



The Business Value of User Experience

January 2014

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The Importance of a Good User Experience

It's more important than ever that products and systems provide a good user experience (UX). What was once considered a luxury or an added expense, the most successful companies now realize that focusing on the user experience is key to success and innovation. Examples such as Google, the iPhone, the iPad, and the Amazon Kindle have shown that user experience is an important product differentiator. Consumers will buy and use products based on their design, usability, and appeal. This expectation for well-designed products has even translated to business applications, such as Salesforce.com and SAP's Fiori mobile apps, as employees have come to expect enterprise software to be as easy to use as consumer applications. They will no longer tolerate poor usability in the applications they rely on to accomplish their daily tasks.

Companies that haven't yet realized the importance of user experience risk being surpassed by competitors who are already reaping the benefits of well-designed consumer and business products. The quality of the user experience can have very tangible business impact. For example, in their "Business Impact of Customer Experience" report from June 2013, Forrester estimated that moving from below-average customer experience to above average would yield more than \$3 billion additional annual revenue for wireless carriers, more than \$1 billion for hotels, \$262 million for insurers, and \$227 million for retailers. ⁱ

Whether you purposely try to design a good user experience or not, people will always have an experience (good or bad) when using a product or system. For consumer products, a good user experience is essential for sales, and a poor user experience can lead to the following negative consequences:

- Decreased sales
- Dissatisfied customers
- Poor ratings and reviews
- Negative word of mouth
- Negative impact on brand
- Increased need for documentation and training
- Increased support requests and costs

For business systems used by employees, the focus isn't sales but effectiveness, efficiency, and productivity. Business systems with a good user experience help employees be effective, productive, and focus on valuable work. Systems with a poor user experience can lead to the following consequences:

- Decreased productivity
- Increased errors
- Increased support costs
- Increased training costs
- Decreased job satisfaction
- Increased employee turnover



What is User Experience?

User experience is the overall feeling or *experience* that a person has when using a product, such as a website, a mobile device, or a software application. It includes how easy it is to use, how pleasant and satisfying the experience is, whether it's useful or not, and how well it meets the person's needs.

How Do You Create a Good User Experience?

Good user experiences don't happen by chance. They are purposely *designed* through a user experience design process that aims to create a solution that meets both business and user needs.

The three key elements of a UX design process are:

- Conducting user research to understand the users' characteristics, behaviors, needs, and context of use.
- Using this understanding of business and user needs to design a solution that follows human factors principles and design best practices.
- Evaluating the design with users by conducting usability testing and making changes based on the findings in an iterative design process.

An important distinction between user research and traditional requirements gathering is that user research involves *observing behavior* rather than simply *asking* people what they need. Observing what people do, in upfront user research and usability testing, is far more accurate and useful than simply asking people what they do. People have a hard time accurately describing what they do and knowing what they need. It's easier and more accurate for them to *show* you what they typically do. Even when the challenge is designing something completely new, it's extremely valuable to observe and understand what the intended users do *now*, that the future product will replace.

The UX design process ensures that systems are designed with the needs of both the business and the users in mind, resulting in systems that are intuitive, useful, and pleasant to use. This design process has been practiced for many years and has even been standardized by the International Standards Organization (ISO) with ISO 9241-210: "Human-centered design for interactive systems."

Impact of User Experience

Whether the users are customers or employees, a good user experience results in savings and increased revenue, as shown in table 1, while a bad user experience can have a serious impact on sales, satisfaction, and costs. General estimates of the value of investment in user experience vary from a return of \$2 to \$100 for every \$1 invested in user experience design. ⁱⁱ



