

RESEARCH DELIVERABLE

# 82 Storyboards

Storyboards provide a visual narrative that generates empathy and communicates the context in which a technology or form factor will be used.

Storyboarding can help visually capture the important social, environmental, and technical factors that shape the context of how, where, and why people engage with products. By illustrating contextually rich narratives, storyboards can be used to build empathy for end users, reframe multichannel touch points, and consider design alternatives in the early phases of the design process.

Experts approach storyboards by harnessing five design practices common to visual storytelling.<sup>1</sup>

1. *Degree of artistic or photo-realistic detail:* A misconception is that storyboards should be left to designers with artistic capabilities. However, simple, abstract drawings of stick figures are oftentimes more effective at focusing the attention of the storyboard audience on a specific detail or message.<sup>2</sup> Refine drawings so that they show enough context, but not so much that details begin to distract from the purpose that the storyboard is designed to communicate.
2. *Text-based narration or explanations:* Use text to supplement the visuals in a storyboard when it would otherwise take too much effort to illustrate a concept or idea. Text is usually added to storyboards as word or thought balloons, captions, or background signs.
3. *Emphasis on people, products, or both:* To elicit an emotional impact from the storyboard audience, illustrate characters in emotionally charged situations. If on the other hand the goal is to elicit technical or evaluative feedback regarding the concept, leaving characters out of the panels can focus attention on the details of the design.
4. *The right number of storyboard panels:* Storyboarding experts tend to use between three to six panels to communicate an idea. Each storyboard should be focused on one salient concept or idea; if more than one concept needs to be communicated, consider creating multiple storyboards that each focus on a different factor.
5. *Depicting the passage of time:* Time as a design element should be used to show large time lapses in a scene. Clocks, calendars, zoom-ins of wristwatches, or the movement of the sun in the background can be added to explicitly show the passage of time.

Construct the story and the storyboard panels depending on what information will resonate with the target audience. For instance, when designing for stakeholders, illustrate the range of potential design opportunities. For developers and programmers, illustrate a scene and a context in which the product or form factor will be most likely used. For visual designers, draw close-up details of the interface, and for users, show empathic scenes to determine if the situation is realistic and meaningful.<sup>3</sup>

1. Truong, Khai N., Gillian R. Hayes, and Gregory D. Abowd. "Storyboarding: An Empirical Determination of Best Practices and Effective Guidelines." *Proceedings of DIS 2006*, 2006.

2. McCloud, Scott. *Understanding Comics: The Invisible Art*. New York: Harper Paperbacks, 1994.

3. Vertelney, Laurie, and Gayle Curtis. "Storyboards and Sketch Prototypes for Rapid Interface Visualization." *CHI Tutorial*, ACM Press, 1990.

Further Reading

Cooper, Alan, Robert Reimann, and David Cronin. *About Face 3: The Essentials of Interaction Design*. Indianapolis, IN: Wiley & Sons, 2007.

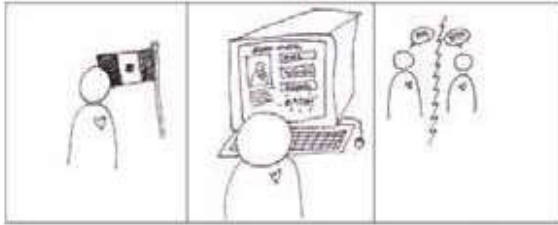
Goodwin, Kim. *Designing for the Digital Age: How to Create Human-Centered Products and Services*. Indianapolis, IN: Wiley & Sons, 2009.

Landay, James A., and Brad A. Myers. "Sketching Storyboards to Illustrate Interface Behavior." *Conference Companion of ACM Conference on Human Factors in Computing Systems*, 1996.

Storyboards have been used by film and television preproduction for many decades, and their best practices are well understood and documented. See *The Art of the Storyboard, Second Edition: A Filmmaker's Introduction* by John Hart, Oxford: Focal Press, 2007.

Behavioral Attitudinal	Quantitative Qualitative	Innovative Adapted Traditional	Exploratory Generative Evaluative	Participatory Observational Self reporting Expert review Design process
170	Universal Methods of Design			

Do you ever wish you had someone of a similar culture/background to talk with about type 2 diabetes?

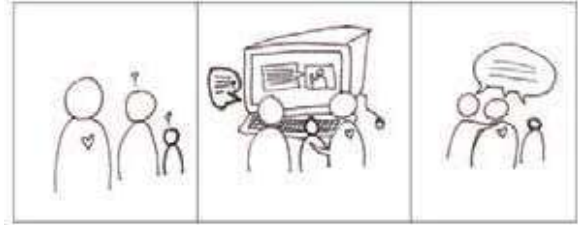


Person is diagnosed with type 2 diabetes. Doctor leaves, and nurse comes in to set up the person with a mentor.

He or she inputs criteria for a mentor, and system finds a match with another person with type 2 diabetes.

The mentor answers the person's questions as the person learns how to manage his or her diabetes.

Do you ever wish you had someone to help your spouse/family to understand what you are dealing with and how best to support you?

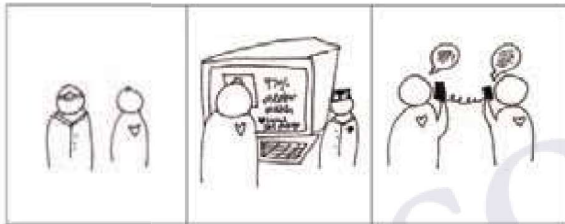


Family doesn't know how they can help their loved one with their type 2 diabetes.

Trained caregiver answers the family's questions and provides helpful tips to be supportive.

Family is active in providing care for their loved one.

Do you ever wish, right after diagnosis, you had someone else in a similar situation to walk you through the learning process?

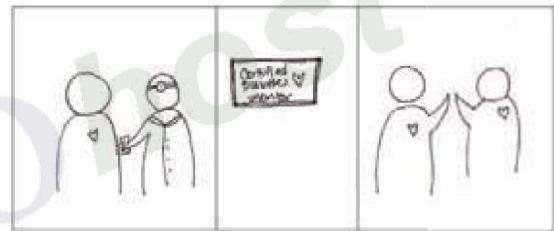


Person wants to talk with someone of the same cultural background with type 2 diabetes.

Person is matched with another diabetic person of the same background.

Both people share their experience and swap favorite traditional recipes.

Do you ever wish you could be trained to be a mentor for other newly diagnosed diabetics?



Person is asked if he or she wants to become a mentor to other people with type 2 diabetes.

He or she completes mentor training.

He or she begins mentoring other people with type 2 diabetes.

Storyboards shape social, environmental, and temporal factors into a compelling narrative and help design teams to more carefully consider how products and services could improve people's lives. The storyboards shown here explore the idea of a peer mentoring service designed to help people who have been recently diagnosed with type 2 diabetes.

*Courtesy of Lauren Chapman*