A Guide to
User Experience Design

ATTAIN®

WHAT IS UX DESIGN?

User Experience (UX) Design is about functionality and usability, and how the user feels when interacting with a product. Whether for the web, an application, or even something in the "real" world, UX Design is charged with making the end-to-end experience of a product pleasing. Taking the time up front to understand your users results in a more cost-effective approach to your project.

At Attain, we use a UX Designer to create products that users can easily navigate and that keep them motivated to take action. We work with our clients to understand users and their needs. From that moment, the user is at the forefront at all times. This provides an efficient mechanism to limit frustration from users and reduce rework, as well as to maximize organizational change management in a short amount of time. Through this specific model, we reduce wasted development time and decrease overall cost.

WHY IS UX IMPORTANT?

UX Design is integrated into Attain's software development methodology to inform the requirements process and ensure the development process is based on users' goals. Through learning about our users, we have insight into what they want and which priority items to build. This creates a product that is more useful, understandable, and appealing. Specifically:

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- We build features aligned to users' priorities
- We expedite design and development through detailed conversations and prototypes or wireframes
- We facilitate change management and acceptance by improving usability right from the start

Moreover, we avoid the underlying causes of failed projects. Dr. Susan Weinschenk, a behavioral scientist and UX Design guru, describes three of the top twelve reasons projects fail in her video, The ROI of User Experience:

- Badly defined requirements
- Poor communication between developers, customers, and users
- Stakeholder politics

All three of these major obstacles can be solved by including UX Design in your project.

WHAT'S INVOLVED?

The UX process can involve many different aspects. It's not a one-size-fits-all exercise.

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When discovery is complete, we move to the **analysis phase**. We synthesize the information learned, and when appropriate, create personas used to

represent the different types of users that will interact with the product we are building. From there, we can build journey maps or user flows to show how users will work through the product. Everything to this point helps inform the Information Architecture (IA) and aids us in creating a well-defined set of requirements.

With requirements defined, we move on to the **design phase**. We begin by sketching initial ideas. The sketches lead to wireframes, which we can then test with usability and A/B testing with users to validate assumptions and ideas. Taking wireframes a step further, we can create interactive prototypes, at varying levels of fidelity, to further flesh out, test, and iterate ideas. After validating concepts, we can incorporate User Interface (UI) Design to create the overall look and feel of the product. When the process is complete, we can be confident that what we build will be something users want and will help them achieve their goals.

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WHAT'S THE VALUE?

So why do all of this? For one thing, it saves money. If you spend a little budget up front to learn about your users, the knowledge you gain will save you in the long run. Think about it; if budget is tight, then UX Design is exactly what should be done because we can reduce development time and build only priority items. Knowing what users want and need allows us to build the product right the first time and avoid the major pitfall of rework. According to Dr. Weinschenk, developers spend 50% of their time reworking code.

Another way to think about this is known as the **1:10:100** rule.

Knowing what users want and need allows us to build the product right the first time.

For every dollar spent researching your users, you can save $10 otherwise spent having to redesign a part of your application or $100 reworking code already written.

$1
RESEARCH

$10
DESIGN

$100
DEVELOPMENT
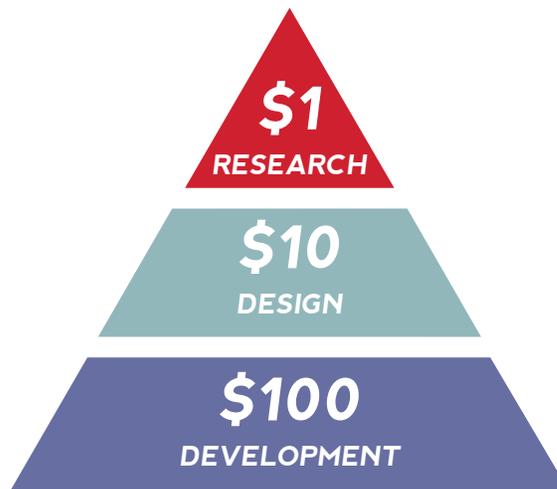
The organizational change management burden is also reduced when UX Design is guiding your project. Since time was taken at the beginning to understand users' needs, less time will be needed to support the necessary steps toward successful user adoption. Keep in mind that if the product is not something people are required to use, then a compelling user experience is even more critical to driving higher conversion rates.

ATTAIN UX IN ACTION–A CASE STUDY

PROJECT OVERVIEW

The client asked us to replace an older, Windows only, desktop application with a responsive web application that could be used across platforms and operating systems. Since we were going to rebuild the application from the ground up, we used the opportunity to apply the Attain UX methodology.

DISCOVERY

As part of the discovery phase we separately interviewed eight users and reviewed the existing application with them. We also discussed improvements and enhancements they'd like to see in a future version. We then conducted a competitive analysis on similar existing applications and reviewed them to see what worked, what didn't, and how we could make our application better.

ANALYSIS

With the interviews and research complete, we established five personas that represented the different types of users who would interact with the application in various ways. These personas were used to guide us through the next phase as we began to sketch and ideate.

DESIGN

During the design phase we started with some rough sketches to get a sense of the overall application layout. The goal at this point was to get as many ideas as possible down on paper. Once we had a good sense of where we were heading, we moved from sketching to wireframes using a wireframing/prototyping tool called Axure. We honed in on the layout of the application in more detail using the wireframes to make sure there was room for the necessary elements and that the spacing and organization looked right. We were only working with boxes in grayscale and some light text to indicate things like navigation and headers. It was at this point that we could show our initial wireframes to the client to discuss, get feedback, and iterate. After going through revisions, we moved forward with a high fidelity prototype.

The prototype provides much greater detail, compared to the wireframes. Here, we incorporated actual text and the user interface (UI) design (imagery, icons, and colors) into the prototype, and included a high degree of interactivity. This gave us something clickable and demonstrable, offering a much better sense of how the application would flow. We took the prototype back to the users we interviewed during the discovery phase for user testing and feedback. After some revisions and further refinement we knew we had a product users would enjoy. We were ready to build the application, and we knew we could build with confidence because we took the research time up front and listened to users.

Proven Performance. Forward Thinking.

Based in McLean, Va., Attain is a management, technology, and strategy consulting firm comprised of innovative problem solvers who disrupt the status quo to change the world and improve the lives of those we touch.

From strategy and digital transformation—including user-centric design, agile development, DevSecOps, and continuous deployment—to cyber security, cloud services, business intelligence and analytics, infrastructure management, as well as industry-specific operational expertise, Attain brings proven performance and forward thinking to advance our clients' missions across the government, education, healthcare, and nonprofit landscapes.

To learn more, please visit attain.com.
Contact us at info@attain.com or 703.857.2200.