Table 1. The business impact of user experience

	Bad UX	Good UX
Sales	Lower sales	Higher sales
Customer Satisfaction	Dissatisfied customers Fewer purchases Fewer renewals	Satisfied customers More purchases More renewals
Impressions of the product and the company	Poor ratings and reviews Negative word of mouth Negative feelings about brand	Good ratings and reviews Positive word of mouth Positive feelings about brand
Documentation	More documentation needed Higher costs	Less documentation needed Lower costs
Training	More training needed Higher costs	Less training needed Lower costs
Support	More support requests More support personnel needed Higher costs	Fewer support requests Fewer support personnel needed Lower costs
Productivity	Lower productivity Higher costs	Higher productivity Lower costs
Errors	More errors Higher costs Customer dissatisfaction	Fewer errors Lower costs Customer satisfaction
Employee satisfaction	Lower satisfaction Lower productivity Poor product quality Poor customer service Increased absenteeism Higher turnover Increased hiring and training costs	Higher satisfaction Higher productivity Higher product quality Better customer service Decreased absenteeism Lower turnover Lower hiring and training costs
Development costs and time	Longer projects Missed requirements Problems discovered late in the process More rework to fix problems Higher costs	Shorter projects Better requirements definition Problems discovered early during the design process Lower costs



Increased Sales

People want products and systems that meet their needs, are easy and pleasant to use, and are well made. Products and services that provide a good user experience will sell better than those that provide a poor experience. Ease of use and design quality have become selling points for companies like Apple, Amazon, Intuit, and others.

With some products, such as software or hardware, customers don't know what the user experience is like until after they've bought and started using them. With clever marketing, companies can get away for a short time selling products with a poor user experience, but dissatisfied customers, poor ratings and reviews, and negative word of mouth will eventually hurt their sales.

Unlike products that people buy and experience later, websites are experienced immediately. So it's extremely important that websites provide a good user experience. A poor experience can prevent people from finding things, from registering, or from making a purchase. With many competing websites easily available, people won't spend much time figuring things out before they leave and go to another website that provides a better experience.

Table 2. Examples of companies that increased sales by improving their user experience

Benefit	Details
Registration up 45%	After a user-centered redesign of their registration process, Bank of America increased online banking registration by 45%. ⁱⁱⁱ
Sales up 53.6%	American Eagle Outfitters increased sales by 53.6% in the month after launch of their redesigned website. ^{iv}
Sales up 24%	Clothing retailer, Anthropologie, increased sales by 24% with a UX redesign that made its checkout process easier. ^v
Advertising revenue up \$80 million	Microsoft's research on their search engine, Bing, found that the link color didn't project a feeling of confidence. They changed the color to a bolder blue, which they estimated would generate at least \$80 million in additional advertising revenue. ^{vi}
Sales up \$500 million	Consulting firm GFK found through user research that poor sales on a client's mobile site were due to a poorly designed "Buy" button that users didn't notice and had a hard time clicking. Adding additional Buy buttons below each product image generated an additional \$500 million in revenue per year. ^{vii}
Visitors up 214%	Wal-Mart's redesign of their ecommerce site resulted in a 214% increase in the number of visitors. In customer surveys, it scored well in ease of use and in stimulating



customer confidence. ^{viii}

Increased Customer Satisfaction and Loyalty

Good user experiences satisfy customers and increase their loyalty. Satisfied, loyal customers are more likely to make repeat purchases, buy additional products, renew memberships, provide positive reviews, and spread positive word of mouth. According to a 2013 survey by Avaya, over 75% of consumers said they were likely to continue spending money as a result of an exceptional customer experience, while 82% would stop spending money with a company as a result of a bad customer experience. ^{ix} Another study, by Forrester Research, found that a positive customer experience increases customers' willingness to pay by 14.4 percent, reduces their likeliness to switch brands by 15.8 percent, and increases their likelihood to recommend a product by 16.6 percent. ^x

Table 3. Examples of increased customer satisfaction and loyalty

Benefit	Details
Online ticketing up 200%	By conducting user research to better understand their customers' needs, United Airlines doubled the number of daily sessions and increased online ticketing by 200% by increasing the satisfaction of their most profitable customers. ^{viii}
Savings \$1.2 million Revenue up \$552,000	Design firm Diamond Bullet's redesign of a state government's website resulted in higher satisfaction ratings, increased the ability for people to find information from 72% to 95%, and reduced the time to find information by 62%. This saved the state an estimated \$1.2 million per year and increased revenue by \$552,000. ^{xi}
Visitors up 80% Repeat customers up 67%	Staples redesign of their ecommerce site resulted in an 80% increase in the number of visitors, a 45% reduction in drop-off rates, and a 67% increase in repeat customers. ^{xii}

