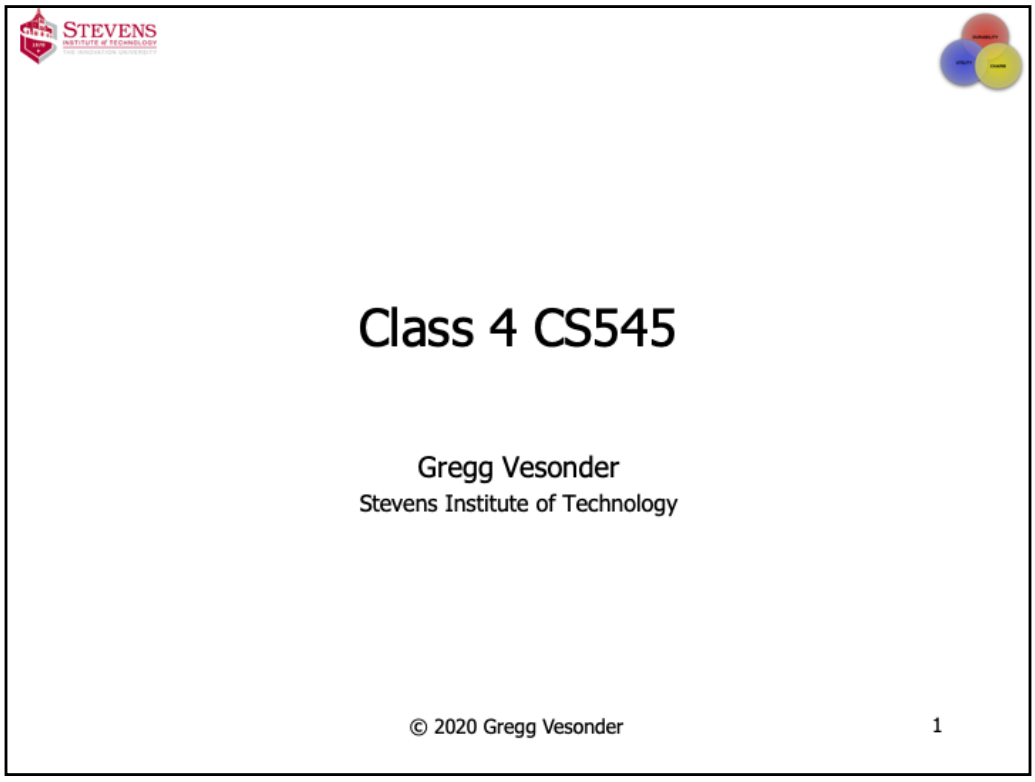
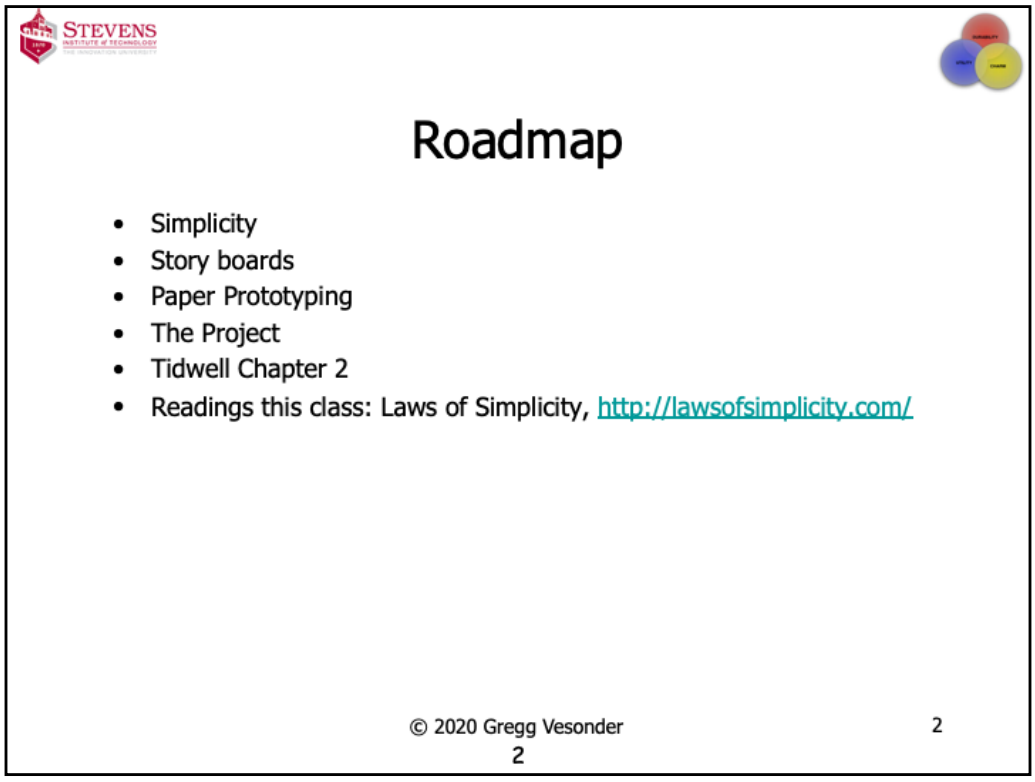
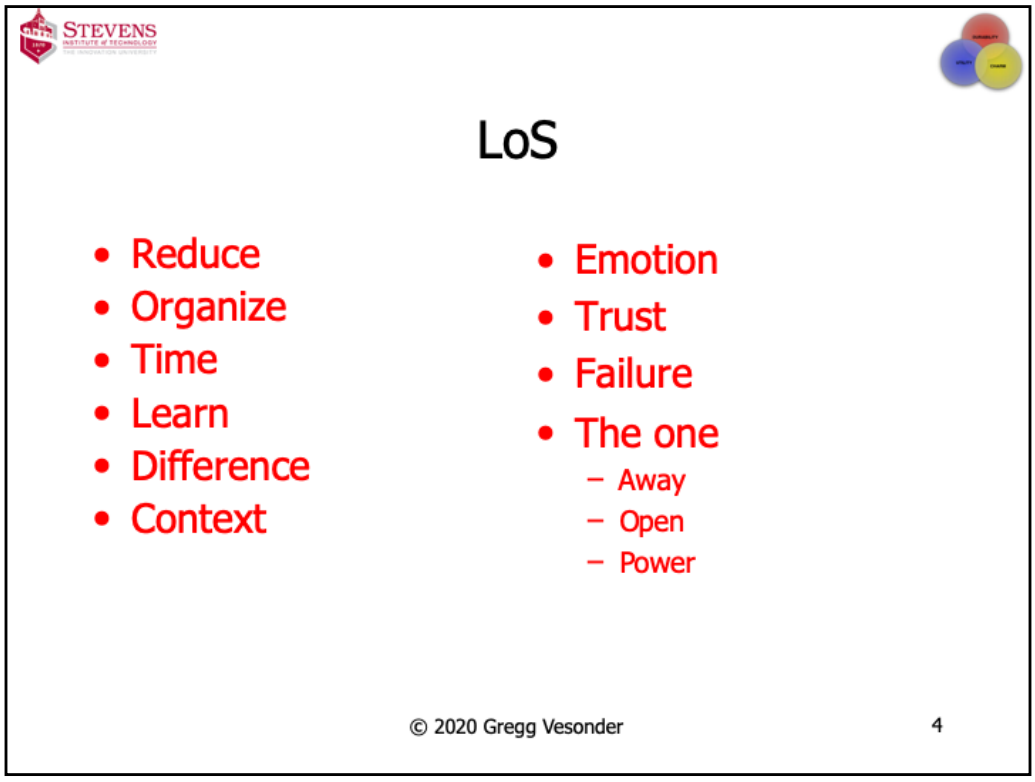


Welcome to class 4! We spend a bit of time on the laws of simplicity since I think that simplicity is an essential aspect of any user experience. I also would like to have a table next week of all the class projects. It really is essential to start engaging in your project.

