences as well as overlap. (We don't report on content designers because there were too few of them.)

One responsibility each role has in common — whether a designer, researcher, or nonspecialist — is user research. The majority of respondents are responsible for carrying out some kind of user research; although, not surprisingly, 100% of those with research job titles are responsible for this activity.



The graph shows the percentage of respondents with researcher, designer, or nonspecialized UX job titles that have 5 different UX responsibilities. Error bars represent the 95% confidence interval.

One thing that the graph above clearly shows is that **researchers have fewer responsibilities** compared to nonspecialists and designers: fewer researchers are responsible for interaction design, information architecture, visual design, and even content strategy. The median number of responsibilities for researchers is 2, whereas the median for designers and nonspecialists is 4. These differences were significant at the .05 level after performing two Mann-Whitney-Wilcoxon tests (p< .00001 for both tests). The median number of responsibilities for those with a manager, lead, or director role is also 4, showing that professionals with these roles don't necessarily stop practicing.

When we compare nonspecialized UX roles and designers, we see that similar proportions of nonspecialists and designers carry out content strategy and information architecture. However, there are some differences when it comes to design and research. Designers are more likely to be responsible for interaction design and visual design than nonspecialists. However, nonspecialists are more likely to be responsible for user research than designers. These differences were significant at .05 level after performing chi-square tests.

One possible hypothesis for why so many designers are responsible for user research could be due to the UX-maturity levels of organizations in which our designer respondents worked.

In high UX-maturity organizations, there are often more people employed into UX roles, resulting in specialization and narrowing in the number of responsibilities. In low UX-maturity organizations, teams may often hire designers because they need them to design an interface, but don't think a researcher is needed to test interfaces. As a result, designers often end up running usability testing on their own designs.

The greater spread of responsibilities in the designer group is perhaps related to the greater number of job titles we see in this group. This spread could be a reflection of individual skills and preferences: some designers may be better at (or more interested in) interaction design or information architecture, whereas others may excel at visual design or may like to think at a high level and thus gravitate to service design.

A product designer from Canada whom we interviewed spoke about the phenomenon of specialization in her organization. She explained that it began to happen as the team grew. Designers started to focus on areas where they had the greatest skills and passion:

"It seemed initially they wanted more of a unicorn ... as the team has been growing rapidly ... I think just because of that, naturally people are allowed to specialize a little bit more. And I think that just has more job satisfaction ... [if] you can spend more time doing [what] you're good at and what you like, you contribute better outcomes to the team."

The fluidity in UX responsibilities for designers raises many questions: Should designers do research? Should UX designers do visual design? Who's responsible for information architecture?

A survey respondent expressed confusion at the trends in UX-designer responsibilities, remarking:

"It appears UX and visual design are no longer separate, so I'd like to learn UI design. I guess. Not really interested, however."

We look in more detail at UX activities in *Activities Performed by UX Professionals*.

The Kinds of Work UX Professionals Do

INDUSTRIES IN WHICH UX PROFESSIONALS WORK

The largest proportion of respondents work in a software or an IT organization (28%), a 6% increase since 2013. This difference was significant at the .05 level after performing a chi-square test (p<.01). Two other fairly large represented sectors were banking/finance/insurance (12%) and consulting agencies (10%). These are the same top industries as in 2013, so it's likely that these are still the major industries hiring UX professionals.

That's not to say that there aren't plenty of UX professionals in other sectors such as government, education, health, gaming, and so on. A small, but not insignificant, percentage of our respondents worked for themselves as independent contractors (5%).

	Industry	Number	Percentage of respondents
1	Computers / IT / software / internet	184	28%
2	Finance / banking / insurance	78	12%
3	Consulting agency	68	10%
4	Education	39	6%
5	Self-employed / independent contractor	36	5%
6	Government / military	30	5%
7	Healthcare / medical / social services	26	4%
8	Retail	24	4%
9	Media / printing / publishing	22	3%
10	Advertising / marketing	21	3%
11	Telecommunications	20	3%
12	Business / professional services	18	3%
13	Entertainment / recreation / tourism	16	2%
14	Aerospace / aviation / automotive	12	2%
15	Non-profit / charity / NGO	9	1%

The table shows the top 15 industries represented in our survey of UX professionals.

WHAT UX PROFESSIONALS ARE WORKING ON

We asked survey respondents what they had worked on in the last 5 years and compared their responses to those to a similar question we asked in 2013². Websites and web apps are still the most popular platforms for UX work. Over 90% of respondents had worked on a website or some kind of web-based application in the last 5 years. 76% of respondents had worked on a mobile application, which is a 9% increase since 2013³. This increase was significant at the .05 level after performing a chi-square test (p<.01).

This increase is not surprising given the rise in the number of mobile applications available since 2013. For example, the number of apps on the Google Play and iOS store have increased over the last 6 years by 205% and 325% respectively, according to statistics published by statistica.com.

Just over half of our respondents had worked on some kind of enterprise application in the last 5 years. About 15% of our respondents had worked on some kind of AI product⁶. We expect the number of UX professionals working on AI products to increase over the next few years.

² We altered the survey question used in 2013, so that, rather than asking what respondents had worked on before, we asked what they had worked on in the last 5 years. We made this change to learn about what UX professionals have been working on recently, as opposed to a decade or more ago.

³ The increase in the number of UX professionals working on mobile applications since 2013 could be higher since we only asked respondents what they have worked on in the last 5 years.

⁴ Google Play Store: number of apps 2019

⁵ Apple App Store: number of apps 2019

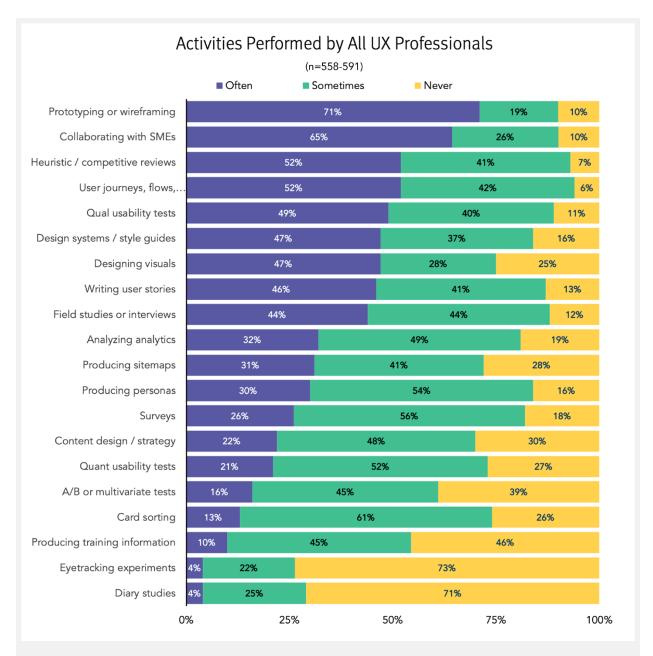
⁶ Unfortunately, we didn't ask respondents whether they worked on an Al product in 2013.

Type of work	Percentage of respondents
Websites / web apps	93%
Mobile apps	76%
Enterprise apps	53%
Docs & tutorials	49%
Desktop applications	39%
Style guides	32%
Cloud services	16%
Artificial intelligence	15%
Medical hardware / software	12%
Customer service or business processes	11%
Social / collaborative software	9%
Kiosks	9%
Packaging	7%
Server / network /sensor systems	6%
Smart environments / sensor systems	5%
Installations / interactive exhibits	4%

The table shows what our 2019 respondents have worked on in the last 5 years.

ACTIVITIES PERFORMED BY UX PROFESSIONALS

Working in UX is interesting because the work is fairly varied and there are many activities that UX practitioners perform. We presented UX practitioners with a range of 20 different activities and asked them to say how often they performed them. We wanted to see which activities are the most common, as well as understand if there are any differences in activities across specialized roles.



The bar chart shows the activities that are performed often, sometimes, and never by UX practitioners who responded to our survey. 33 respondents did not provide responses to all activities, which is the reason why the sample size is between 558 and 591.

Between 558 and 591 UX practitioners provided responses regarding these 20 activities. (33 respondents did not provide responses to all activities, which is the reason why the sample size is between 558 and 591.) Popular activities, which are carried out by around 90% of UX practitioners, include: qualitative usability tests, heuristic reviews, constructing user journeys, creating flows or storyboarding, and prototyping. This is to be expected as these activities are employed frequently

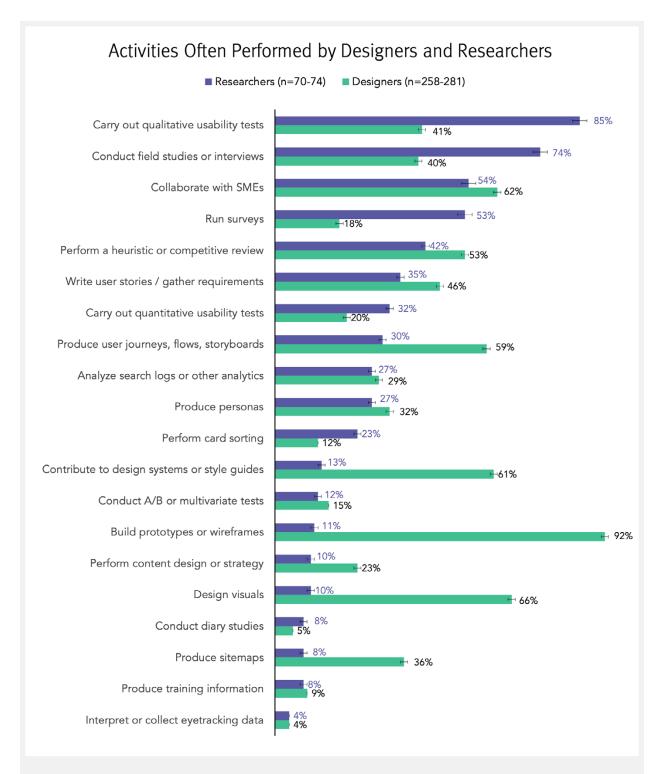
throughout the design process, in contrast to more summative research methods like quantitative usability tests or eyetracking experiments. Collaborating with subject-matter experts (SMEs) is also a top activity carried out by 90% of practitioners.

Less popular activities amongst UX practitioners were eyetracking studies and diary studies. Sadly, diary studies still remain an underutilized research method, with 71% of UX professionals claiming to have never conducted one before.

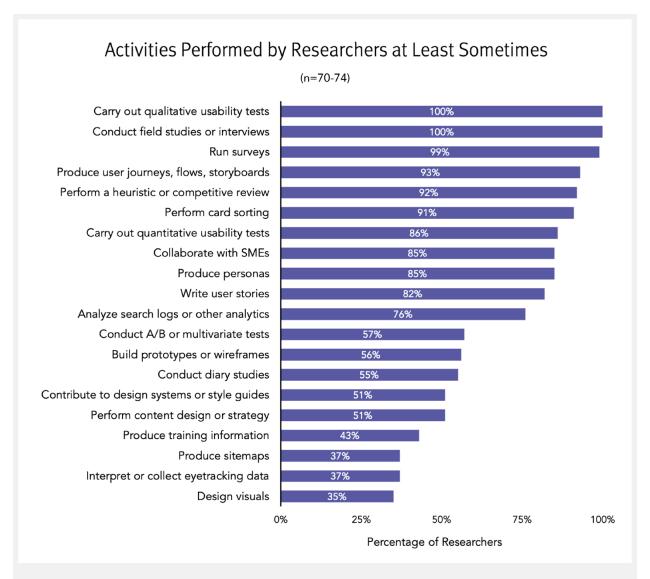
Activities of Researchers Compared to Designers

We compared researchers and designers to see where differences lie in the type of activities performed.

