Agile UX Storytelling

Crafting Stories for Better Software Development

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A zombie software case study

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Rebecca Baker

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This book is dedicated to all those bought this book because it had the words zombie and software on the cover. You are my kind of people.

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About the Author

Dr. Rebecca Baker is a professional speaker and passionate storyteller with more than 20 publications and 30 speaking engagements on topics ranging from information encapsulation to remote usability testing. A patent holder with 20+ years of enterprise software experience, Rebecca is currently the senior director of user interaction design and research at Active Network, where she instituted a story-based design approach to feature planning and development. She was formerly the UX design director and product design manager at CA Technologies. Rebecca received her BS in physics from the University of Houston and her PhD in Information Science from the University of North Texas. As a writer of both fiction and nonfiction, she believes that storytelling should not be relegated to fairy tales but can work to make information more accessible, understandable, memorable, and actionable in everyday work.

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Preface: Not Just Once Upon a Time

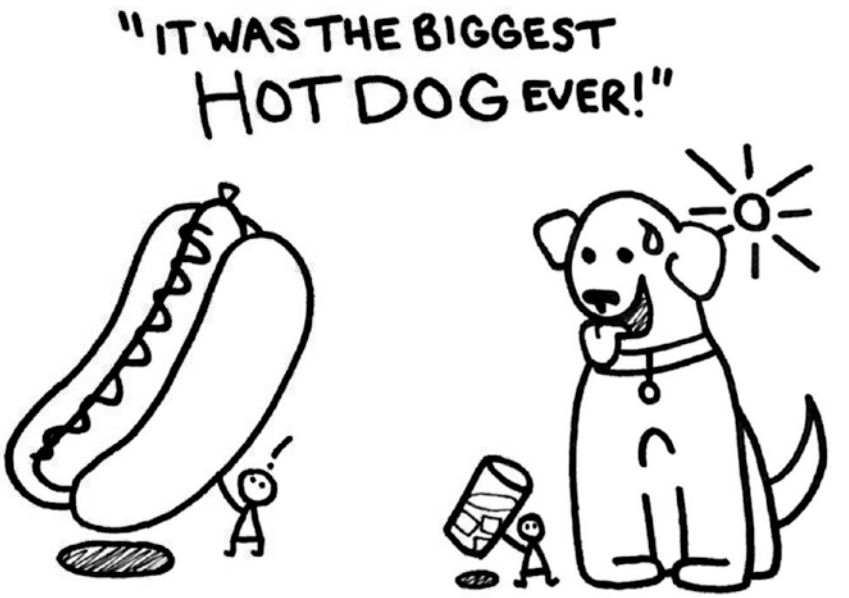
Understanding the Relevance of Stories

When I was a child, I loved stories. I loved to hear them, I loved to tell them, I loved to write them. It seemed to me that the whole world was filled with stories, if you were only willing to listen. Whether it is the charming elderly man on the train telling me how he used to dance in thunderstorms without fear because lightening is nothing but the shoes of the angels striking the clouds as they dance, the proud crowing of a parent in the grocery store whose child just took first place in her chess tournament, or the product manager relaying how he sees a certain friend once a year to watch him run a marathon and how that experience inspired him to create an app for spectators—I love stories because they give you a version of the world as seen through someone else's eyes.

As I grew up and began working in enterprise software, I realized, as many others have, stories are not just for children. They are powerful, relevant tools that can be used every day to ensure effective and accurate communication, to persuade others by helping them see your point of view, and to improve your products by giving the faceless "user" who buys your software a face. At all parts of the software development life cycle, you can find people using stories—not just the traditional user story associated with the Agile methodology but narratives of every kind that illustrate ideas and concepts in a way that people can understand. Product management uses stories to communicate their business cases, helping others understand the problem they are trying to solve. Business analysts use stories to tease out detailed requirements. Designers use stories to humanize and personalize the end user to prioritize pain points and find the best solution. Developers use stories to provide context and priority to coding decisions. Quality assurance people use stories to create realistic test scenarios. Support people use stories to communicate solutions to end users. These stories show a vision of things from a different angle. And in that vision lives perspective, context, and understanding.

What Is a Story?