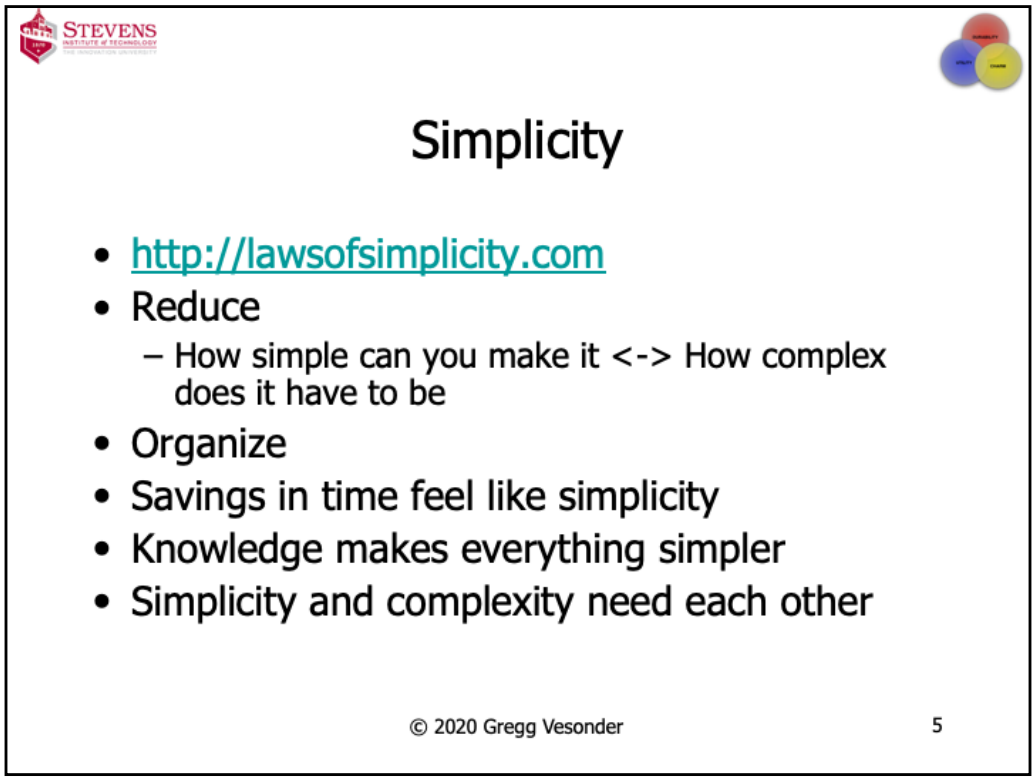


Okay, this week we explore a simple technique, paper prototyping, talk about the laws of simplicity that should permeate all of our design, discuss a bit of statistics and move on to working on our projects.

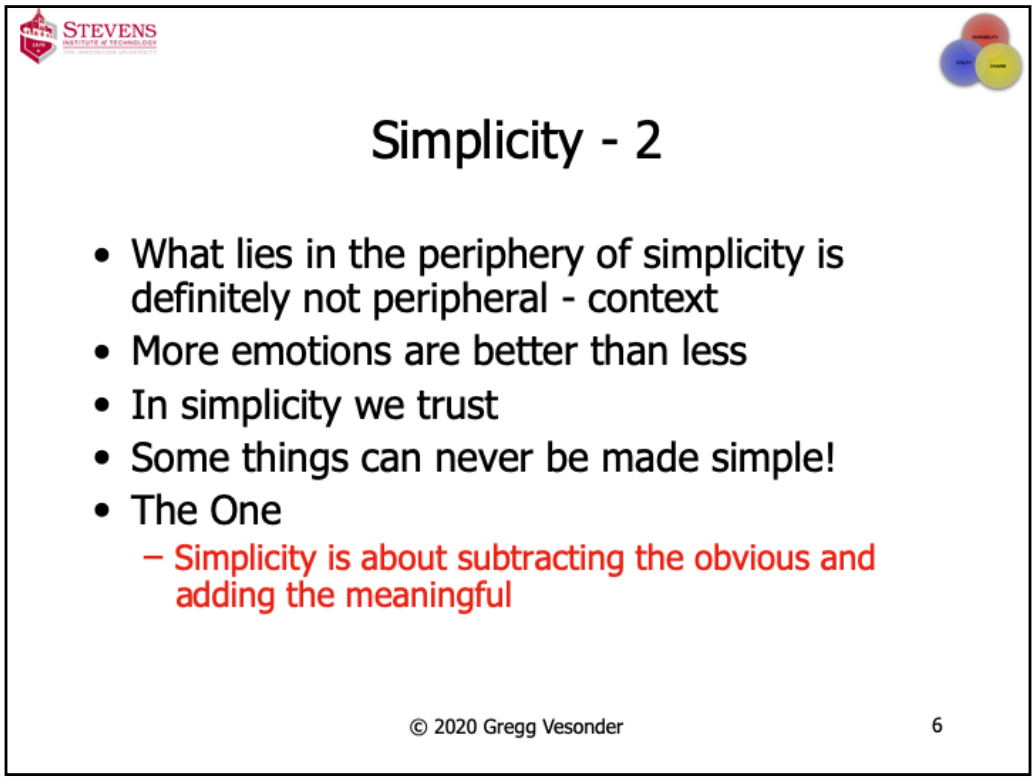
I have alluded to the Amazon Echo as the device that changed my opinion of speech interfacesit. It is one bit of tech we use constantly in our home. If you have a chance experiment with it, please do so. My next adventure is to attach Internet of things devices to it. I will keep you posted!



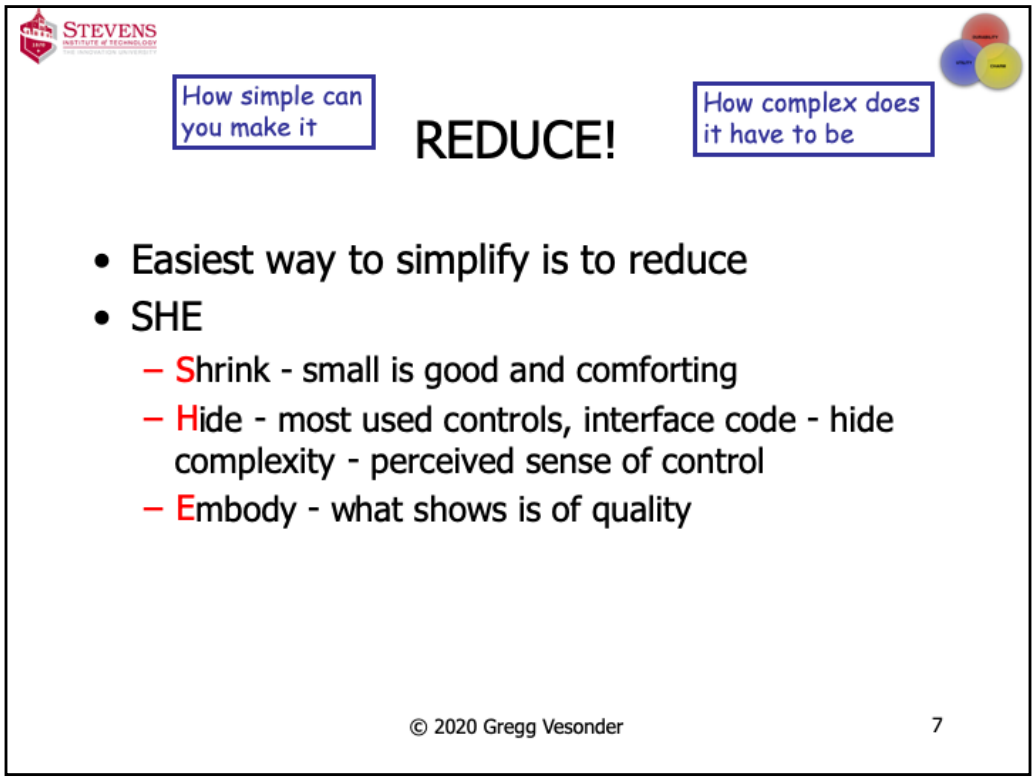
John Maeda wrote a terrific book on the laws of simplicity. This is a list of the 10 laws (he cheated a bit on the last one ☺). The next two slides lead to a punch line.