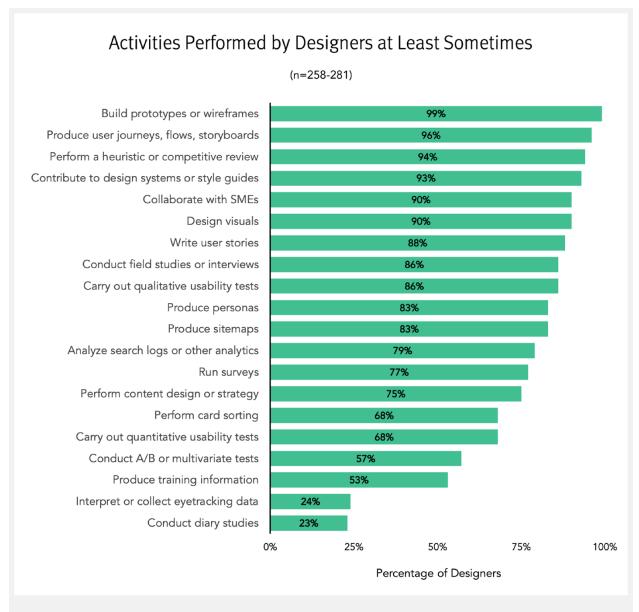
The graph below shows activities that researchers and designers claimed to perform often. Naturally, researchers often perform research activities like qualitative usability testing, field studies, interviews, card sorting, and surveys much more often than designers. Designers, on the other hand, are often building prototypes and wireframes, putting together user journeys, flows, or storyboards, designing visuals, and contributing to design systems and style guides.



The graph shows the percentage of UX researchers and designers that claimed to often do 20 different activities in their job. Error bars represent the 95% confidence interval.



The graph shows the percentage of researchers who perform 20 different UX activities at least sometimes. 4 individuals did not provide answers for all activities, which is why the sample size is between 70 and 74.



The graph shows the percentage of designers that perform 20 different UX activities at least sometimes. 23 individuals did not provide answers for all activities, which is why the sample size is between 258 and 281.

As shown in the graphs above, all UX researchers perform qualitative usability tests and field studies or interviews with users. Another popular method was surveys, which have been carried out by all but one researcher. Collaborating with subject-matter experts was also performed often for over half of our UX researcher respondents. Almost half of UX researchers claimed to have never worked on design systems or style guides (49%), built prototypes (44%), performed content design or content strategy (49%), or carried out A/B or multivariate testing (43%).

Lastly, the most uncommon activities — which under 40% of our research respondents have performed before — were: designing visuals (35%), producing sitemaps (37%), and carrying out eyetracking experiments (37%), although the proportion of those that have never carried out eyetracking experiments is significantly lower than the population of designers (p<.05).

The most popular activity for designers is prototyping, with 99% of respondents claiming they do it. 2 individuals claimed they have never done prototyping before. Regardless, it's clear prototyping is a large part of the role, and 92% of designers reported doing this activity often.

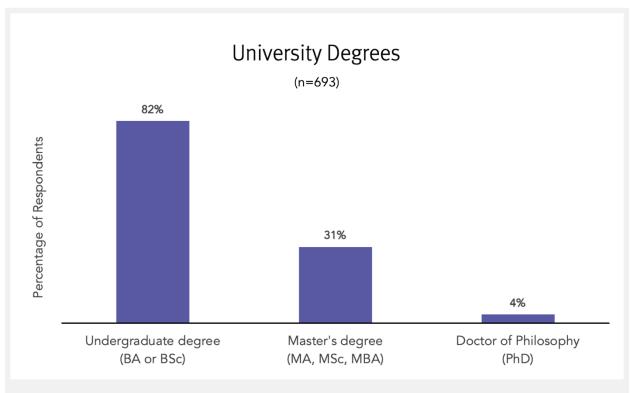
Popular activities that are carried out often by over half of UX designer respondents included: designing visuals (64%), collaborating with SMEs (63%), constructing user journeys, storyboards, or flow diagrams (59%), contributing to design systems or style guides (59%), as well as performing design reviews, competitive reviews, or heuristic evaluations (54%).

A large proportion of UX designers have carried out qualitative usability testing before (87%), although a significantly lower proportion of designers report that they conduct them often, compared to UX researchers (41% vs. 85%, p<.00001).

Education and Backgrounds

FORMAL EDUCATION

82% of surveyed respondents have some kind of university degree. Only 38 out of 693 respondents who had a UX role had never attended university, indicating that not attending university is an exception in the field. 31% of surveyed respondents have or are studying for a master's degree (which includes MBAs). Less than 5% of surveyed respondents have a Ph.D. (3.6%).



The graph shows the percentage of our 2019 survey respondents that had, or were studying for, an undergraduate, Master's degree, and doctor of philosophy.

For the 82% of respondents that had a university degree, we asked them to list their degree(s). There was an enormous variety of degrees obtained; however, there were some trends. For example, **designers often had degrees in design-related subjects**, such as graphic design, industrial design, product design, digital media, visual communications, and fine arts. **Researchers often had degrees in social-science subjects** such as psychology, sociology, and anthropology. **People specializing in content often had formal writing training** through an English, journalism, advertising, or communications degree.

Undergraduate Degrees

Undergraduate Degrees for Researchers

61 UX researchers left a description of their undergraduate degree, many of which were in the social sciences. 23% of UX researchers who listed their undergraduate degree had one in sociology or psychology. UX researchers had degrees in many other topics such as: cognitive science, communications, computer science, English, history, informatics, media, as well as some design subjects, such as industrial design.

Undergraduate Degrees for Designers

262 designers left a description of their degrees. 42% of these had a degree in a traditional design subject. Most popular degrees were graphic design (13%) and industrial design (6%). Other degrees listed included product design, visual communication, digital media, fine arts, and illustration, which are also likely to have a heavy design curriculum.

Postgraduate Degrees

Of the 224 respondents who had or were studying for a postgraduate degree (Master's or PhD), there was a great spread in degree titles and subjects. The most common postgraduate degree of the cohort was in human—computer interaction or human factors, which accounted for just over 20% of all postgraduate degrees.

The 6 most common postgraduate degrees are shown in the table below; however, they account for only 40% of all postgraduate degrees obtained by the 224 respondents.

Postgraduate degree	Count (percentage)
Human-computer interaction	26 (12%)
Human factors	20 (9%)
User-experience design or interaction design	17 (8%)
Computer science	10 (4%)
Library and information science or information science	9 (4%)
Human-centered design or human-centered systems	9 (4%)

The table above shows the most common postgraduate degrees that our respondents reported studying for or having.

Do You Need a Relevant Degree to Be a Successful UX Practitioner?

A Relevant Degree Helps to Get a Foot in the Door

Relevant degrees are helpful in teaching valuable skills and knowledge that can be applied directly to the specialty, as well as helping new joiners to get a foot in the door for their first job.

A UX researcher from the US who responded to our survey said:

"My background in the behavioral sciences helped me look at problems with humans at the center. I also learned how to be observant, ask the right questions, and collect and synthesize data."

Another survey respondent — who was a UX designer from Sweden — said:

"Background in graphic design helped immensely to have as a hard skill, because it was easier to get a foot in the door."

There are certainly advantages to studying a subject that provides a lot of relevant training for the role. For example, researchers with a social-science background receive training in research methods, study design, and statistics, which are useful in understanding how to conduct sound research.

Designers with a design background receive training in visual-design principles, typography and layout, design tools and methods, and so on. Hands-on practice builds needed skills, which can be applied on day 1 of the job.

Finally, content designers with education in writing develop much needed skills in writing for audiences, understanding of grammar, and the ability to communicate effectively through written text.

Practitioners with a broad education could be at an advantage because they acquire more skills (both hard and soft) and knowledge that will be helpful in their practice. As one UX specialist from the US explained in our survey:

"Journalism was very helpful because it taught me to ask questions to really be able to solve problems. Web development was helpful so I can understand what is actually possible. Design classes were helpful so that I understood design best practices even though I'm not a designer."

However, some UX practitioners felt strongly that you don't need a relevant degree to get into the field. The wide variety of degrees that UX practitioners have suggests this is the case. As one UX researcher said:

"Don't worry so much about your background. I've met UX professionals that come from all sorts of backgrounds from finance to anthropology — you don't NEED a special degree to get into the field."

Almost All Degrees Provide Relevant Skills

Despite the usefulness of relevant former training through higher education, plenty of UX practitioners we surveyed or interviewed studied nontraditional subjects at university, but still found elements of their studies relevant in the field.

One of our interview participants from the United States explained how a degree in fine arts provided her with valuable skills and experience that has since helped her in her career as a UX librarian.

"My undergrad degree was in fine arts with an emphasis in instrumental music, piano performance... I think that having to perform in front of my peers and be evaluated by them and to evaluate them myself was so interesting and powerful and an experience that was really painful at the time, but has been extremely useful in my whole career."

Another interview participant from the United States explained that her degree in political science and English helped her develop strong communication skills and an understanding of how to convince others with sound rationale, which is useful in her role as a product designer.

"... I would say not directly [beneficial], but [the degree in Political Science and English was] indirectly [beneficial] ... in terms of just being able to communicate clearly and also [in]... constructing rationale for the decisions that you've made. And I think that's actually a really big part of being a designer..."

A content designer based in Greece, whom we interviewed, explained that her degree in linguistics and her master's degree in website localization were useful in providing the right mindset for UX writing.

"As a linguist, it tells me a lot to find the right perspective and to always see it ... from the eyes of the user. Because when you translate ... you try to convey one meaning that was written in one language targeting one specific audience, living in this culture, and you had to try to convey into another language... so being aware of this transition and what it means, this shift in perspective, this I think is what's stayed with me throughout..."

A product designer from the US explained that a BA in psychology and an MA in marketing communications equipped them nicely for their career in UX.

"My course in social psychology about how people influence each other has been immensely useful in UX in learning how people respond to certain elements. Completing this degree also gave me a background in the scientific method and conducting research, which helps me execute user research and usability testing. The entirety of my MA helped me feel prepared to understand the basics

of business, as well as how a brand communicates and markets itself. These two components together are very beneficial in a role where I continually have to balance the users' and business' needs and design a solution that meets both."

Plenty more of our survey respondents with nontraditional educational backgrounds responded similarly when we asked them what aspects of their background were most useful in preparing them for a career in UX. Some examples of learned skills are given below.

Storytelling, avoiding bias:

"History trains you that there is always bias, and that you just need to find a way through it so that you are aware of what you bring. I also learned how to tell a story that is interesting."

Understanding of people, and how to study them:

"My biblical studies degree taught me how to study people and messages and how to convey information to people. It wasn't so much about design, but how to listen to people, and discover their needs."

Communication with peers, managing feedback:

"The critique aspect of a BFA [bachelor of fine arts] has been enormously helpful in my career. Being able to give and most importantly receive feedback well is crucial. You must be able to justify your work, but also bend where appropriate."

Written communication skills, critical thinking:

"As a UX researcher, I feel like my English degree has actually been crucial for both helping me with close observation and, of course, written communication."

The fact that so many different degrees can be relevant demonstrates how multidisciplinary the field is — despite the specialization — as well as how soft skills are important across the board. For example, a hiring manager whom we interviewed explained that having the right characteristics for a UX-job is more important than having a relevant degree.

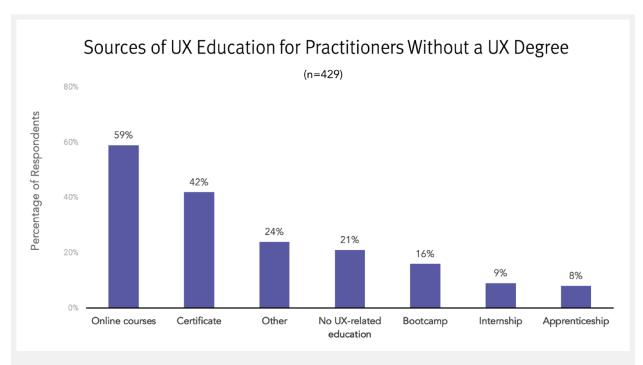
"I would rather bring somebody in who doesn't have a design degree, but who's bright, who's really worked hard and has a good attitude, than somebody who... went to a good school... who [is] ego-driven."