On its surface, a story is a narrative that describes a series of events—an accounting of something either fictional or nonfictional. However, ask any child, and they will be quick to tell you that a list of what happened—whether real or imagined—is *not* a story. So, what then differentiates the simple recounting of events from a tale worth telling? The secret to stories is meaning.[1] When we tell a story, we give the events we are recounting meaning through the details we provide, the details we leave out, the tone, the context, the characters, and the conclusion. We provide our listener or reader not just a series of facts but our interpretation of those facts.



Stories can be made of words, images, or sounds. A short film clip showing current conditions in a war-torn country, a well-drawn political cartoon, the recounting of a site visit by a product manager, the headliner in a newspaper—all of these are stories. Regardless of the format used, they convey the storyteller's perspective of an event or situation, their reaction to it, and the filter they use to understand it.

[1] Phillip Martin, *How to Write Your Best Story: Advice for Writers On Spinning an Enchanting Tale* (Milwaukee, WI: Crickhollow Books, 2011).

The Power of Stories

The power of stories lies not in the entertainment they may provide but in the glimpse into another person's mind and vision, as a participant rather than an observer. Stories show you how other people see the world and those things that happen within that world. They let us see how another person's interpretation of events is different from our own and how it is the same. They let us cheat Schrodinger's cat[2] and observe it simultaneously alive and dead. And once we have that perspective, they give us the power to show others how we see the world.

Persuade

One of the most common uses for stories is to persuade. Think about the commercials you see every day, whether on the television, on the radio, in magazines, or on the Internet. A good commercial tells a story to persuade you to see things from the advertiser's point of view. One story might show a young woman out on a date with a young man in a fancy sports car. What story does this scene imply about the role of the car for this young man? Another shows a happy family seated around a table, laughing and conversing, about to eat a prepackaged convenience food that looks tantalizingly delicious. By showing us a story of a happy family who eats together, what is the advertiser persuading us to believe? Stories have the power to associate powerful imagery with strong emotions, leading the audience to conclusions they might not have drawn otherwise.[3]

Context helps others understand our perspective and personalizes data, making it easier to get key ideas across. A design team that I led was having a challenging time explaining the reason to a client we were making some improvements to some software that let a user plan a trip. The team was getting frustrated—they had shown the numbers, time on task, and so on, but the client just wasn't getting it. Taking a step back, to walk them through the full set of changes, we created a story about a young woman who wanted

[2]Schrodinger's cat refers to a famous thought experiment by the physicist Erwin Schrodinger in the 1930s. In it, a cat is placed in a box along with a jar of poison and a radioactive isotope. If the isotope decays, the jar breaks, and the cat dies. However, since the box is sealed, there is no way of telling whether this has happened or not without opening the box and looking at the cat. While the box is closed, the cat is considered simultaneously dead and alive. The act of opening the box and observing the cat forces the system to be one or the other. This illustrates the idea of quantum superposition and how reality forces a single state on a system. Put another way, it shows that once we observe something, it is forever changed from multiple potentials to a single reality.

[3]John Baldoni, "Using Stories to Persuade," *Harvard Business Review*, March 24, 2011, https://hbr.org/2011/03/using-stories-as-a-tool-of-per.

to take a trip. We explained how excited the young woman was to go on the trip but that she was anxious too because she'd never done anything like this before. At each step of her journey, we told her story and how our designs had helped her, keeping her feeling connected and calm. After the presentation, the client came to me to say, "You guys really get it—this is how our customers live!" They approved the changes the same day, and we were able to move forward. The challenge had been that they couldn't "see" the numbers. They weren't real; they weren't the people they dealt with on a daily basis. It took creating story to explain a vision that we could share with them to help persuade them to see our perspective and, more importantly, their user's perspective.

Using stories to persuade is a powerful technique and, as such, imposes an ethical responsibility on the storyteller. Stories must be based on real data—not simply made up to support the beliefs of the storyteller. Inspiring stories can lead us to invest in a particular opportunity or change our health habits, which can be dangerous to our finances and health if they are not adequately fact-based.[4]

Educate

Stories make things more memorable. Whether used as a coaching tool or a way to help people understand a new concept or process, stories make things relatable. As pattern-seeking creatures, we are wired to look for stories.[5] By providing the story for our audience, we give them context to make sense of what we are trying to communicate.