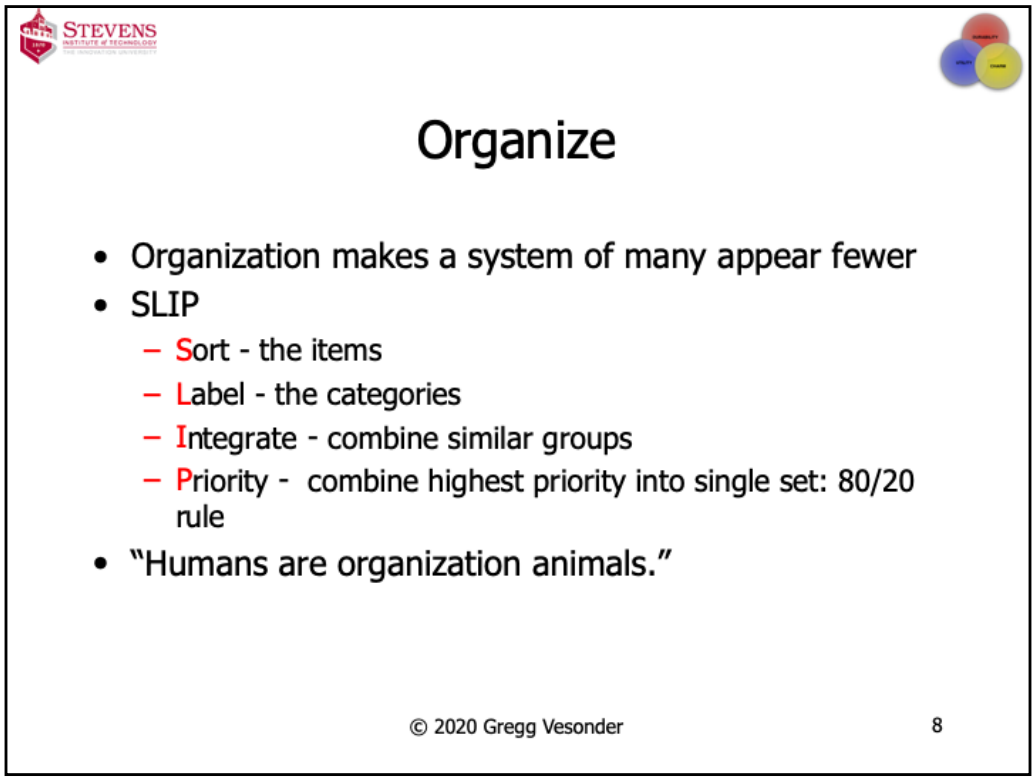
Browse his web site for further information. A brief expansion that leads to …



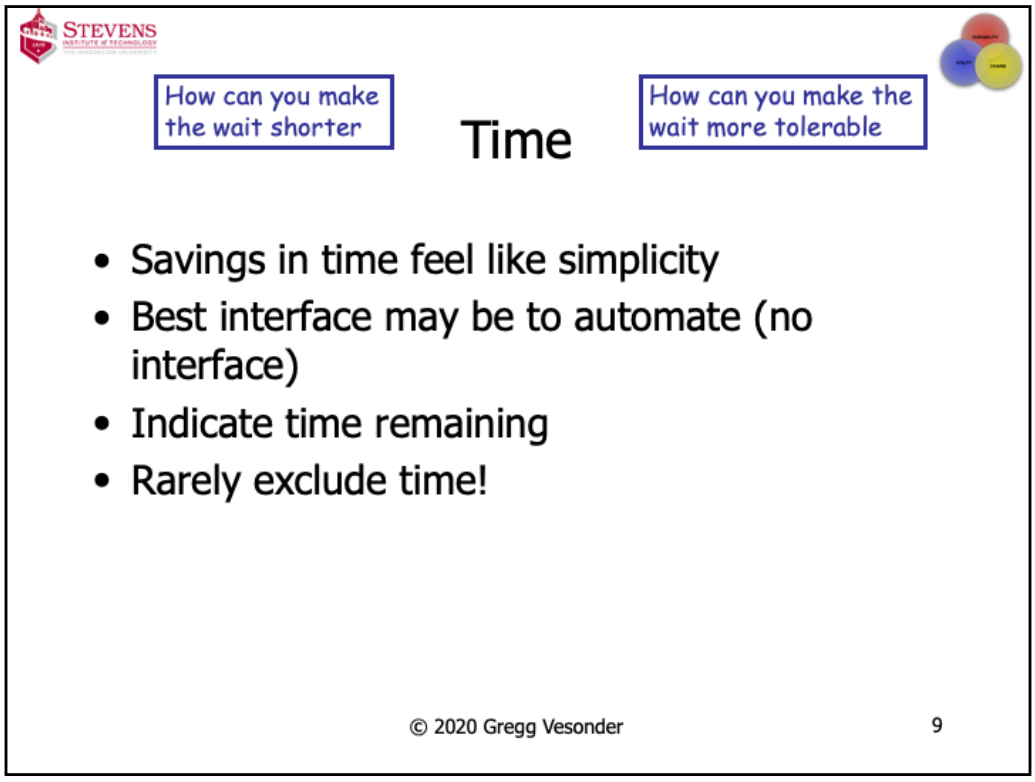
Simplicity is about subtracting the obvious and adding the meaningful. Now a bit more detail



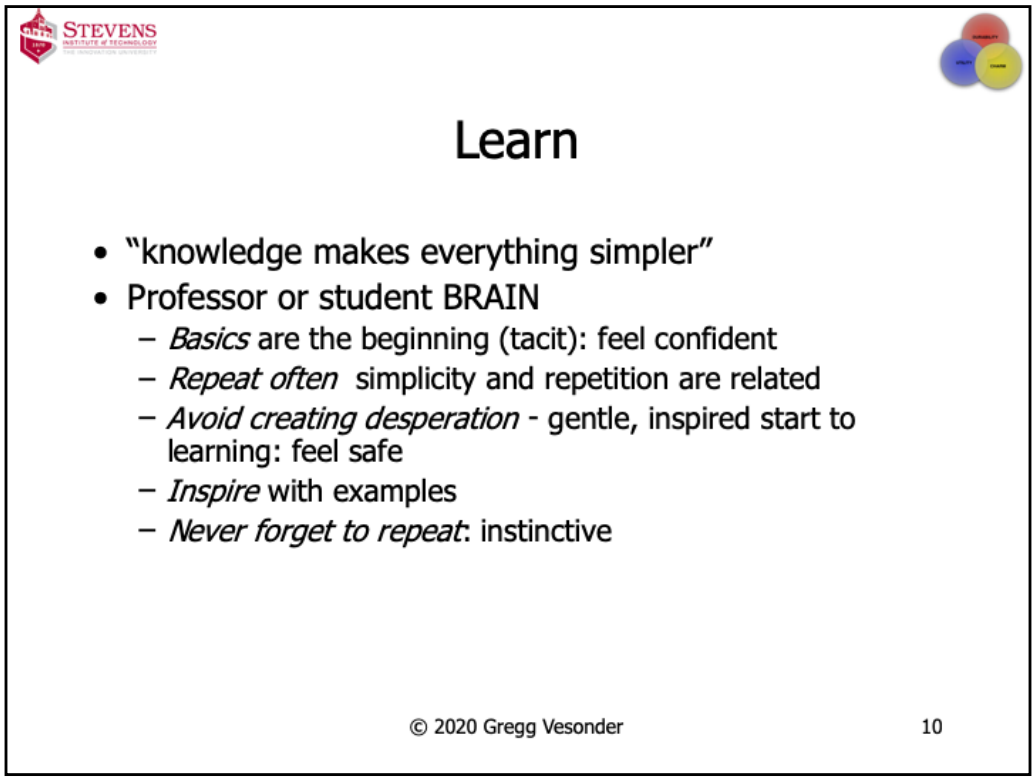
The first principle, reduce, using the principle of SHE