We talk more about soft skills in <u>Skills that UX Practitioners Found Useful</u> and more about what hiring managers look for in <u>Hiring UX Professionals</u>.

UX-Related Education

We asked respondents whether they had any UX-related education. 658 practitioners provided responses. 35% of respondents said they had undertaken a UX-related university program.

429 respondents did not have a UX-related degree. Within this group, we see a spread of different educational experiences, but the most popular education source is an online course (59% of respondents). This was the most popular type of UX education across all individuals with over half of all respondents having taken or completed one. This may have to do with the abundance of online UX courses available today. Respondents mentioned online courses run by a wide range of different organizations and communities including local community colleges, Coursera, General Assembly, IDEO, Interaction Design Foundation, Lynda.com (now LinkedIn Learning), and Udemy.



The graph shows UX-related education sources for 429 UX practitioners who don't possess a UX-related degree.

For the 21% of respondents without any UX-related education, they mentioned learning about UX on the job by reading books and articles and consuming other readily available resources.

"I am self-taught in everything related to UX design. In college, I did take design, psychology, sociology, and computer-science classes, but I did not complete my degree."

"I did not have any formal training. My entire career was built on the job with the help of amazing mentors." It's quite possible to learn about UX by doing the job, especially if you have access to strong mentors to learn from. One survey respondent said:

"Be open to learning from others. Education and certifications are good, but you learn the most by working with people who have hands-on experience in the field."

Bootcamps

Bootcamps are short periods of intense, applied learning, and can be useful for new entrants to the field who may have theoretical knowledge but haven't had a chance to build up skills in application of theory.

A student who took part in our focus group in Hong Kong spoke about his positive experience undertaking a bootcamp. The motivation for enrolling in it was that he believed his "traditional degree" was not giving him the hands-on, problem-solving experience he needed. He enrolled in a 6-month bootcamp which specialized in UX and UI. During his time there, he had projects for real clients (often nonprofit organizations), as well as tutorship by experts from the industry. The bootcamp allowed him to learn and make mistakes.

"Kind of creating this safe space, where you get the real simulation. You have instructors from industry, and you get to make mistakes and learn."

He also developed many new soft skills, particularly in communication and collaboration.

"Every project, you get a different person as well, so that simulates ... the real world; you have to work with different people."

Although our student participant found the bootcamp beneficial for many reasons, he wished he could have more interaction with senior practitioners.

"I wish I'm able to [do a] contextual inquiry [of] senior-level UX people in a company, because right now I can only imagine ... like being able to find a mentor but also follow the footsteps, because without really seeing how senior-level UX [professionals] really work in a company, we can't really get to their level this kind of idea [that] the senior UX would be holding your hand, like we're now going to do this, this is why we're doing this."

While bootcamps might give you access to industry experts, you probably won't be working with them; instead, they'll just be giving feedback on your work and providing you with guidance. What's missing is seeing how senior practitioners would solve the same problems. In fact, what this participant is talking about is formal mentorship in the workplace, which provides both the opportunity to do work and receive feedback, but also to watch and learn from those with greater experience.

One of our interview participants from the US had also undergone a General Assembly bootcamp. Being the only designer at her company, while also being new to UX design, she felt that she

needed to get a firm foundation in UX. Through exposure to projects during the bootcamp, she was able to improve her portfolio, which later led to a job in a UX-design firm. She explained that even though she had taken design classes at university, she was not prepared for the UX career.

"I don't think I could have gotten that experience there because there's a certain level of abstractions in higher education that makes it hard to come out with really practical examples of what you are capable of in the workplace when you enter into the real world."

While bootcamps can provide helpful experiences for students and new entrants to the UX field, some hiring managers are skeptical of their value. One hiring manager explained that she believed a master's degree would offer more practical skills and knowledge than a 12-week bootcamp.

"I'm thinking more of those [junior UX practitioners] that I have encountered that might've gone through like a 12-week General Assembly program... [that] offers to teach the whole UX suite in 12 weeks, and it's hard to do.... I think it's the depth of understanding that people [with a master's degree] come through with. Also, some hands-on projects, and I know the 12-week program does them too, but there just aren't as many of them. So, in a year and a half you can build up a lot more experience by doing projects in class for real clients or through some volunteering. But coming out of a 12-week program, they still need a lot of hands-on management. And that's hard in a business reality that we are in today with everything moving so quickly. It's hard to find that time to invest in someone."

The decision whether to pursue a bootcamp is ultimately a personal decision. It can provide hands-on practice and experience for students with a lack of exposure to real-world projects. The bootcamp will be helpful to get your foot in the door for your first junior UX job as you should have examples to show and talk about in an interview. On the other hand, if a degree involves working on real-world projects, then a bootcamp probably isn't needed. Remember that bootcamps give you an overview of activities in the field and of how UX practitioners work, but you will probably learn more doing the role in a real, business context.

Apprenticeships and Internships

Apprenticeships and internships provide a focused educational experience in an organization and typically lead to growth in skills and exposure to real-world projects. Apprenticeships are generally longer and have some taught classes alongside exposure to the job; internships are often shorter, and, in the US, are often completed during the summer of a student's studies. Some organizations use the terms interchangeably. Many of our survey respondents complained about a lack of opportunities to learn and grow their skills in the field, which could be due to a shortage of valuable apprenticeships and internship programs.

Both internships and apprenticeships were mentioned by respondents who had undertaken them as being the most useful areas of their background, that helped them prepare for a career in UX. Several reasons were given, including the ability to learn by doing:

"By studying I learnt a lot of things, but I really started to improve knowledge by doing things, so I think that in my whole education, the apprenticeship was the most important experience."

"[The] internship at a design agency was monumental for my growth as a junior researcher."

Internships allow UX practitioners to try the field in a real company and see if they like the work. As one survey respondent explained:

"Once I got my foot in the door with my first internship, this made it extremely useful in preparing me for a career in UX. I knew that if I liked the internship and the peripheral work I was contributing to, then this was something I could run with for a long time."

If you are a student, or have recently finished your studies, and are not sure about whether a career in UX is for you, then consider trying out an internship. If one isn't available, consider reaching out to a company and asking if it'll take you on as an intern for the summer. If you have graduated and are keen to learn more about the field and to receive on-the-job training, then an apprenticeship in UX would be an excellent starting point.

Internships Are Worth the Investment

Although training junior practitioners can be time-intensive, it can be worth the investment if set up properly. One of our interview participants had set up a successful internship program in her organization, and believed it provided high return on investment.

"[If] they're really being utilized, you're getting really good quality work for really minimal investment ... you get to train [them] in the way you want them to work. I would say that's the biggest selling point."

When creating an internship program, have clear learning objectives and expectations for interns, as well as available UX leaders to train and give regular feedback on their work.

MOST USEFUL AREAS OF STUDY

We asked survey respondents to tell us which topics or subjects in their education have been the most useful for them. Not surprisingly, there was a huge array of topics mentioned that covered everything from research through to design and project management.

Topics mentioned included:

- Agile project management
- Design thinking
- Human factors
- Information architecture
- Presentation skills
- Prototyping
- Psychology
- Research methods
- Study design

Respondents not only mentioned topics, but whole courses, UX companies, and even books that had the most impact on them or have been the most useful in their career.

Books that were mentioned by respondents included:

- About Face 3
- Don't Make Me Think
- Design of Everyday Things
- Hooked
- Information Architecture for the World Wide Web
- Lean UX
- Sense and Respond
- Sprint

Some respondents described hands-on experiences as being the most useful type of education — more so than reading, studying, or taking classes. This is not surprising, as everyone has a personal learning style and trajectory into UX.

"An entrepreneurship class in business where we had to get out on the street and talk to people [was the most useful educational experience]."

"A meetup where we practiced design-sprint methodology first opened my eyes to the power of UX, exposing a whole new world." Several respondents commented that all of their experiences have been useful.

"In all seriousness, all of them. Whether it was humanities course work that touched on empathy or music/writing courses that explored transitions and layers, they all led me to where I am."

One of our interview participants who transitioned to a career in UX believed that there isn't only one right path for getting a UX education.

"There's not going to be a career path like law or medicine where you do X, you do Y, you do Z, you end up here. It's really up to you ... to really form your education, and that education can be formal, informal."

The real takeaway here is that the field is diverse, and many aspects of one's background — whether formal or informal, theory- or practical-based — are all important in shaping a successful career in UX.

Changing Careers

THERE ARE MANY ACCIDENTS INTO UX

The field is still growing, and the wide range of roles means it's possible for anyone who is interested in and suited to the field can get a job in UX. Several of our focus group and interview participants explained that they never expected to end up in the field, but that many of them felt happy that they had found a career that suited them.

After a round-robin introduction on how each participant found themselves with a career in UX, participants in our LA conference focus group reflected on how none of them had set out with an intention to find a job in the field, but had either been recommended the job by others, based on their skills and temperament, or had found themselves doing the job and had transitioned fairly naturally as the field became well-known⁷.

Participant 1: "It's great to hear that there are so many accidents into it."

Participant 2: "...It's interesting everybody comes from a different background."

Participant 3: "You just kind of stumble into it."

Participant 1: "Like none of us here went to school for UX."

Participant 2: "Yeah, you're right!"

Several of our interview participants had very similar experiences and reflections. One interview participant said:

"I kind of fell into it, but then decided to embrace it... I didn't even know the field really existed until right after I graduated college. I wasn't planning for it as I was finishing my degree, but it just kind of happened that all of my experiences ended up leading me there."

Since a somewhat accidental discovery of UX seems to be fairly common, it's quite possible for anyone to work in the field given a level of interest and a certain temperament.

⁷ This was coincidental, as we did not recruit for this characteristic; we recruited individuals with a variety of job titles and time in the field.

EVEN UNRELATED FIELDS OF WORK PROVIDE RELEVANT SKILLS

Some of our survey, focus group, and interview participants had previous careers before transitioning to a career in UX. Their experience and knowledge of other fields, they believed, were helpful to them in getting into the UX field, and in being capable and effective in their roles, as well as excelling quickly.

A usability researcher from the US found their previous training as a technical writer to be useful in writing usability reports.

"I was a technical writer for a long time. I think that training helped me with written reports. I am used to thinking about what the most essential piece of information is to share and how to emphasize it ... you are constantly having to explain what usability research is to your stakeholders."

A UX manager from Australia had previous careers in Egyptology and computer science, and found these both to be extremely relevant, providing research skills, as well as technical knowledge — useful for communicating with engineers.

"My background is very diverse, yet each component has added to my ability to be successful in my UX career. Egyptian archaeology (Egyptology) — this was all about understanding the desires and motivations of the folks who had lived in the sites we were excavating. The only catch was, unlike talking with customers today, these folks had been dead for 2,000+ years so I had to develop a keen eye and use scientific methods to be able to work out their stories and understand their objectives... Computer science — I studied and lectured in this field and this developed my ability to be fluent in both the technical aspects of software development, as well as maintain the research and communication skills I had developed in my arts research degree."

A web-team lead from Canada who used to work as a campaigner and in communications believed these roles provided valuable skills in persuasion.

"You learn to be concise and play to your audience."

A UX designer from the US with only 1 year of UX-related experience had over 10 years in the finance industry and believed that to be helpful in building client relationships.

"My previous business experiences have proven to be very valuable when working on related projects. I am able to speak intelligently with clients on a variety of financial, health care, and manufacturing topics, and am able to provide value above and beyond UX."

If you're considering a transition into the UX field, instead of simply thinking about UX skills and knowledge you have, make a list of what knowledge and skills you have acquired in your previous role(s) that can be applied to working in UX. Talk about these in interviews or on resumes, and explain how these can be applied to the field and a job in UX. Some of our survey respondents gave this advice, too:

"You probably have more relevant skills than you think! Anyone who has worked in customer service and done it well, who can understand what people want or need and communicate that effectively — whether verbally or by design — already has a great starting point for a career in this field."