In contrast, a poor user experience can deeply hurt a company's brand. For example, in 2011 Ford dropped from 5th place to 23rd in J.D. Power & Associates automotive quality survey because of consumer complaints about the un-intuitiveness and complexity of the MyFord Touch system, used to control the entertainment, climate, and navigation systems. In 2012, Ford dropped further to 27th place. ^{xiii}

Increased employee satisfaction

It's easy to understand how *customer* satisfaction has a direct financial impact for a company, but the financial impact of *employee* satisfaction is harder for some people to understand. Yet studies have shown



that employee dissatisfaction leads to lower productivity, poor product quality, poor customer service, increased absenteeism, and higher turnover, which leads to increased hiring and training costs.^{xiv}

The experience employees have with their tools can greatly impact their job satisfaction. Employees today spend a large part of their time using technology, such as software and web applications, to accomplish their work. Those systems can either be easy to use, efficient, and helpful in performing tasks; or they can be difficult to learn, cumbersome, inefficient, and unhelpful in accomplishing tasks.

Table 4. Examples of increased and decreased employee satisfaction

Benefit/Loss	Details
Stock returns more than double Increased motivation Lower turnover	Edmans (2010) found that companies with high employee satisfaction had stock returns more than double than those of the overall market. ^{xv} Satisfied employees identify with their company and internalize its objectives, have increased motivation, and stay with the company longer. High employee satisfaction can also be a valuable employee recruiting tool and a marketing point for customers who are more willing to buy from companies that treat their employees fairly.
Loss of \$125 million Loss of salespeople	In 2013, Avon Products Inc. gave up on a four year, \$125 million software overhaul after a test of the system in Canada revealed that the system was so burdensome and difficult to use that many salespeople quit the company. ^{xvi}

Reduced Development Cost and Time

Incorporating user experience design activities into the standard software development process would seem to *add* time and cost to projects. However, these activities actually *save* time and money by designing the right solution from the beginning and by finding and correcting problems early in the project, when they are easy and inexpensive to change. When the user interface is designed by someone who knows and applies principles of human factors and design best practices, many UX problems are avoided. Iterative usability testing and redesign finds and fixes problems and validates the design direction. Before development begins, the design is validated by both the business and users, eliminating costly change requests due to unmet requirements and usability problems late in the development process.

It's far less expensive to make changes during the requirements definition and the design phase than it is to make changes during or after development. Forrester estimates that for every \$1 to fix a problem during design, it would cost \$5 to fix the same problem during development, and it would cost \$30 to fix the same problem after the product's release.^{xvii}



Table 5. Examples of reduced development cost and time

Benefit	Details
Cost of fixing usability problems down 60 – 90%	By correcting usability problems during the design phase of their website, American Airlines reduced the cost of those fixes by 60-90%. ¹⁶
Reduced defects by 79%	Sodala Software Company introduced use case scenarios into their development process to model the design around user needs, reducing defects by 79% and increasing customer satisfaction. ^{xviii}

Another benefit of early user research is that it reveals which features are most valuable to users, which saves the development team from building features that aren't needed. Instead, they can focus on the features that provide the most value.

Decreased need for training and documentation

The easier a system is to use, the less training and documentation is needed. Very few people want to attend training or read documentation in order to start using an application, a website, or a product. Most would rather just get started using it and figure it out on their own.

Initial ease of use is crucial for websites and consumer products, because they need to be immediately easy to use. Training and documentation is not an option for websites, and very few people will buy products that *require* attending training or reading documentation.

Business systems and software are typically more complex than consumer websites and applications. They may still require some training, but the easier they are to use, the quicker employees will learn and become productive. That's important because training and loss of productivity is expensive.