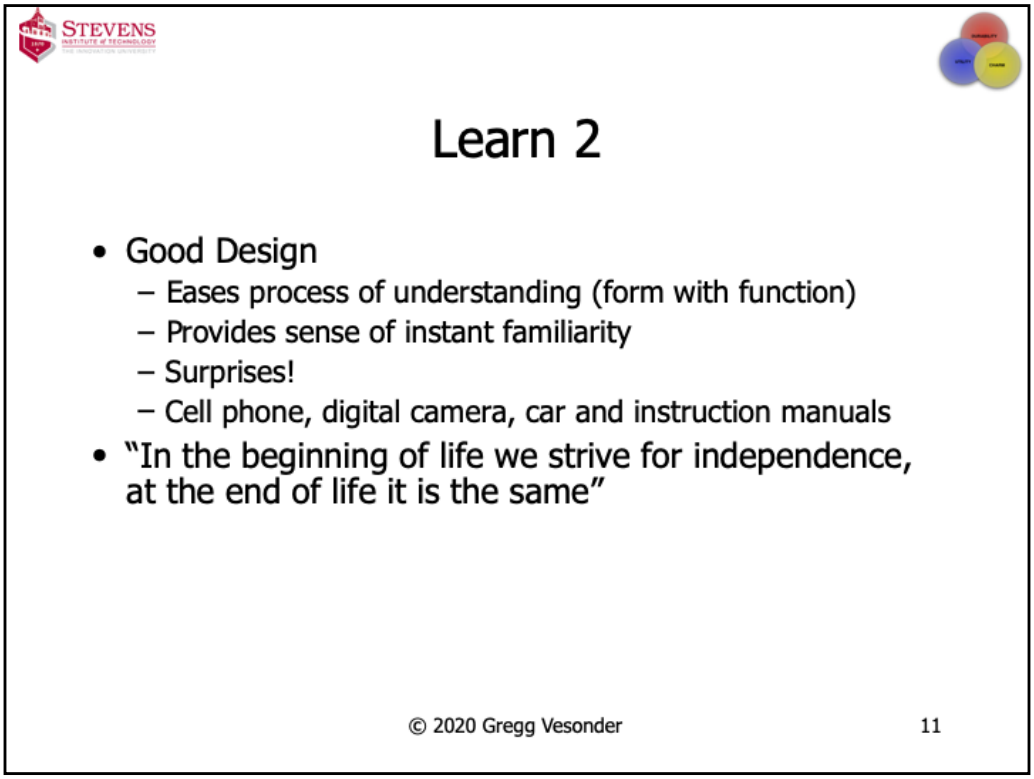
SLIP really is an excellent strategy for dealing with card sorting. Card sorting is a device to determine how folks organize things – for example computer commands such as open, copy, delete, move, I highly recommend using card sorting to get a handle on how users organize the commands/task(s) in their minds. SLIP captures the methodology in a succinct acronym.



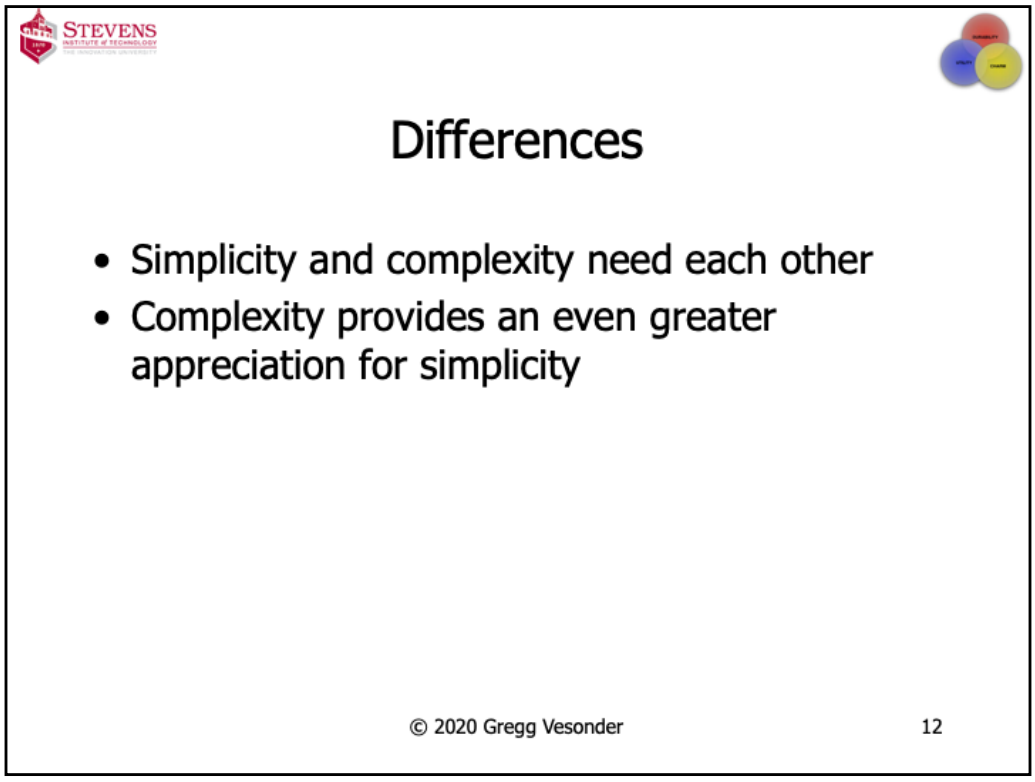
Note if you can't reduce time, you can possibly make it more enjoyable. Apple has its employees chat with you while you are on line at an Apple store.



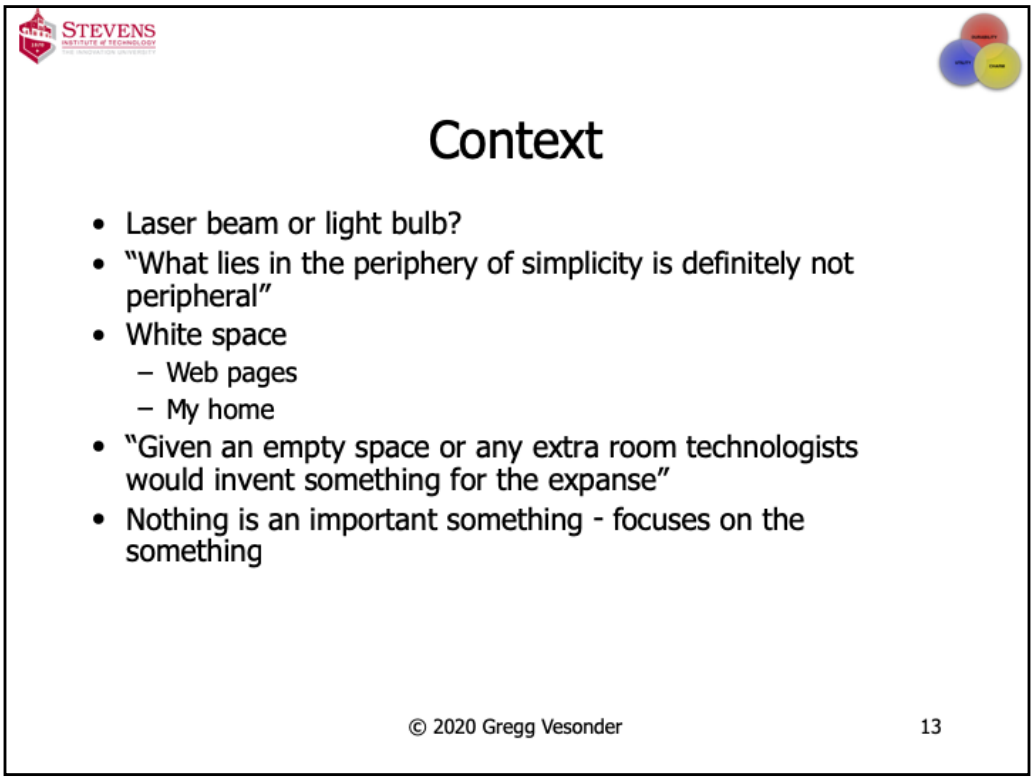
Did I mention that you should repeat things. Seriously, knowlng how things work does make everything more straightforward.