"Get clear on what skills you have that will translate to UX work and don't expect a hiring manager to necessarily map that out for you."

"Do not be put off if you have no prior UX experience, many of the skills required can be transferred from other careers."

CHANGING CAREERS CAN BE HARD, BUT IT'S WORTHWHILE

Many of our survey respondents and interview participants were very happy with their new careers. One career changer that we interviewed said:

"I absolutely love my job. I would not change it for anything."

However, changing careers can be tough intellectually and emotionally. A couple of our participants mentioned experiencing feelings of hesitation and insecurity. These feelings were countered by the positive feelings experienced by their new career.

"I'm very happy with my decision to move into UX. It's a wonderful combination of psychology, technology, and art. I'm still relatively new, so I'm going through a lot of learning curves and insecurities as I transition, but I have a great support system and I'm having a blast."

"There's always an element of hesitation when you make such important decisions... maybe not so much early on when you graduate... but later on in your career; like someone in my position with 12 years working on one thing and then suddenly decide to completely jump ship... it can be really daunting. But I would really advise not to hesitate at all. There aren't enough UX-ers out there. The demand is huge. The opportunity and the potential is huge."

In some cases, it's possible to slowly start doing UX at your organization without having to leave and find a new job. This was the case for some of our interview and focus-group participants who came from related fields.

For example, a UX designer from the UK whom we interviewed had transitioned from a decadelong career in marketing and explained how the transition to UX happened after starting a marketing role at a new, nonprofit company.

"After the first couple of projects, it became apparent that this role needs to be different...I got completely detached from the marketing team and attached to the development team...as soon as I raised my hand and said, right, I am doing user-centered design, at least three people jumped on the offer."

She urged others in a similar position to follow suit, and simply start doing it, then tell others you're doing it.

"Put your hand up and say, I can do this! It's absolutely amazing how many projects will start to flow your way."

Another participant in our interviews — a product designer from Nigeria — explained that he learned mostly by doing UX on projects as a freelance graphic designer.

"And so, mostly actually I even learnt on the job, so I was freelancing prior to joining [name of employer], and so I had to convince clients, let's do user research, let's not dive straight into design. And when I was able to do that, I was able to learn on the job."

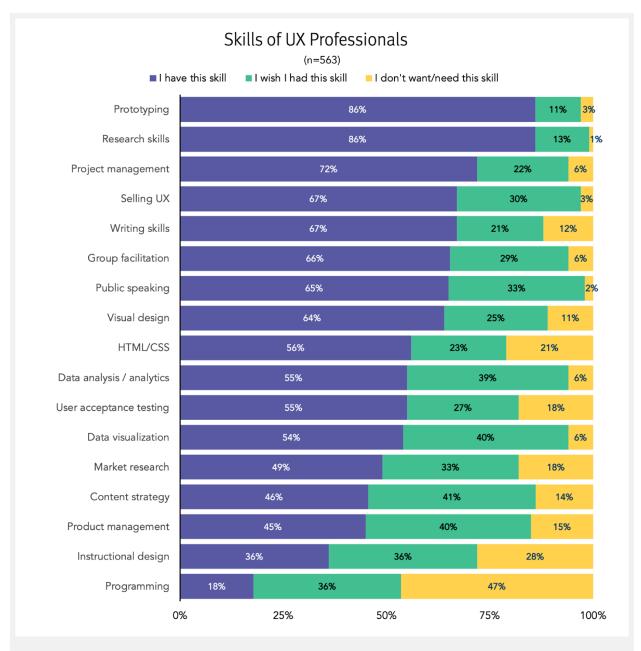
He was then able to apply for a role at a different company as a product designer with evidence in his portfolio that he had done user-centered design.

Skills Needed for the Job

Survey respondents were asked to rate 17 different skills based on whether they had this skill, wanted the skill, or whether they did not want or need it. We report the results for all UX practitioners, as well as breakdown between the roles of designer and researcher.

SKILLS UX PRACTITIONERS HAVE

Almost all UX practitioners have skills in research and prototyping. The skill that was least represented was programming, which was also the 4th most desired skill *and* the skill that most UX practitioners reported to not need. This is interesting, and is perhaps indicative of the disagreement over whether programming skills are useful in a career in UX, which we talk more about in *Should Designers Code?*



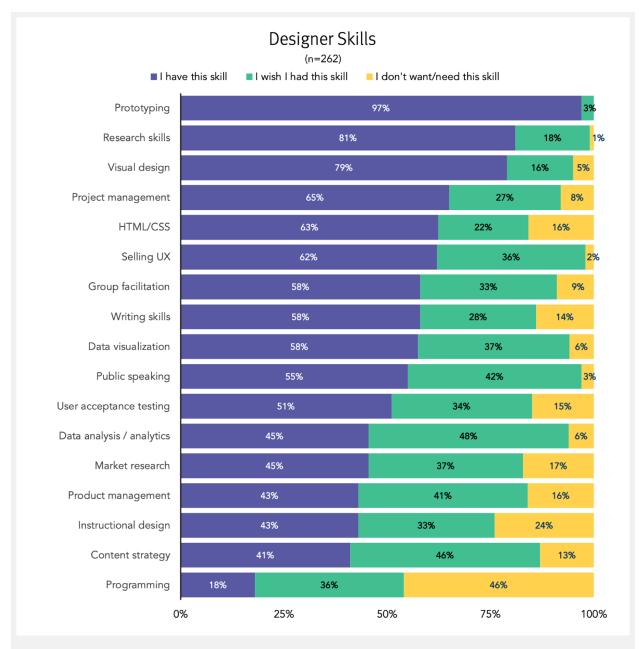
The graph shows which skills UX practitioners have, wished they had, or reported to not need.

Researcher Skills Versus Designer Skills

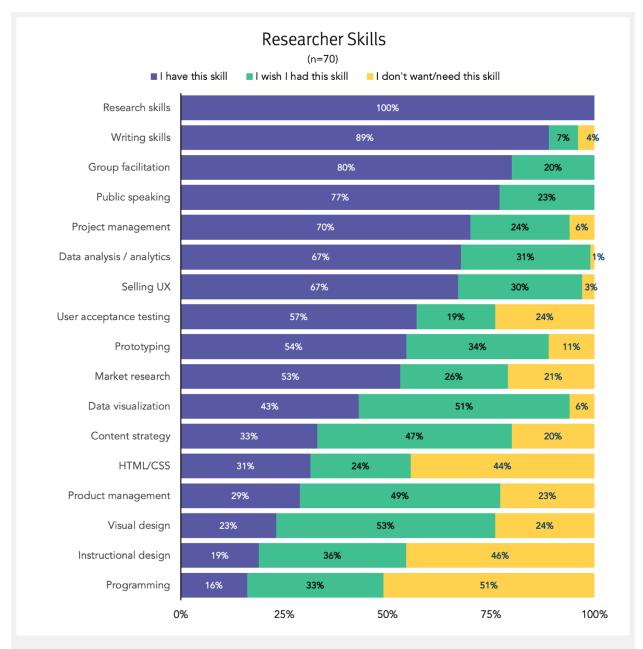
When we compare skill sets of designers versus researchers, we see that nearly all designers have skills in prototyping. However, the percentage of designers who have research skills is also pretty high (81%), — not surprisingly, given that 86% of our designer respondents claimed to do qualitative usability tests or field studies and interviews in their role. Significantly more designers than researchers have visual-design skills (79% designers vs. only 23% researchers, pc.00001).

Skills in programming software are low for both researchers and designers at 16% and 18%, respectively. However, 63% of designers have skills in HTML and CSS, compared to 31% of researchers. This difference is also significant (p<.00001) and may be because some designers use component libraries that allow for faster production of interactive prototypes. The difference may also be explained by the designers' tendency to interact closely with front-end developers, especially when handing over designs, or to have transitioned from a front-end-development role. This had been the experience of some of our interview and focus-group participants.

Activities that involved communication skills were quite high for researchers. Over 75% said they had skills in public speaking, group facilitation, and writing — whether that was writing reports or content.



The graph shows which skills 262 designers have, wished they had, or reported to not need.



The graph shows which skills 70 researchers have, wished they had, or reported to not need.

SKILLS THAT UX PRACTITIONERS WISH THEY HAD

When looking at all roles combined, **41% of respondents indicated that their top desired skill was content strategy**, as well as data visualization and product management (both of which were desired by 40% of respondents). Data analytics and analysis, instructional design, and software programming were also frequently mentioned.

When breaking the responses down by role, **designers identified their top desired skills as data analytics/data analysis** (48%), content strategy (46%), public speaking (42%), and product management (41%). Since we found that a lot of designers are also doing research-related work in their day-to-day, it is not surprising that they would want to increase their data-analysis skills.

The top desired skill identified from researchers was visual design (53%), closely followed by data visualization (51%). A UX researcher explained that visual-design skills would help her better present research data.

"I use data and diagrams almost every day and I wish I was better at visual[ly] presenting this. So much PowerPoint!"

Product management and content strategy was also a top desired skill.

SHOULD DESIGNERS CODE?

Less than 25% of UX practitioners we surveyed can write software. Although, just over 50% of our respondents can write some code in HTML and CSS.

Those that did have programming skills believed them to be useful in their UX career, mainly for the fact that they were able to communicate better with developers or were able to see possible solutions and design constraints from a technical point of view.

"Writing front-end and back-end code [was the most useful skill in my UX Career]. This allowed me to understand constraints on functionality ideas, as I knew the obstacles that engineering would have to go through to execute a design. Knowing these obstacles, I was able to meet engineers halfway to get the design across in a way they could still implement it."

"Technical skills (software, architecture, computing in general) have proven to be the most noncore UX skill I have. Being able to converse with engineers at their level strengthens my relationship with the engineering team, and increases my credibility and influence..."

37% of designers wished they could code. They often gave the same reasons as the UX practitioners who could code.

"I would like to learn how to code, to get a better understanding of what the developers do."

"I would totally love to learn how to code, even if that is not part of my direct work, I think it's quite useful to be aware of the possibilities."

Some respondents also mentioned that being able to code was helpful in creating high-fidelity prototypes very quickly.

"It is extremely useful to be able to handle so many different programming languages, frameworks, and tools, because it becomes very easy and also fast to build high-fi[delity] prototypes. So, the time from concept/paper prototype to high-fi prototype shrinks, which makes it possible to have more iterations, thus delivering features and improvements faster to the user."

A senior UX researcher from Canada mentioned that coding skills would be helpful in visualizing solutions and running queries against data.

"I would like to have a further understanding in development so I can begin to visualize solutions that are possible and their potential barriers early on in the process. I would also like to be able to run queries so I can analyze the data faster and not have to rely on a developer to do this for me."

Some knowledge of front-end code (i.e., HTML and CSS) is probably a good idea, especially if the organization you work for has an established design system and coded elements in libraries that can be drawn from to construct interactive prototypes. However, nearly 50% of our respondents claim to not need programming skills, and almost 25% claim to not need skills in HTML and CSS, so they aren't always necessary.

One of the downsides (not discussed directly by our survey respondents) of having too much technical prowess — which is often the case for people who transitioned into a UX role from a technical role — is the temptation to think about solutions without a good grasp of the problem. Our survey, focus group, and interview respondents talked about identifying problems as being a necessary step prior to creating solutions.

"So basically, that is the most challenging thing to overcome, to get out of your head, to stop thinking about how you're going to do something and start thinking, okay, what is the problem I'm actually solving?"

"I find myself struggling with wanting to jump right into the solution and the design and reminding myself constantly to back up and look at the problem and really see if that's the problem and analyze that, before jumping in my design."