To teach some designers about the context of the software they were designing, I used this story to illustrate how the software would help check in children to a daycare center:

> The day started like any other, with Miss Mary Martinez checking in children at KidSpot. There were so many things planned for the day—making paper flowers, feeding the goldfish, learning how to count to five, and let's not forget Jillian Gorfman's birthday cupcakes that afternoon—that Miss Mary was not quite paying attention to all the little heads coming through her

[4]David Evans, "Danger of Stories," December 18, 2003, http://blogs.worldbank.org/publicsphere/danger-stories.

[5]Melanie C. Green, "Storytelling in Teaching," *Association for Psychological Science*, April 1, 2004, www.psychologicalscience.org/observer/storytelling-in-teaching#.WR4EzFYrLmE.

> door. At the end of the day, she prepared for the parents to come pick up their sticky little darlings, wiping cupcake icing from their ears and reassuring them that it would be their turn any moment. But wait! She counted the ears she had wiped and came up with two too few! Quickly checking her roster, she noticed that in her hurry this morning she had failed to check every child in. She quickly checks in the ones she can see, but Sue Ellen Dempsie is nowhere to be found. Did she make it in this morning? Miss Mary can't remember, and unfortunately Sue Ellen is a "hider." She starts to sweat, checking every possible hiding place Sue Ellen might be.

Once the designers had internalized the story, I started asking questions. What do we know about the environment that the check-in software is used in? What level of care and attention is the teacher able to give the software? What does this tell you about the design? The students were able to quickly hone in on the need for a simple interface with potentially a fail-safe check-in feature requiring a physical interaction with the child (swipe a badge or a quick photo of the child), a dual check-in (once at the facility level and once at the class level), and an alert that let the teacher know if all the expected children had not checked in. The original designs for the class exercise that had concentrated on extensive reporting that would run overnight, options for assigning nicknames, and so on, were adjusted based on a more visceral understanding of the situation faced by the teachers.

Communicate

Every person has their own set of stories. They collect them from the time they are born, adding their own narratives about their personal experiences as well as the narratives of their peers, their mentors, and their society. These stories inform how they understand the world—they are the filter through which they see things. Understanding these stories can make or break the communication between two people. On a cultural level,[6] stories can inform an entire society's attitude toward impactful things such as expected behaviors and outcomes, organizational responsibilities and authority, and acceptable uncertainties.

When working with designers in China, I have been asked, "How can I better understand the end users when they are Americans?" YouTube is a

[6]Geert Hofstede, Gert Jan Hofstede, and Michael Minkov, *Cultures and Organizations: Software of the Mind*, 3rd ed. (New York: McGraw-Hill, 2010).

great resource for this, as you can find endless videos people have made of themselves telling their stories. However, for a deeper understanding of cultural differences, I frequently point to fairy tales. Many children's stories and fairy tales represent the cultural lessons we want our children to learn.[7] Take the classic tale of Cinderella—hard work and endurance in the face of abuse will eventually pay off royally! Good triumphs over evil. Contrast this with classic Chinese folk tales, and you will see a very different message—one of balance, of the need for both good and evil. As I pointed this out to the team, one of the designers suddenly had an "aha!" look on her face. When I asked her about it, she said she realized now why her North American colleagues always celebrated when they hit a milestone. She said, "It's like they didn't even know that this was just temporary and that something else would come up to push us down again in the cycle." The difference in approach is part of our cultural story.

A Story of Stories

This book is a story of stories. Through the fictional story of Max, you will see how stories can be used in software development to maintain context, discover issues (before they blow up—literally or figuratively), and solve problems. Each chapter will tell you a bit more about stories and help you see, through the character's perspective, how you might be able to use stories yourself. Even if you don't have to deal with zombies.

Key Takeaways

- Stories provide power when communicating by providing a visceral, human connection to numbers and facts.
- Stories can be used to persuade, communicate, and relate, providing a glimpse of a different perspective.
- Good software design must be thoughtful and inclusive of the end user. Using stories, everyone in the process from product manager to BA to designer to developer to QA to support can transform data into something with meaning.

[7] Jack Zipes, *The Irresistible Fairy Tale: The Cultural and Social History of a Genre* (Princeton, 2012).