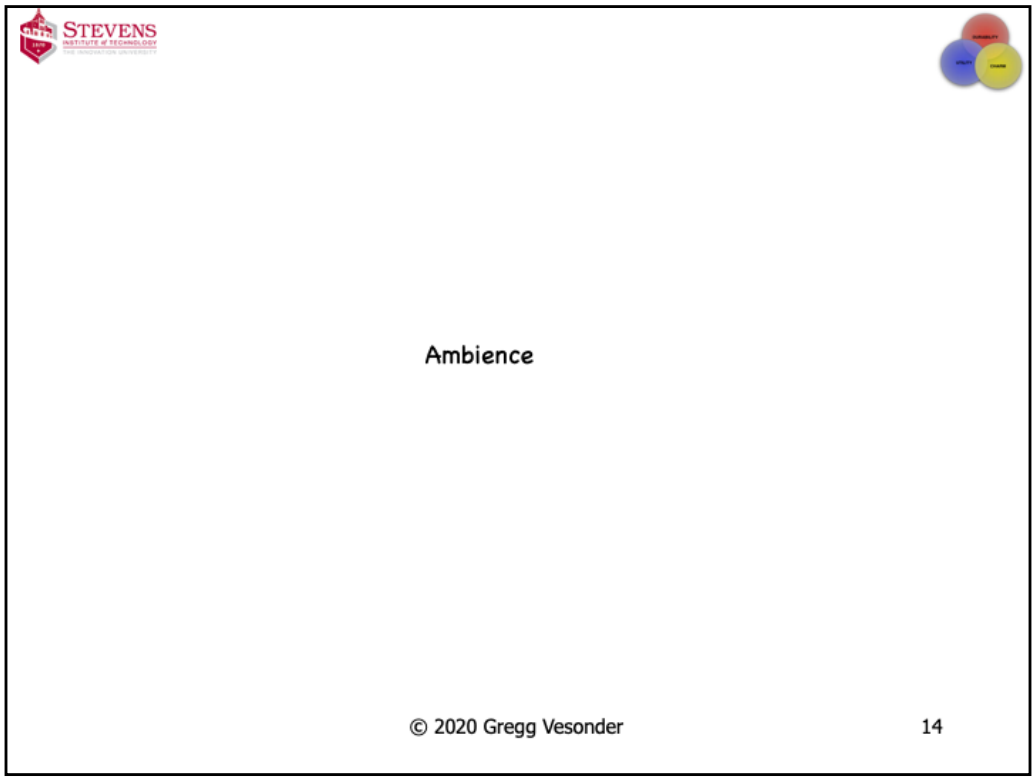
Did I mention to repeat things! ☺ Design should make it easier to understand how to use something, the design naturally leads to the use. Maeda, also discusses a bit of philosophy on our own life cycle. Reminds me of the riddle of the sphinx, "Which creature in the morning goes on four legs, at mid-day on two, and in the evening upon three, and the more legs it has, the weaker it be?" – Man – crawls as a baby, walks as a man, uses a cane when old. From wikipedia



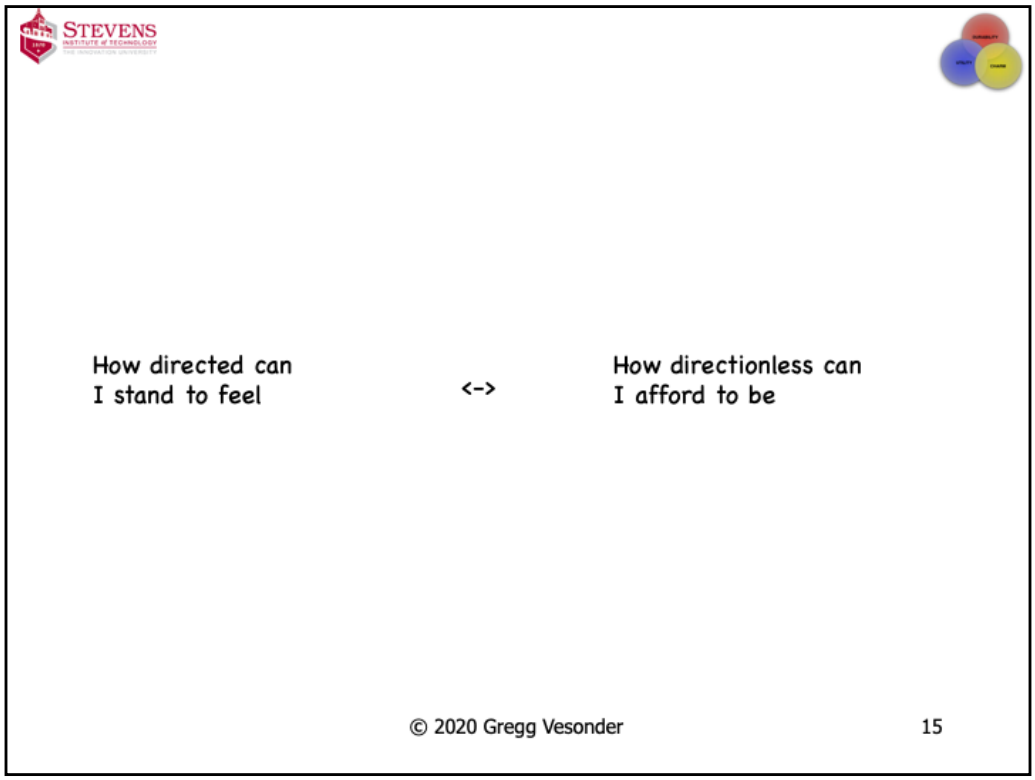
Often one needs a contrast for appreciation. Silence seems a lot more special after a deluge of noise. There is a similar relationship between complexity and simplicity.



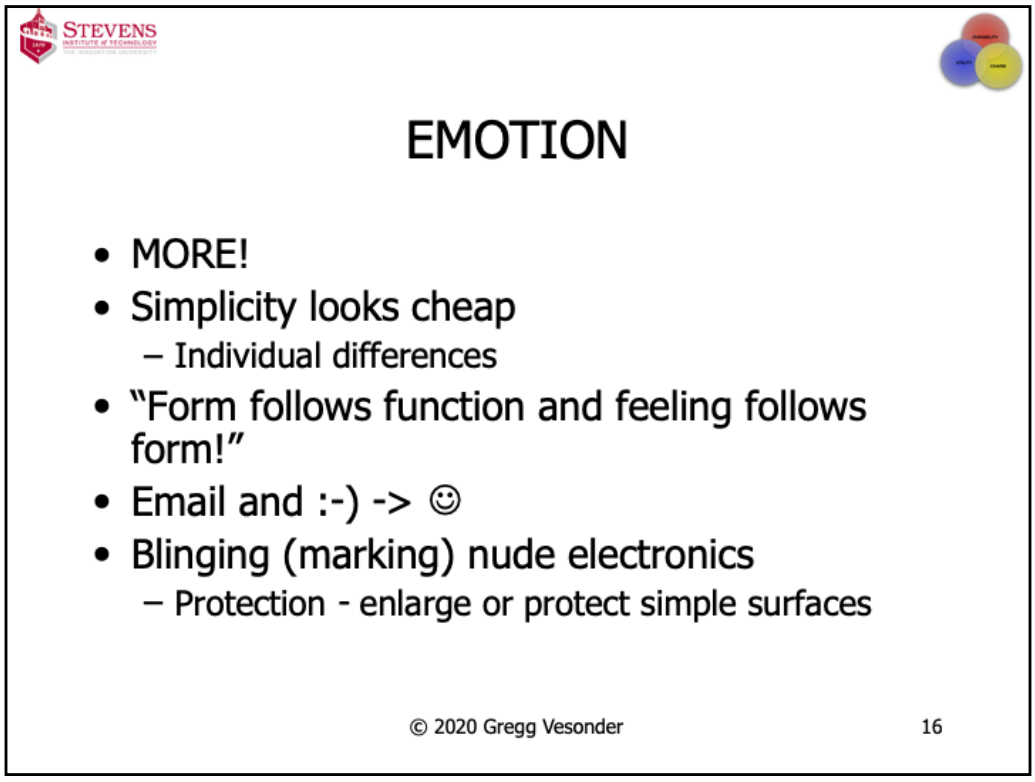
Remember the gestalt perceptual test of the lady vs. the vase. There is something very design worthy about differentiating figure and ground. Often we as technologists want to use every available bit of real estate, yet there is merit and usability gains of saving white space to focus on the something.