SKILLS THAT UX PRACTITIONERS FOUND USEFUL

We asked if there were any other skills participants thought were useful to them in their UX career. Respondents gave us their thoughts in a free-text field so we could gather qualitative feedback. We removed any comments that weren't related to skills they possessed, any responses that didn't make sense or were too ambiguous, and responses that had comments like 'N/A.' We were left with 358 comments. Each comment was coded manually. Many of the comments contained more than one skill, and so each skill mentioned was coded.

Type of skill	Coding instances (out of 358)
Soft skills	190
Communication	65
Empathy	37
Listening or "active listening"	17
Teamwork / collaboration	16
Problem solving	4
Hard skills	80
Design	42
Technical	33
Research	26
Business	20

The table shows the most frequent codes assigned to comments left by respondents.

Over 50% of comments listed a soft skill, compared to 22% that were coded as a hard skill. Common soft skills mentioned in the comments were communication (65 comments), followed by empathy (37 comments). Other frequently mentioned soft skills were listening skills (17 comments) and teamwork (16 comments), which are related skills to communication. There was also a myriad of other soft skills mentioned such as resilience, curiosity, confidence, and problem solving. Respondents explained that due to the nature of the field, soft skills were the most important to them:

"People, people, and people. UX is about people. Being able to understand people is key."

"UX is about people, so soft skills in general is the most important thing."

"I keep listing things that I'm not sure are skills: innate curiosity, a desire to solve problems, the confidence and ability to give the same advice over and over to people who might not want to listen."

"Collaboration, one would think that it's a given, but given that so many people come from different backgrounds, collaboration is often neglected which I found to be key in everything that I have done."

Soft Skills Can Be Acquired Through Many Avenues

Soft skills were also mentioned when respondents were asked what aspects of their background were useful in their career in UX.

"Being curious, proactive, and self-starting — if I don't know something, I'm going to do my best to gain an understanding of the subject matter. Meticulous organization and attention to detail. Moreover, the natural desire to have detailed systems and organizational structures."

Relevant skills and experience don't just come from formal education but can also be obtained through previous roles. Many of the comments around soft skills included previous jobs completely unrelated to UX, such as customer service, teaching, and other people-related roles.

"Working with people in advice-giving, teaching, and customer service roles. Being able to quickly establish rapport, active listening skills, and ability to determine and draw out information I need are valuable skills in my UX role."

"Customer service and technical support — helped me understand how to teach other people and anticipate when they don't understand what I am explaining."

Hard Skills

While primarily soft skills were mentioned when recalling useful skills, several hard skills were also mentioned. These included specific research skills, such as questionnaire design, statistics, and data analysis; design skills like typography or information architecture; business skills like requirements gathering; and technical skills like coding or creating technical diagrams.

Mentorship

EXPERIENCES WITH MENTORSHIP

61% of 627 respondents reported to have had some kind of mentorship in their UX career, but only 48% of respondents considered this mentorship to be a formal one. Some of these participants explained that the people they considered mentors were not formally assigned.

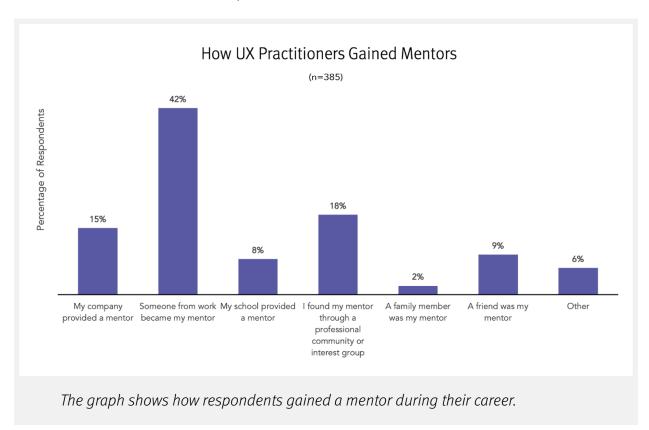
"This person is not my 'official' mentor, but they guide me and teach me every day just like a mentor would do."

"I don't think people have a single mentor. We all have people who cross our paths who inspire us to believe in ourselves more. For me it has always been natural and organic. Not a formal or assigned process."

"I did not seek my mentor. We hired him as a contractor, and it happened naturally. I think that is sometimes best when it's not forced."

WHERE TO FIND A MENTOR

Over half of mentorships were acquired through the workplace (57%), with the majority of these occurring somewhat naturally, as opposed to being set up formally. 18% of our respondents who had mentors acquired them through a professional community. Participants mentioned finding mentors at conferences and meetups.

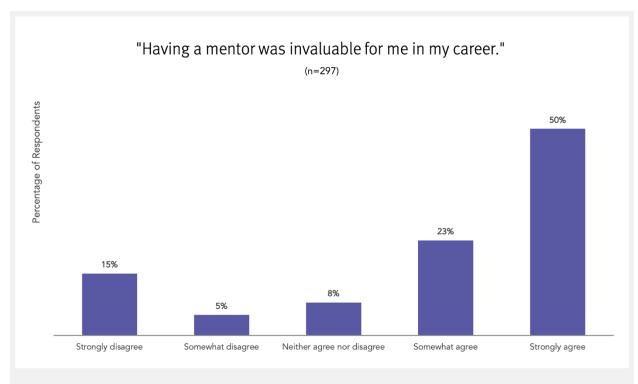


If you don't have a mentor in your workplace, get involved in the UX community in your area.

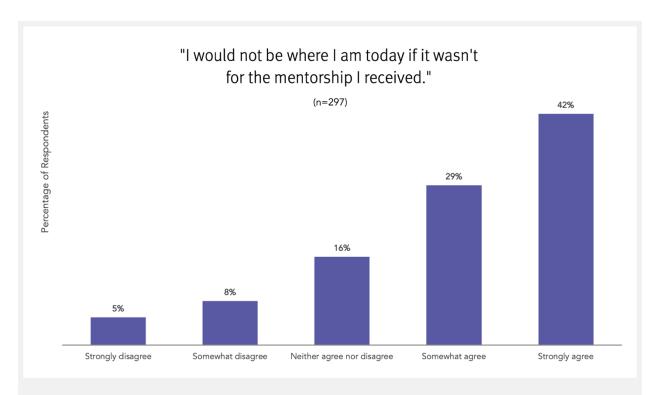
"Reach out to people, get involved in a local group, or start one if you're brave."

MENTORSHIP IS LARGELY A BENEFICIAL EXPERIENCE

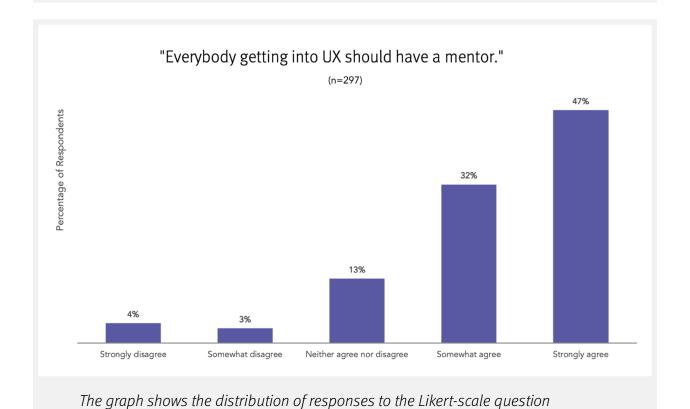
In general, UX professionals were very positive about the impact mentorship had on their career, with almost three-fourths of professionals believing that the mentor(s) they had provided an invaluable contribution to their career. A similar percentage believed that they wouldn't be where they were in their career without the mentorship they'd received. Nearly 80% of UX practitioners with experience of mentorship recommended that new entrants to the field find a mentor. There were no real differences in the proportions of researchers or designers that had been mentored or their perceptions of the mentorship they had experienced; the majority of respondents across all roles had an overall favorable experience with mentorship.



The graph shows the proportion of 297 responses to a Likert-scale question in which the following statement was given to respondents: "Having a mentor was invaluable for me in my career."



The graph shows the responses to the Likert-scale question "I would not be where I am today if it wasn't for the mentorship I received."



"Everybody getting into UX should have a mentor."

WHAT'S SO GOOD ABOUT MENTORSHIP?

When mentorship is run properly or initiated voluntarily by both parties, there are a number of benefits that can arise from the relationship, particularly for junior entrants to the UX field.

Knowing You're Going in the Right Direction

One of the risks of starting out in the field alone is that it's possible to go off track or feel lost. A lot of the UX practice is not cut and dry. As one of our interview participants said:

"I would say to anyone looking to get into UX ... you have to get scrappy because there's not ... going to be a formula."

Instead, UX practice is about making the best decisions given the context, understanding when to push back and when to cede, what to work on, and how to drive the design process. Some of our survey respondents explained:

"Learning by yourself is wonderful, but still you need someone to inform you that you're on the right path..."

"In my case, [they] just pointed me in the right direction and was a friend whom I can relate to and get wise advice."

One of the reasons for career dissatisfaction was the lack of mentorship, and several respondents remarked on how it made them feel lost or unsure. For example, a UI/UX designer based in Ireland said:

"I don't have a mentor I could learn from. I often feel lost and like I don't know what I'm doing."

Moral Support

Making decisions as a junior UX professional can be nerve-racking. A mentor provides moral support that can make those initial weeks and months (or years!) a less stressful learning experience. They can also provide advice about career development. As one participant explained:

"Mentors help you get the pro tips and insights you need to understand who you are, what you want to pursue...They also provide moral support, too."

Speeds Up the Learning Process

A lot of learning is done on the job when working in UX. Having a mentor available to ask those questions that come up can help to accelerate the learning process.

"My mentor was precious because he was always ready to discuss with me and clarify every question I came up with while working as a UX designer."

Participants mentioned being able to learn much quicker, avoiding mistakes, or learning lessons faster than they would have otherwise alone.

"Learning from someone else can really help speed up the process. Best practices are something we can either learn from someone else or by making all of the mistakes many others did before; in both cases you learn, but the latter takes much longer."

FORMAL MENTORING ISN'T NECESSARY

Some respondents didn't agree with the statement that everyone needs a mentor, but they did recognize that seeking input, exchanging ideas, and learning from others was important.

"You don't need an official mentor to do well in your career, but I do believe that seeking input, advice, and inspiration from others is of great importance."

"Official mentoring may be a bit over the top, but I do think juniors can hitch a ride on the experience of more senior staff."

Some respondents mentioned they have had both good and bad mentors. One survey respondent spoke about approaching mentorship as an analytical activity, adopting what is useful, and discarding what is not.

"Every single word and conversation you have with a mentor should not be a Bible. I use mentors and open-to-sharing individuals to select the best learnings and apply them to my journey ... This mentor does not need to be one person and does not need to know everything that's going on in your own trajectory, just use the best parts and build a repository."

CAN MENTORSHIP BE HARMFUL?

One of the downsides of certain kinds of formal mentorship in the workplace is that it can unintentionally hold some individuals back. One respondent mentioned how losing their mentor at work instigated more growth, as new challenges had to be tackled alone.

"Having a mentor was helpful at first but when she left, that was my biggest challenge but where I learnt most about UX because I had to handle every aspect of UX in a particular project. Guidance is important at first but handling a project entirely gave me the biggest learning."

Another respondent explained that mentorship requires work from both parties.

"It depends on ... [your] willingness to go out there and try things alone. The mentor can only advise you but the rest you are responsible for it."

A small percentage of our survey respondents strongly disagreed with the statement that having a mentor was invaluable to their career. There were several reasons given. Some of our respondents had poor formal mentors — people who were either not experienced or were not natural teachers. One respondent said he had a mentor at work who was forced to train him, rather than volunteering for this responsibility. One survey respondent remarked that poor mentors can hold back and demotivate. Another respondent had been assigned a mentor when she started, but, because they had not worked on a project together, she found the mentorship to not be particularly useful.