Table 6. Examples of decreased need for training and documentation

Benefit	Details
Training time reduced from 80 hours to 30 minutes	D ³ Infragistics redesigned a slot machine configuration and troubleshooting application for a client, reducing training time from 80 hours to 30 minutes, saving the client \$50,000 a year in training time.
Reduced training time saved \$300,000 to \$3 million	Mid to large size electric utilities reported cost savings of \$300,000 to \$3 million by reducing customer service staff training when they implemented more usable customer information system software. ^{xix}



Businesses sometimes make the mistake of thinking of training as a solution to usability problems. Instead of fixing problems, they think it's easier to require employees to attend training to learn how to work around the problems. In reality, training often doesn't happen, not everyone gets to attend, and new employees often don't receive training. It's always better to design the right solution in the first place and to fix usability problems instead of training people to work around them.

Reduced Support Costs

When products are easy to use, users have fewer problems and have less need to contact support. Fewer support personnel are needed to answer calls, emails, and chat sessions. Support costs decrease.

When products are difficult to use, more users contact support, requiring more support personnel to answer calls, emails, and chat sessions. Support costs increase. Cost estimates vary, but a current estimate is about \$1 per minute for the average call center to service a customer. ^{xx}

Table 7. Examples of reduced support costs

Benefit	Details
Reduced help desk costs by 69%	Design firm, Foraker Labs, redesigned a community platform for Breastcancer.org, reducing monthly help desk costs by 69%, increasing visitors by 117%, increasing membership by 41%, and reducing registration time by 53%. This saved the organization tens of thousands of dollars. ^{xxi}
Tech support calls decreased by 90%	MacAfee redesigned its ProtectionPilot software in 2004 to improve its usability. Tech support calls were decreased by 90% after launch. With 20,000 downloads over a 10 week period, there were only 170 support calls. ^{xxii}

Increased productivity

Consumers appreciate being more productive and that can lead to increased satisfaction and sales, but we usually think of the benefits of increased productivity with systems used by employees. Applications created with a UX design process employ user research to understand the work employees' perform. They are then designed with an understanding of human factors and design principles to create interfaces that maximize efficiency and productivity. For example, UX designers can apply principles of human perception and memory to improve the visibility of important information, decrease the number of steps, and provide the most informative display of data.

The UX design process results in applications that help employees complete their work tasks more easily, efficiently, and quickly with fewer errors. With many employees and repeated tasks, productivity savings



add up exponentially. In contrast, applications created without an understanding of the users, their tasks, and human factors and design principles, end up being a poor fit to the work employees need to do.

Employees don't have much choice in the applications they can use. They either have to invent elaborate and inefficient workarounds to get around system limitations, or they resort to using simpler, external applications instead of the approved, internal business systems. For example, instead of using complicated knowledge management systems, many employees use simpler, web-based solutions, such as Dropbox.

Table 8. Examples of increased and decreased productivity

Benefit/Loss	Details
Tasks performed 20% faster	Oracle improved the navigation structure of their database manager application, allowing database administrators to perform their tasks 20% faster. ^{xxiii}
Improved productivity saved \$6,800,000	After spending \$20,700 on usability testing and redesigning a login process, a major computer company saved \$41,700 on the first day the new login process was used. On another system with over 100,000 users, the same company spent \$68,000 on a redesign and saved \$6,800,000 within the first year, a cost-benefit ratio of \$1:\$100. ^{xxiv}
Reduced productivity Reduced sales Reduced profit	In 2010, Lumber Liquidators Holdings Inc. said that their new, poorly designed point-of-sale and inventory management system led to millions of dollars in reduced productivity and lost sales, hurting their 2010 profits. ^{xxv}

Conclusion

More than ever, consumers and employees have come to expect a good user experience as the norm and will no longer accept a poor experience. Companies that haven't yet learned to provide a good user experience to their customers and effective tools to their employees, will be at a competitive disadvantage to the many companies that do.

The key to a good user experience is to involve users throughout a UX design process, to observe their behavior, to design based on human factors principles and design best practices, and to test the design with them in an iterative design process.

If you don't already have a process in place, there are several options to get started, including hiring user experience consultants to help you with a particular project, hiring one or more user experience designers to join your project team, or starting an in-house user experience department. Whichever option you choose will be a step in the right direction. The result will be systems that are easy to use, efficient, useful, and satisfying. Giving people well-designed systems increases revenue and decreases costs, and that's just good business.



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