Case in point



Depends on the situation – if you are flying a plane, correct direction is good, however if you are exploring data you may want to encourage browsing.



Emotion is not bad, it is part of the charm – depending on the user experience, one may want to evoke emotions, awe, discomfort, comfort, safety, security, frivolity, …

A few examples of blinging technolgy – folks have been doing it to cars for decades

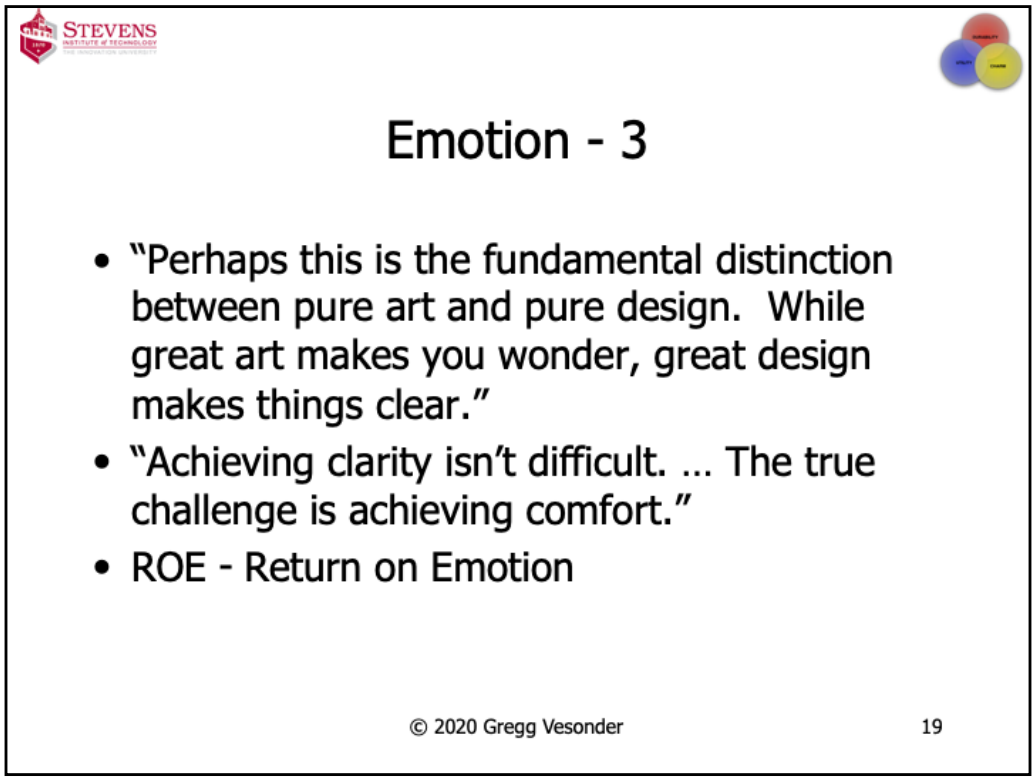
EMOTION 2

- Animism, anthropomorphism - naming of cars, computers (Shintoism & Miyazaki)

imdb.com

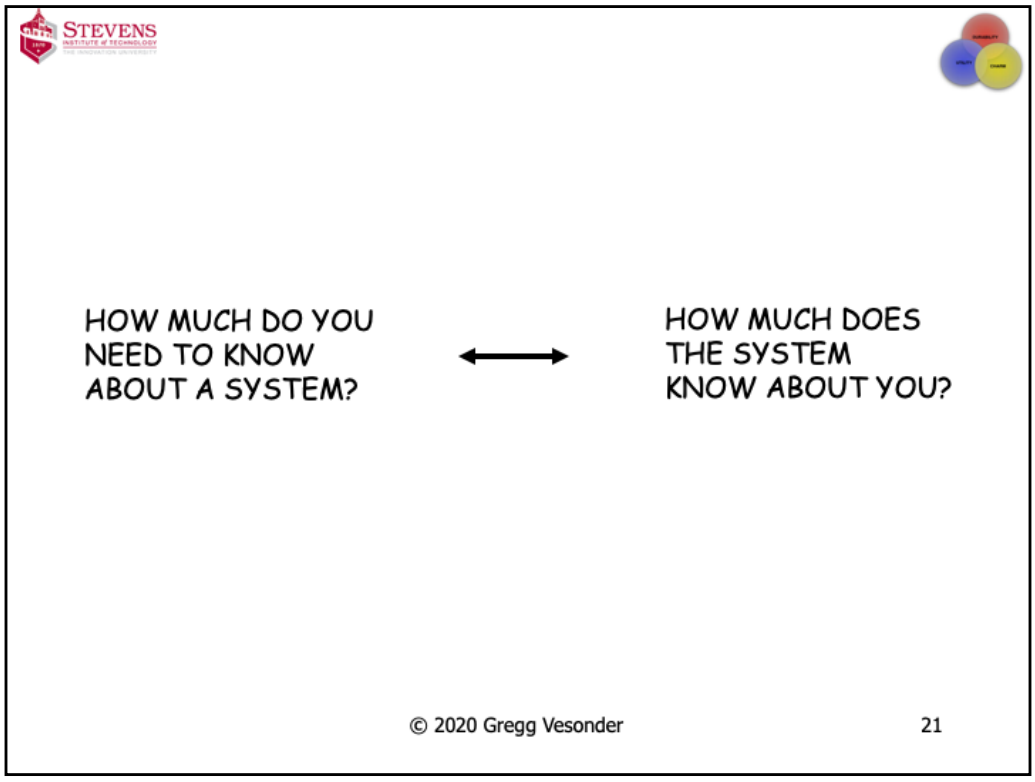
http://movies.lovetoknow.com/wiki/Fantasia

There was once a concerted effort to avoid anthropomorphizing computation, but as reported in the MEDIA EQUATION, people react similarly to computers and people in social situations. As user experience designers we should be aware of this and design accordingly. If you have never watched any of Miyazaki's epic cartoons, you are in for a treat. SPIRITED AWAY is one of my favorites.