Takeaways from these comments are that mentorship is successful when both parties desire to participate in the relationship. If mentors are provided at work, they should be sufficiently close to the mentee in order to provide practical advice and to share learnings that are applicable to the work the mentee is doing, but they shouldn't stop mentees from gaining hands-on experience, as a lot of learning comes from doing the job. Lastly, if you feel a formal mentor is holding you back, step out of your comfort zone and ask for more opportunities.

DO YOU NEED A MENTOR?

It's probably best to have a formal mentor if you're very new to the field. As you gain more skills and confidence, mentorship can become more fluid. What we've learned from our survey respondents and our interview participants is to not be afraid to reach out to other people: you can have more than one mentor, and mentors can come from all disciplines.

"Depending where you are and/or you came from, your need of mentorship varies. It's extremely important and helpful. But you must be proactive too."

You can learn a lot from people who are not even in your field.

"The most valuable mentors I've had in my career had no UX background. However, their guidance about business and professionalism has helped in my UX career."

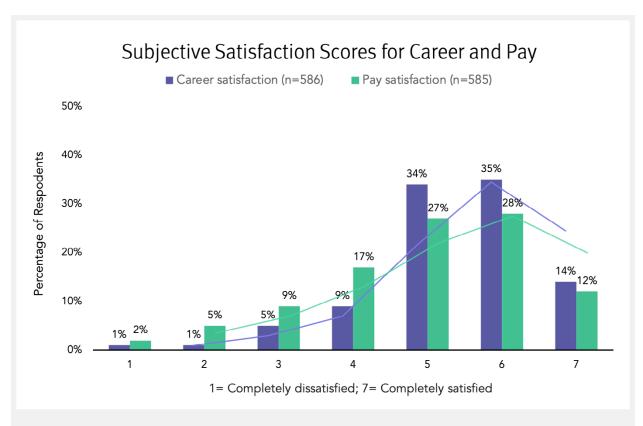
BECOME A MENTOR

If you've been in the field for a while and have a desire to teach, then why not consider becoming a mentor to new entrants to the field? One of our survey respondents expressed their feeling of duty to future generations of UX professionals entering the field.

"Mentors helped us all get to where we are today. It's our responsibility to give back to bring up the generations of UXers who come after us."

How Satisfying Is a Career in UX?

We asked respondents to rate their satisfaction with their compensation and their career on a 1–7 scale, where 1 was completely dissatisfied, and 7 was completely satisfied. As the graph below shows, scores are negatively skewed, meaning that UX practitioners are largely satisfied with their career and pay. However, there is a greater skew for career satisfaction, indicating that UX practitioners are more satisfied with their career as a whole than their compensation.



The graph shows the distribution of responses to two questions regarding satisfaction with career and pay respectively; 1 was completely dissatisfied and 7 was completely satisfied.

CAREER SATISFACTION

The average career satisfaction score was 5.37 on a 1–7 scale (the 95% confidence interval was from 5.27 to 5.46). This is the same average as when NN/g asked the same question of 963 UX professionals in 2013. Satisfaction ratings are skewed toward the happy end, with 14% giving the perfect score of 7, 83% of respondents giving a score of 5 or above, and only 1% giving a terrible score of 1.

Interestingly, the median career satisfaction for UX practitioners with 5-or-more years of experience was 6; this was a point higher than the median career-satisfaction score given by UX practitioners that had under 5 years of experience (median = 5). These differences were significant after performing a Mann-Whitney-Wilcoxon test (p<.01).

There could be many reasons for why this is the case. One reason could be that those with 5-ormore years of experience often have better jobs or have acquired enough experience to do more UX in their role. Or perhaps, as UX practitioners acquire years in the field with their employer, their employer gains more familiarity with UX, resulting in higher UX maturity at the organization and a greater ability for UX practitioners to do their jobs well.

The Main Reasons Why People Love Their Career

They Love the Process and the Work

"I love what I do. Not a single day goes by where I'm not challenged creatively and mentally."

"I'm doing new things every week and they are interesting and engaging. I have a feeling that my work improves people's lives and is ethical. And I receive a decent salary for doing what I love."

Seeing the Impact of Their Work

"I really enjoy the work and feel I am making a difference."

"The software that I'm building is genuinely helping people. The people I work with are very knowledgeable. I enjoy so many aspects of my job. I could pinch myself.:)"

Receiving Recognition for Their Work

"I enjoy my work and have always had a talent for it. Peers and co-workers give me praise and appreciation for my work."

Having Opportunities to Grow and Excel

"I've been able to work with some amazing people in both the consulting world and now for a Silicon-Valley-based company. I've had a lot of experience in a short amount of time, a lot of which was through self-motivated learning. I've excelled very quickly in the field and now feel confident in my skill set, with both a desire and the support to learn even more."

Sources of Dissatisfaction

Not surprisingly, the same reasons people gave for loving their career were also the reasons for dissatisfaction — for example, lacking progression, lacking the time to do UX activities, and not seeing the impact of their work.

Not Enough Progression

"In my current role I have stagnated because I have not had opportunities that would allow me to advance to the next level."

"Most of my career has been at organizations with very low level of UX maturity. The org structure and lack of growth opportunities that are inherited as part of the hierarchy does little to empower my role as a UX leader in such organizations. Overall, I am not satisfied with my career progress."

Not Being Able to Enter the Field Due to Lack of Experience

Some respondents from our survey were new to the UX field and complained about not being able to find their foot in the door.

"How can I get the job in Silicon Valley when [I am] fresh out of college and every single company expects 5—10 years of experience?"

One of our focus group participants in Hong Kong explained this was also an issue in Thailand for many UX professionals. UX has only been around in Thailand for the last 1 or 2 years, yet companies are asking for UX professionals with 3–5 years of experience.

"In my country, in Thailand, [UX] it's really new (...) it's challenging to get into that interview, because they often look only for some kind of education or certain experience, which is really rare to have in Thailand, like, you know, require 3–5 years (...), how you can find that amount of experience(...)?"

UX Practitioners Aren't Doing Enough UX

The biggest theme that emerged after analyzing the free-text responses was the inability to do proper UX in the organization (or any UX at all) because the organization does not understand what UX is or puts more emphasis on delivery or UI work.

"I'm not doing all the things a typical UX designer is supposed to do during the design process and there's simply not much room/time for creativity in a software company."

"I still don't feel like I'm doing real UX. I want to be more involved in the early stages of the products, doing more testing. My work is more UI than UX, even though my enterprise considers me as a UX designer."

"I also think that I should be conducting more user research and usability testing. Unfortunately, nobody in this company seems to understand that those activities should be as much part of my job as wireframing and prototyping."

In low UX-maturity organizations, time is spent educating others and trying to convince them to do UX activities, instead of actually doing them. A UX/UI designer from Queensland, Australia explained that the field is led by development, and that blocks UX work.

"UX is very misunderstood and is often confused with UI and a lot of time is just spent educating employers and teammates instead of practicing UX."

A UX design expert from Brazil, with 17 years of experience in the field, also felt that the time spent educating others was too much.

"I love what I do. The problem is that I still have to spend about 60% of my time convincing them to let me do my job..."

Not only is not doing UX activities frustrating — because this is what attracted UX practitioners to the field — but it impacts career prospects:

"It has been extremely difficult to get my own director to buy into some of the most important parts of [the] UX process...while I've conducted in-person user sessions, it's always on a finished product rather than making it part of the build process. I feel like this hurts both the efficiency of our process and my career trajectory."

No Access to Training, Mentorship, or Guidance

Some UX professionals find themselves alone without any support or guidance, or access to training. This aspect makes it difficult for junior UX professionals to do proper UX work, and some survey respondents reported feeling like there is still a lot to learn.

"I'm a junior UX designer but I don't have anyone more experienced than me to turn to when I'm stuck."

"I want to learn fast things to use in my full-time job. I have had to take a lot of time to research items I could possibly have learned in a classroom."

"I believe if I would have got more exposure to the current UX practices or would have been trained better, I would have been able to design better products. I rely mostly on articles on UX to gain knowledge."

"I am happy to have gotten my foot in the door in the field, but it has been an uphill battle and I have had to put in a great deal of effort and make major sacrifices to do it. In my current role, I am not doing the things I was told I would be doing and am part of a generally dysfunctional and collaborative team. While I am hopeful things will improve as I progress through my career, I am disappointed that I have landed where I am."

Some respondents expressed disappointment that they don't have a mentor at work or wished they could have one.

"I'm missing a mentorship that could take me to the new level."

"I love my job, but I really miss having a UX mentor who teaches me, shares his experience with me and feedbacks [on] my work."

"There is no good guidance after I left my previous company and no access to mentors in my current company, which frustrates me."

If you're new to the field and looking for your first job in UX, then consider the support network and potential for mentorship at the companies you interview. Ask hiring managers what career progression looks like and how junior UX professionals work with seniors.

Burnout: Too Much Work and Too Few People

In low UX-maturity organizations, UX practitioners are often stretched too thin, being asked to support too many teams or projects, or expected to fulfill too many roles. The heavy workload not only makes them less effective but also leads to burn out.

"I currently have work in both roles, being a designer and a software engineer. It takes a lot of energy to keep up with both roles..."

Working in a Low UX Maturity Organization

Several respondents felt they were not valued in their organization. Some survey respondents mentioned that colleagues do not respect UX or believe that UX work is easy.

"I work at a place where UX is a buzzword to be bragged with but is often an area that keeps being forgotten in development processes. When it is included, it is always prioritized the lowest."

"Companies in Brazil are not quite mature and familiar with UX. Most are fake UX jobs and don't do user research at all, they're all focused on UI design based on hypothesis and stakeholders 'taste."

"It's a daily struggle to ensure we are user focused, rather than business- or product-focused and it brings me into conflict with stakeholders on a regular basis – it's exhausting, we can't just build, build, build and not measure or check!"

Some survey respondents mentioned feeling tired battling an organization that doesn't understand or want to understand UX.

"UX is generally a new field and as someone who has been largely self-taught it's incredibly tiresome to go through life not knowing whether personally I am a 'good' or 'highly-skilled' UX professional while simultaneously having to sound 100% convinced when speaking with stakeholders that my role is essential to have. When many organizations and projects are at different stages of maturity and have different needs, selling the entire UX process can feel disingenuous in some cases where, for example, an organization is just not ready for it both culturally, or logistically."

Uninteresting Work or Monotony

Several comments from respondents mentioned feeling uninspired and bored from working on the same kind of projects. This feeling may be compounded when UX professionals do few UX activities, but instead just churn out wireframes and prototypes to development teams.

"It feels dry to me sometimes. I wish I worked on a wider variety of products, and I wish that I didn't only work on software products."

Inequality in the Workplace

Unfortunately, there were some comments (albeit a small minority) which talked about nepotism, ageism, sexism, and racism in the workplace, which participants believe results in fewer opportunities and barriers to career advancement, hiring, and better compensation.

"I'm sure as a woman I get paid less than my male counterparts, but I make a decent living."

"Experiencing sexist treatment in regard to advancement."

"I have run into massive chauvinism and ageism."

"I am 44 and, in my country, [it] is hard [to] get a new job, because the ... industry searches ... [for] young people, because they are cheap."

Although these were a small minority of comments, these comments are still worrying, and provide evidence that the UX field has some of the same problems that plague the wider tech field.

PAY SATISFACTION

The average satisfaction rating for pay was 4.94 on a 1–7 scale (the 95% confidence interval is 4.83 to 5.06), slightly lower than career satisfaction. When Jakob Nielsen and Susan Farrell ran the same questionnaire in 2013 for the first edition of the report, the average score was slightly higher at 5.2. This difference was significant after performing a Mann Whitney Wilcoxon test (p<.001), although the effect size was small (d=0.156).

On the whole, respondents are more satisfied than not satisfied with their pay, with 67% of respondents selecting a satisfaction score of 5 or above, and only 2% giving a terrible score of 1.