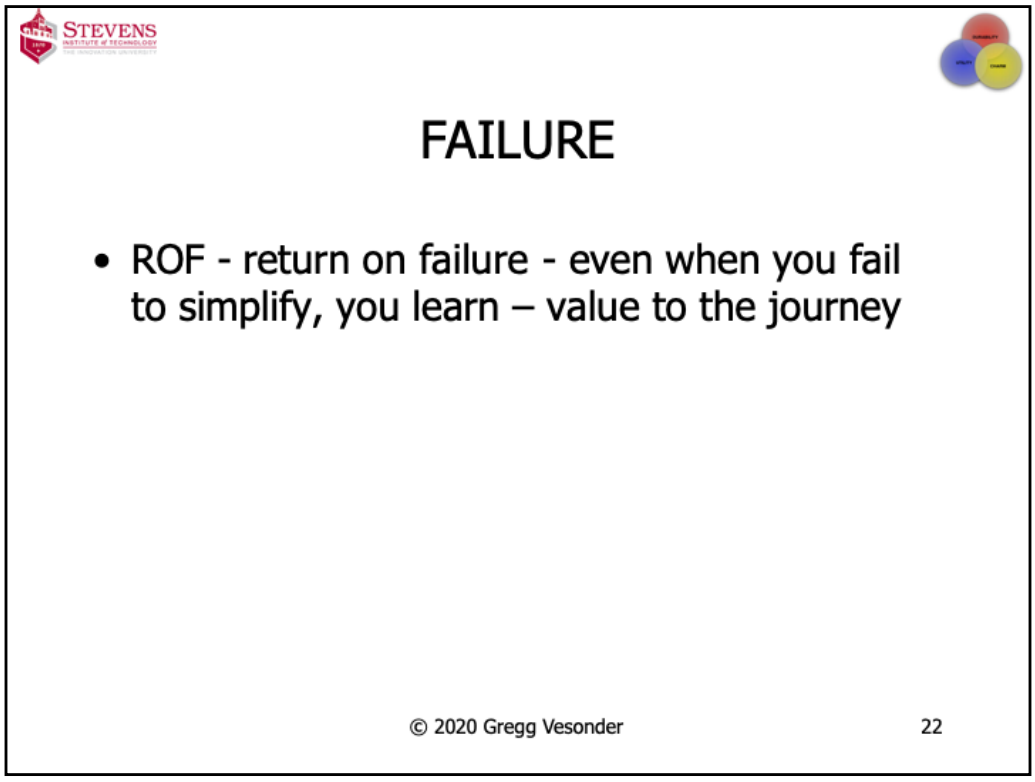


Rather self explanatory – yet it should make you think a bit more about the depths of experience and how evocative design can be. Note that this is all part of the user experience, how the user reacts and how we want to shape that reaction, at times.

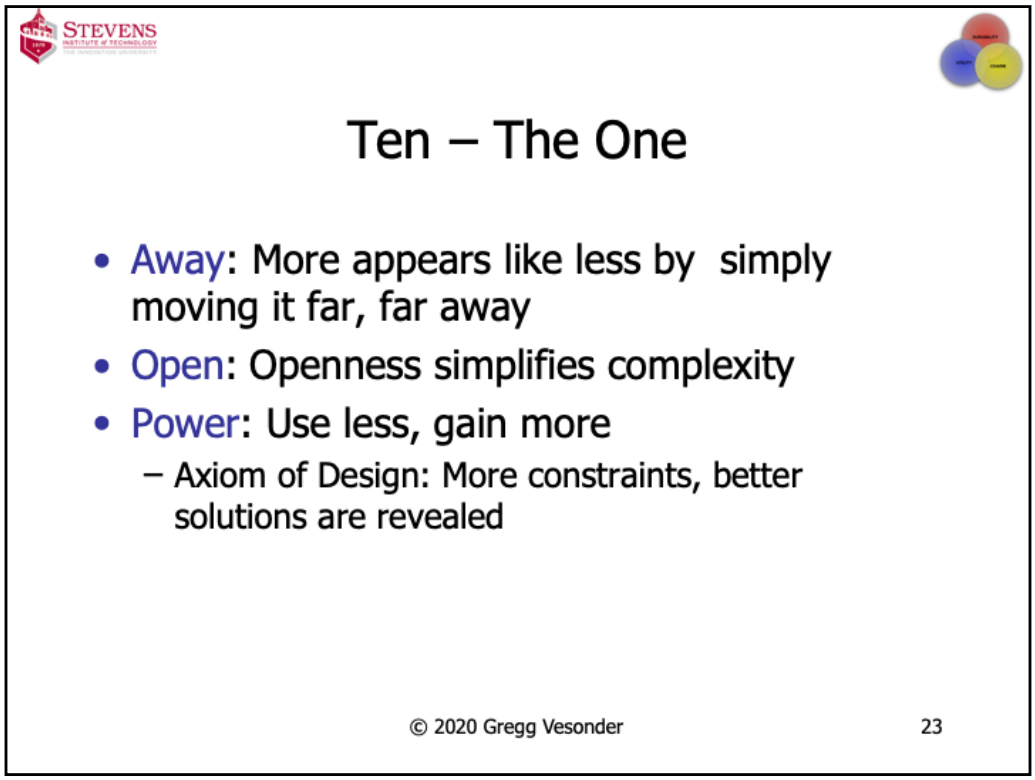
TRUST is engendered through experience. If something is automated and it serves us well we will feel comfortable, It is of further comfort to make such actions reversible.



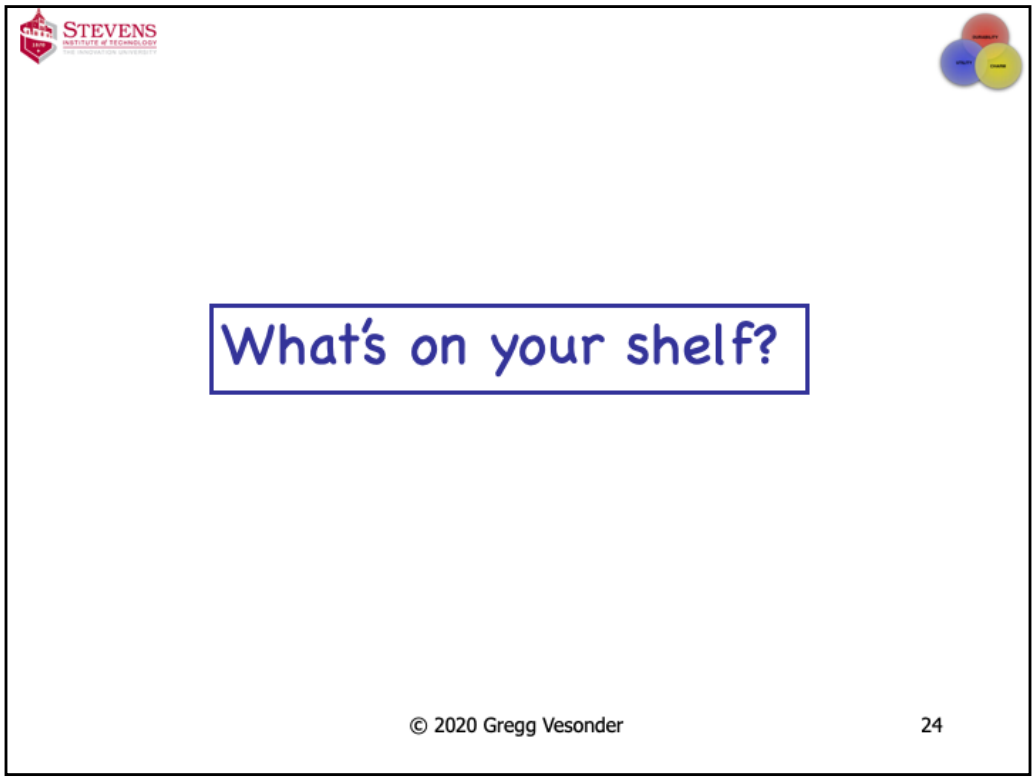
For those of you that have TiVo, or even shop at amazon, this clearly has some implication. Part of modern technology attempts to tune the experience to your interests and this can be enhanced by knowing a bit about the system. Each of these laws would make fantastic discussion points.



Focusing on these issues improves the experience in other ways too, even if you do not simplify that dramatically. It is yet another context in which you interact with the user to try to improve the experience.