Interestingly, the median pay satisfaction for UX practitioners with 10-or-more years of experience was 6, a point higher than the median pay satisfaction score given by UX practitioners that had less than 10 years of experience (median=5). These differences were significant at .05 level after performing a Mann Whitney Wilcoxon test (p<.001). This may be because UX practitioners with 10-or-more years of experience are in senior or leadership roles, where they can expect a better salary.

Many of the respondents who scored 7 reported feeling very happy with their compensation given the national medians, or the amount of stress relative to the compensation received. They reported feeling that they were compensated well for their skills and knowledge. Some of those who scored highly were independent contractors and were able to scale back deliverables to the compensation.

"I never imagined I would have the compensation package I have today at my age. My company has generous benefits and treats its employees well. My design-group manager works hard to make sure that, in a field where being underpaid is all too common, he provides compensation equal to the value contributed by design."

Sources of Dissatisfaction with Pay

UX Professionals Aren't Paid Enough in Some Countries

Some respondents complained that the pay was generally poor in their country. Survey respondents from Italy, Japan, and South America complained about the lower wages for UX work. One participant from Italy explained that her wage was the same as that of a shop assistant working in retail.

Poor pay in some countries could be correlated with a lack of understanding and appreciation of the field. As one interview participant from Greece explained:

"I think that writing, at this moment in my country where I work, has not earned the respect that it should. So, people tend to be dismissive: 'Oh, come on; You can do it; Anyone can do it because we learn to write at school; I think that anyone can do this type of work'. So, this is reflected on the salary someone gets."

Being Paid Under the Median Salary for Their Country

Several respondents from the United States complained that they knew peers at other companies who were earning more or explained that their salary was below the median for that role in the US, which led to dissatisfaction.

Not Being Paid Enough for the Value that They Bring

Some respondents believed their wage was not enough considering the work or value they bring to their organization.

"I feel my salary doesn't match my responsibility and the extra hours I need to work to meet all the requests, keeping the quality of my work high."

"For the importance of what we do, we are generally underpaid."

Advancing beyond a senior role can be difficult in companies which utilize pay bands or where more pay means taking a sidestep out of the field. As a result, some senior UX professionals felt dissatisfied with their compensation. As one senior UX professional from the UK writes:

"There is a plateau once you get to senior/lead with nowhere to go from here. I've hit a ceiling and have been told so year after year."

Being Paid a Much Lower Salary After a Career Change to UX

For career changers, sometimes a sideways move comes with a decrease in pay or an increase in work for the same pay.

"I actually took a fairly big pay cut to take this role and I had to actually fight to get the income I do now."

"I earned more as a senior web designer than I do as a product designer ... I am expected to be skillful in many disciplines but receive less respect and money than [in] previous digital design positions. I believe my job is misunderstood by colleagues..."

A UX designer from the US, who had over 10 years of experience in the finance industry, took a 40% reduction in compensation to take up a UX designer role at a consulting agency.

"After spending 10+ years in financial fields, I was very comfortable financially. I knew transitioning to a new career would come with a salary reduction, but it was much greater than I expected...I was also surprised to learn that I was taking a little bit of a step back in benefits, as I transitioned from the manufacturing industry into software."

Hiring UX Professionals

WHAT HIRING MANAGERS LOOK FOR IN UX CANDIDATES

204 of our survey respondents were responsible for hiring UX professionals. Some hiring managers were responsible for hiring numerous roles or generalists, while others specifically interviewed for designers or researchers. We asked hiring managers what they looked for in UX candidates in an optional open-text field; 49 respondents left comments. 34 of these comments mentioned soft skills as something they try to assess and look for when recruiting new hires.

These soft skills include:

- Curiosity or a desire for learning
- Emotional intelligence
- Strong communication skills
- Confidence
- Passion
- Empathy
- Listening skills
- Growth mindset (comfortable with failure and learning from it)
- Humility
- Problem solving
- Creativity
- Being a team player

It's not surprising that many of these soft skills are the same skills that UX practitioners believed to be useful to them in their career. Many of the comments left by hiring managers in our survey included multiple of these soft skills, such as the example below:

"A genuine interest in humans: listening ability, empathy, communication skills, the ability to receive feedback & ability to stay firm when ethical matters come up."

A survey respondent explained that although hard skills were important, a passion for fixing things was the most important aspect one should look for when hiring UX professionals.

"Hard skills in interface design, cognitive psychology, research, writing, or whatever your area... those are important. But if you don't start out with a real desire to fix things, those skills won't take you very far."

A focus group participant from Hong Kong explained that soft skills were the most important skill set being tested in recent interviews he'd experienced.

"I found out that mostly they're looking into ... soft skills like: your perspective; both giving feedback and getting feedback; looking into things; whatever you experience, how you approach it; your passion on actually doing the thing; ... how do you advocate whatever you're trying to do..."

A hiring manager who recruited researchers explained that she also looked for people skills (which are a mix of different soft skills), which would ultimately help in facilitating research with participants.

"Certainly, like somebody who has demonstrated aptitude at least for conducting UX research experiments, but also who's very, very personable so that they can put people at ease during interview situations."

Collaboration was also a key skill mentioned by several hiring managers and UX practitioners alike. Since UX practitioners often work within a team, it's important that they work well with others and have the ability to compromise.

In addition to soft skills, there were a number of hard skills mentioned by our survey respondents. Practical applications of user-research methods, user-centered design, visual design, and an understanding of design principles such as color theory and typography were all important for selecting quality UX candidates.

One of the participants in our interviews that was responsible for hiring UX generalists was especially keen to hire strong writers.

"If you're a strong writer, that is another skill. I can't stress enough for a younger person, or anybody The better you are writing, the more I think you're going to succeed because that is just in very limited supply these days. It's very hard to find people ... [that can] actually write properly."

This participant described how she looked for evidence of writing skills in job-application materials — such as the candidate's portfolio. We talk more about portfolios in *UX Portfolios*.

Hiring Expectations for Juniors and Seniors

If you're a new entrant to the field, hiring managers don't expect you to have a lot of projects to talk about or a portfolio full of design work. Instead, hiring managers often look for evidence that a candidate has what it takes to be successful in UX and learn quickly. As one hiring manager who hires junior designers explains:

"When I hire, you know, it's really looking at potential, more than work."

Signs of potential are the same soft skills — curiosity, a desire to learn, and good communication skills, amongst others. A hiring manager who hires UX/UI designers explained:

"[If] I'm going to hire someone that's entry-level, I'm more interested in how curious they are, how willing to learn they are, how open to new experiences, and how interested, like this kind of spark in the eye they have."

A hiring manager recruiting user researchers looked for signs of curiosity in phone and in-person interviews with candidates.

"A lot of specific skills around exactly how to do research, that I can train. But if they don't have that curiosity, they're not going to make a good user researcher or a good moderator."

Showing curiosity in the interview by asking questions or showing interest through body language and talking about things in the field that interest you, can probably go a long way in your interview.

When it comes to hiring seniors, hiring managers looked for slightly different things. In addition to some of the soft skills mentioned, they also expect a strong body of work and evidence of experience. One survey respondent explained:

"With younger candidates, it's motivation, intellectual horsepower, and creativity. With more experienced candidates, it's track record, creativity, solid practice skills, and wisdom."

How Hiring Managers Assess Soft Skills

Assessing candidates on soft skills is more difficult than determining if a UX candidate can create wireframes or use specific software. Hiring managers assess communication skills and problem-solving skills through several means: assignments which require some upfront work before an in-person interview, probing questions about an applicants' portfolio or resume, or scenario-based questions, which explore a hypothetical situation. All of these devices prompt candidates to explain their process and line of thinking.

When asking about past projects, hiring managers are often trying to glean whether applicants followed a user-centered-design process, whether they worked collaboratively, and, if they did research, how they chose their methods.

"...their involvement, how they work with other teammates, and what was the process of choosing methodologies.... the results, what was planned, what was different from what was planned..."

These aspects are also assessed when giving candidates hypothetical scenarios. As another hiring manager explains:

"If they were on their own...how would they do it? How do the wheels turn in their head? ...You're just kind of understanding the processes that they're used to."

Hypothetical scenarios allow hiring managers to see how the candidates respond to situations similar to those they'd face in the organization, and whether the candidate might be a good fit for the problems they'd be exposed to. It also means candidates can't prepare responses but need to think on the spot. This approach assesses another soft skill: problem solving.

When being asked to show work in their portfolio, hiring managers may challenge candidates on their choices of methods and approaches, to test for communication skills, confidence, and assertiveness. One hiring manager mentioned how he grills the candidates' portfolios.

"They should be able to tell me about their design process...They should have a bit of fight in them, I try to get them to defend their design decisions. They should be good communicators."

In doing so, hiring managers get to see how UX practitioners would face skeptical stakeholders or difficult clients.

We asked hiring managers that we interviewed if there were any questions they always ask in interviews. Some of our participants had set questions, which included:

- When was the last time you failed, and what did you learn from it?
- What's your greatest strength and greatest weakness?
- What was the most unexpected finding you've had, and why?
- What questions do you have for me?

These questions aim to assess the growth mindset, curiosity, reflection, and wisdom.

Design Assignments

We spoke with a few UX practitioners who had recently been through a hiring process as a candidate to give us insight into what it's like to be on the other side of the table. A number of our respondents mentioned having to complete some sort of design challenge as part of the interview process.

UX candidates treat these design challenges as tests of their abilities and often put more effort into them than what is asked for. One of our interview participants talked about how the challenge was stressful, as she felt pressure to produce a good design. Even though she later mentioned that she knew the assignment was about giving the hiring manager a good feeling for her approach and her ideas, this knowledge didn't stop it from being a stressful experience.

"I know you're not actually supposed to like create a product in the 24 hours that you have to complete the design challenge, but it still feels like it sometimes. So I have to... solve this massive problem in 24 hours....I know that they were just looking for my... thought process and how I would approach tackling that problem, what I would start with first ... what kind of ideas I had. So, it was stressful, but they always are — just kind of how it goes."

If you're incorporating a design assignment into your hiring process, help manage stress levels of candidates by laying out clear expectations of the time commitment, outcomes, and what will be discussed once the assignment is complete.

UX PORTFOLIOS

The majority of the hiring-manager respondents mentioned a good portfolio as a key element in their hiring process. The elements that they were looking for varied, but it seems UX portfolios are still widely used when evaluating candidates.

The biggest takeaway from our survey respondents and interview participants was having a portfolio that demonstrated a clear thought process and workflow.

"Portfolios that illustrate concrete thought processes and logical reasoning when developing solutions targeted for end customers."

"I think there should be an explanation of why you made the decisions you made and what was that backed by ... and hopefully that's user research."

In addition to a UX practitioner's workflow and thought process, hiring managers want to know that you have a solid understanding of business problems. Our interview participants and survey respondents talked about wanting to hear UX candidates connect their work to business goals and outcomes.

"If they can tie that to a positive outcome for the customer experience plus a positive outcome for the business goals, that's really, really great. That's like taking it to another level."

"What I'm really interested in ... are outcomes. So, can they tie specific studies that they have done or specific recommendations they've made to... outcomes and how that actually impacted the customer experience... Do they understand how to measure the success, right? Do they understand... what types of metrics to be tracking before and after?"

"Show me how you started with an opportunity and produced real value for a user and the organization."

Finally, hiring managers also want to see that you practice what you preach and that your portfolio has been created with UX in mind. Having an organized, well-designed, and thoughtfully written portfolio was very important to one of our hiring managers.

"When I look at your portfolio, I want to see that it's been designed. I want to see user experience applied to your user experience. If you can do that, and it's not just thrown together, that's telling me a lot about you and I can't stress enough how much, writing, if you're a strong writer, that is another skill."

Portfolios Aren't Always Required

It's important to note that not every company requires a portfolio of work in order to consider the applicant for a role. Applications for research roles or for junior-level positions often did not include a portfolio component, as these types of positions were not focused on visuals, or the applicants were not expected to have enough projects to show.

A user-experience researcher from Malaysia mentioned that portfolios for junior-level candidates are not a requirement but considered a plus.

"For our company, we welcome mostly fresh graduates, hence portfolio will be just a plus point."

Portfolios for Researchers Versus Designers

There were some differences in what hiring managers expect in a portfolio for a researcher versus a designer.

If hiring managers recruiting researchers ask for or receive a portfolio, they want to see examples of research reports, test and research plans, and any research-based artifacts produced — like personas, user-need statements, or customer-journey maps. A researcher's portfolio isn't expected to be flashy or highly designed.

Designer portfolios, on the other hand, should include the finished designs or screenshots, in addition to any process-related artifacts — like sketches, wireframes, or even pictures of the team in a design workshop.

Advice for New UX Practitioners

We asked our survey, interview, and focus-group participants if they had any advice for incoming UX professionals and junior practitioners who have just entered the field. We received a variety of advice which we summarize below.

KEEP LEARNING AND STAY CURIOUS

Since UX is an ever-growing field, it's no surprise that many of our participants mentioned continuous learning as an essential piece of advice. This learning is sparked by a natural curiosity and can be built up through reading, asking questions, and applying concepts to your own work.

"I wouldn't be the UXer I [am] now if I hadn't read so much and tried to apply it in my day to day work."

"I think just to make sure that they have curiosity... one of the things that really stands out to me with a candidate is somebody who's really curious and asks a lot of questions and wants to understand the problem before jumping into solving the problem."

UX professionals recommended reading as much about UX and related fields like psychology and software development.

RESPECT OTHERS

There's no room in UX for an over-inflated ego and lack of respect, according to our survey respondents. They mentioned that being able to listen, collaborate, and respect others on teams were incredibly important traits of being a successful UX professional.

"Lose the ego and respect others."

"Learn to be an active listener. [The] bulk of the job requires a lot of listening and empathy towards not just end users but teammates and business execs."

Appreciating others and their roles is also important.

"Develop an appreciation for the other disciplines involved in bringing an idea to market. Being overly idealistic can hurt one's ability to influence a team if one is too dogmatic and inflexible around your principles. This is especially true if one doesn't understand the complexities and pressures other disciplines face as they try to do their job."

BE IN CHARGE OF YOUR OWN CAREER

Having a career in UX is not always perfectly defined and can be difficult to manage without a certain level of motivation. Interview participants mentioned the need to be comfortable with ambiguity and offered advice on how to overcome uncertainty.

"So, I would say to anyone looking to get into the UX... There's not going to be a career path like law or medicine where you do X, you do Y, you do Z, you end up here... it's really up to you... in my understanding, right now to really form your education, and that education can be formal, informal."

"Figure out which path you want to take and what you need to learn to... leverage the experience you already have and look for the skills that you need to complement."

Some survey respondents advised gaining experience in multiple types of work environments and trying different elements of UX in order to learn your strengths and interests.

"Try to work in many companies to gain more experience with people and processes."

Getting practical experience was also advised, whether that's through internships, bootcamps, or just through voluntary work.

FIND YOUR PLACE

As we've shown, there are a wide variety of roles and responsibilities. If you're not sure which role is right for you, stay broad and try your hand at many different UX activities. An interview participant alluded to inclusivity for those who are thinking of starting their UX careers.

"I think the biggest thing that people need to realize is ... there is probably a home that will make sense for you... there's lots of different entry points into the industry that I think are really fascinating, that so many people just don't have their eyes open to."

A principal product designer based in the US advised juniors and new entrants to get a mentor, along with spending time finding what most motivates you.

"Find a UX mentor. Become aware of the skills you have, and the skills you need. Decide what kind of UXer you want to be. Find your purpose and seek roles that feed your soul."

A UX researcher from the US who responded to our survey discussed practice projects for those new to the field, to help determine which aspects of UX would be most enjoyable.

"My biggest piece of advice is to be proactive in kick-starting your career. Crack the books open and start practicing by creating your own projects. As you start working on personal projects, you realize you tend to enjoy some aspects of the work more than others (i.e. UX research over wireframing, etc.). Hone in on those sparks and strengthen them, they will be handy in the long run for selling yourself."

BE CONFIDENT

Imposter syndrome or low confidence can get in the way of voicing your point of view. However, it's important to speak up for users. An interview participant discussed how important confidence and an acceptance of failure is necessary when first starting out in the field.

"So many junior designers feel like they can't speak up or they don't feel like they have a voice at the table if you stand up and you can articulate your why, you're going to go a lot further than if you sit back and say nothing Some junior designers, I think, don't want to take that risk because they're afraid of losing their job; they're afraid of not getting the promotion, but it's just the polar opposite! Having a distinct point of view in how you approach the work, understanding your strengths and weaknesses is going to get you a lot further than being timid..."

About This Report

About This Report

This report has been produced for User Experience (UX) professionals, people interested in UX careers, and those who hire people for UX roles. We hope it will be useful as an education, training, and career-strategy tool for students, career changers, and practitioners, as well as a guide for universities, job interviewers, HR departments, and hiring managers.

We would like to thank all of our research participants who gave their time to share their experiences.

METHODOLOGY

We carried out research in 2013 into the state of UX careers by conducting a 27-question branched survey which received responses from 963 people. The results of this research were published in the 2013 report entitled *User Experience Careers: How to Become a UX Pro, and How to Hire One* by Susan Farrell and Jakob Nielsen. One of the shortcomings of the report was the lack of focus on specialization in UX roles and how it affects relevant education, skills, activities, and hiring practices.

Given that UX is still a fairly young field, we felt it was appropriate to carry out a similar study to learn how much the field is changing, while exploring specialization. We also wanted to gain more detailed accounts of the experiences of career changers, professionals who had received formal mentorship, or had undergone an internship in the field.

In our 2019 study, we carried out an updated version of the 2013 survey, alongside 2 focus groups in Hong Kong and Los Angeles, and 17 remote, semi-structured interviews with UX professionals.

Focus Groups

2 focus groups were conducted in Hong Kong in January 2019, and in Los Angeles in February 2019. The focus groups helped us further prepare questions for the survey and gain insight from UX practitioners on their feelings about their career, and the UX field in general. Focus-group participants were recruited from our UX Conference and were all UX professionals. Each participant was incentivized with a free report or online seminar of their choosing. Focus groups took place one evening during the week-long conference and lasted 90 minutes.

Each focus group was capped at 6 participants to ensure that each participant could contribute meaningfully to the session. The objectives of the focus group were to understand:

- What participants thought helped them get into UX
- What skills and activities participants thought were helpful in progressing their careers
- How participants measure their own career progression
- What skills and experiences participants were still looking to obtain and why

Focus groups consisted of a series of 20-minute diverge—and—converge activities to allow time for introspection and to reduce the effects of groupthink during discussions. Discussions began in a round robin format and later became more unstructured.

The Survey

We conducted the same survey from 2013 with some light alterations to encompass the new areas of investigation. These alterations included removing a question around tools and frequency of use, some slight improvements to questions, and removing options from rating tables. We also introduced several new questions. The updated survey contained 25 questions and was branched; it took around 15 minutes to complete. Although the average time spent to complete the survey did not decrease, the response rate did increase to 79% in our 2019 survey, compared to 54% in 2013. We believe some of these changes made the survey easier to complete.

We conducted two pilot surveys with 66 attendees at two NN/g UX Conferences to test the altered and new questions that we included in the 2019 survey, in particular the questions related to career growth and mentorship. The responses helped us prepare our survey questions for mass consumption.

The survey was hosted on Survey Monkey. In March 2019, we invited individuals responsible for usability research or testing, interaction design, information architecture, visual design, content strategy, and UX management or leadership to take our 25-question survey. We received responses from 693 people. 565 of these were considered complete responses, as these respondents answered all mandatory questions.

Our survey asked questions about roles, activities, industries, education, training, mentorship, career satisfaction, and what to look for when hiring. Many questions had free-text fields so we could gather further data to provide a richer picture of responses.

Interviews

Because survey answers don't tell the full story of a UX professional's career, we wanted to learn more about some of our participants' answers and backgrounds. We selected 25 survey respondents — who had all indicated that they would be happy to take part in further research — to be invited to a follow-up interview. Participants received a free report or online seminar of their choosing as a thank you for participating.

The selected individuals all had varying lengths of time in the industry, came from all corners of the globe, and had very different experiences entering the field. Of the 25 invited, 17 accepted our invitation and took part in a 1-hour video interview with an NN/g researcher. Our interview participants came from 9 different countries: USA, Canada, Brazil, UK, Germany, Greece, Bulgaria, Slovenia, and Nigeria. Because recruitment was blind to gender, we ended up with more female participants than male participants; 5 were male, 12 were female.

A guide was prepared for the interviews that had a range of questions, including questions about:

- What a typical day looked like
- How participants got a career in UX
- What participants liked about their job
- What participants disliked or found challenging about their job
- What skills participants would like to gain
- What advice participants would give to other UX professionals entering the field

For hiring managers, we had additional questions which covered:

- What hiring managers look for when hiring new UX professionals
- Specific things hiring managers look for in a portfolio or cover letter
- What questions or tasks hiring managers give candidates in interviews and why

Limitations of Our Study

Although we believe the results are reliable and consistent, we would like to acknowledge several limitations of our study.

Convenience Sample

First, we cannot claim our sample was representative of the entire UX-professional population. This was because the sample was a convenience sample, rather than a random selection. Our survey was also only in English, which means only respondents with some level of English-language proficiency were able to complete the survey. We also only advertised the survey through our own networks, such as through the NN/g Twitter and LinkedIn accounts, and through our own website (nngroup.com), so the sample draws heavily from our UX following.

Survey Length

Our survey was fairly long in order to gather enough factual data about UX professionals for us to provide this analysis. We did our best to reduce unnecessary questions and move key questions to the beginning. Some participants did drop off towards the end of the survey, so we had fewer responses for some of our later questions. Throughout this report, we have indicated the number of respondents in all graphs for clarity.

Statistical Tests

In performing statistical tests between years we've assumed that our samples from 2013 and 2019 are independent. However, there could be some individuals who completed our survey in 2013 that also completed it again in 2019. We do not believe this to be consequential to the main findings of this report.

About the Authors

Maria Rosala is a User Experience Specialist with Nielsen Norman Group (NN/g). She plans and executes independent research for NN/g, as well as for clients to help them improve their products and services. Maria designs and teaches a variety of classes on topics like research methods, psychology, and management. Prior to joining NN/g, Maria worked as a Senior User Researcher in the UK government, where she carried out research in the UK, and internationally, to improve numerous digital products and services, such as internal caseworking systems, online visa applications, public-facing websites, and various other online and offline services.

Maria holds a BSc in Philosophy, Logic & Scientific Method from the London School of Economics and Political Science (LSE) and an MSc in Human-Computer Interaction with Ergonomics from University College London (UCL).

Rachel Krause is a User Experience Specialist with Nielsen Norman Group. Her areas of expertise include storytelling, UX in Agile, design thinking, scaling design, and UX leadership. She has also planned and conducted research on careers, UX maturity, and intranets for clients and practitioners in numerous industries.

Prior to joining NN/g, Rachel was a UX consultant responsible for carrying out user research, facilitating UX workshops, and designing visuals on discovery and delivery teams. She also spent time hiring and growing a UX team, crafting job descriptions, roles, and an internship program for a new UX team. She is passionate about mentorship and cultivating spaces in the industry for junior UX professionals and those transitioning into UX.

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This edition of the report would not have been possible without the hard work of the team who wrote the first edition (then titled *User Experience Careers: How to Become a UX Pro, and How to Hire One*):

- **Dr. Jakob Nielsen:** Principal and co-founder of Nielsen Norman Group, who provided direction on this most recent study, as well as the 2013 study
- **Susan Farrell:** Former User Experience Specialist with Nielsen Norman Group, who conducted the initial survey for the first edition of this report in 2013

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