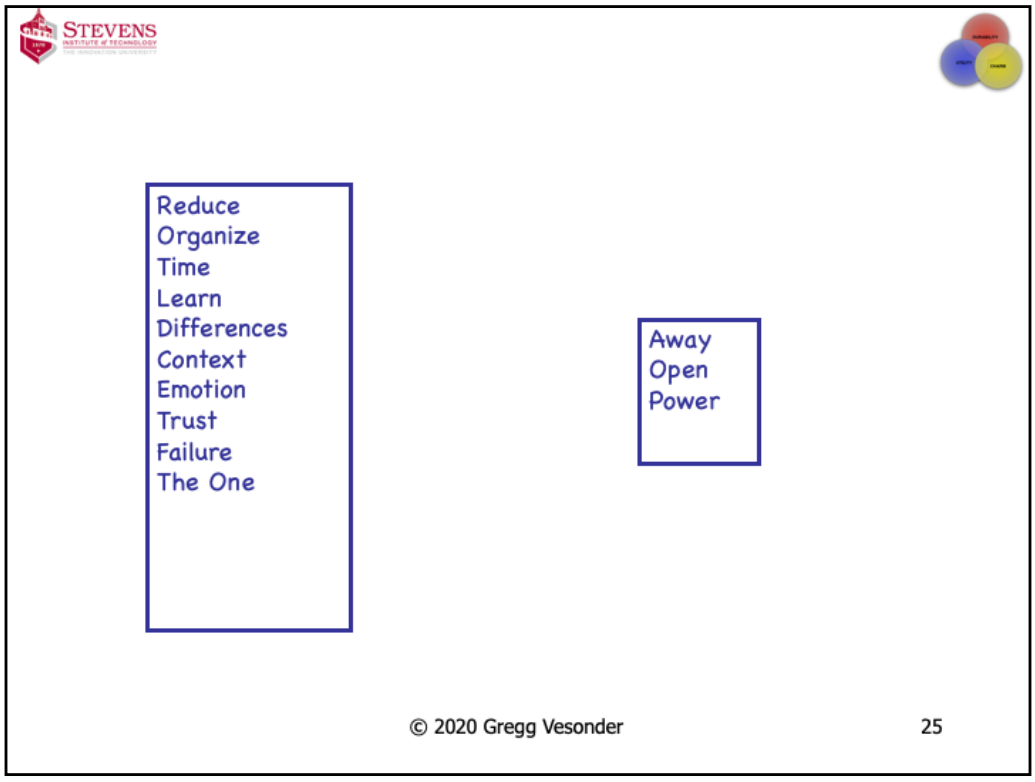


One way of invoking “away” is to keep the minimal interface close to the user and have the rest of the computer and device separate. At the very least the situation does not appear as intimidating. One current example of “open” is open source software, which provides us with as much insight about a system as we need. Sometimes simplicity is being minimal and sometimes simplicity requires understanding to dissolve complex myths and inaccurate hypotheses. The designer must make these choices in conjunction with the user. Finally “power” has many contexts and many twists. Maeda, relates a game of laptop chicken, where he left his charger at home and rationed his access to the machine. By using it less he actually interacted more with the folks around him and his experience was enhanced. Using less energy will be a common design theme in the years ahead. Constraints in all design be it software or usability enhance the solution.

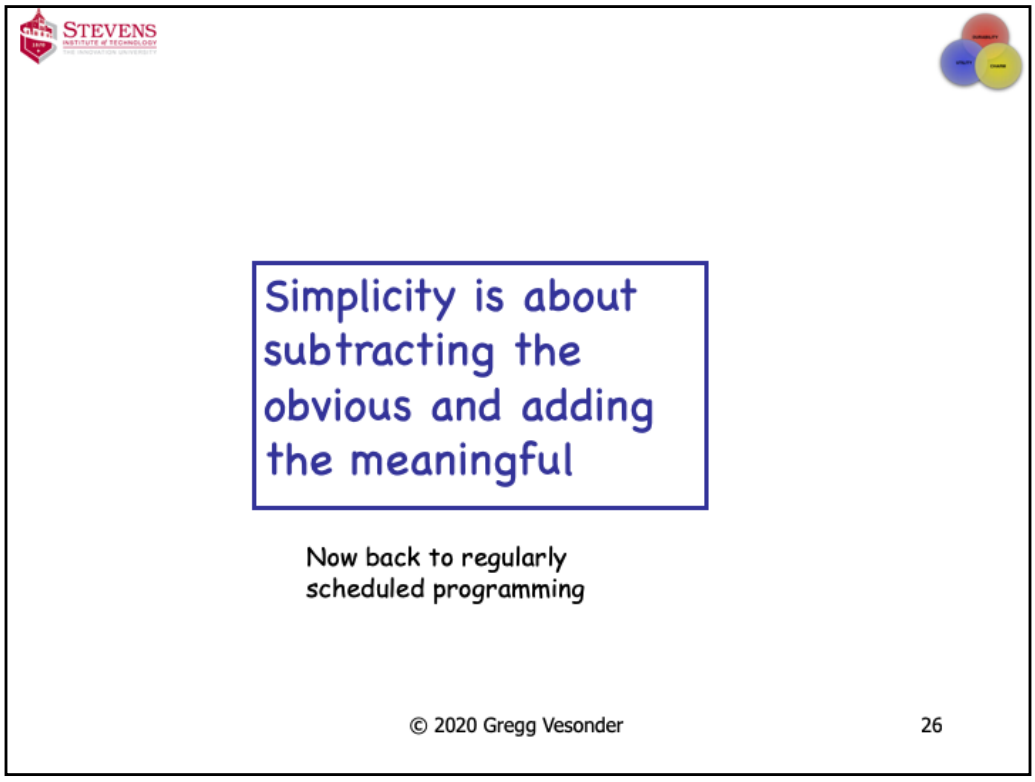


The final discussion of simplicity is a discussion of what each of us actually needs. He relates a story concerning a homeless person who died and one of his grad students who had befriended him had the task of clearing his only possessions on his shelf. Through all the man's difficulties, he managed to keep a few things that were important to him. It is worth reflecting on what is essential.

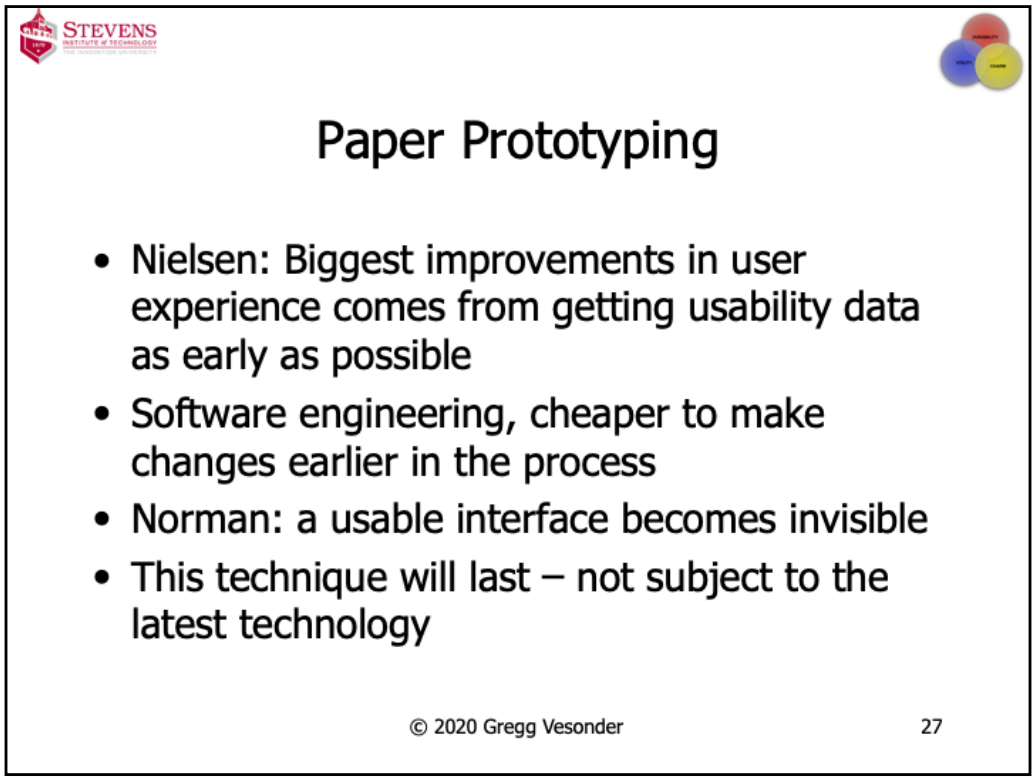
Technology can both be an exhilarating enabler and exasperating disabler.



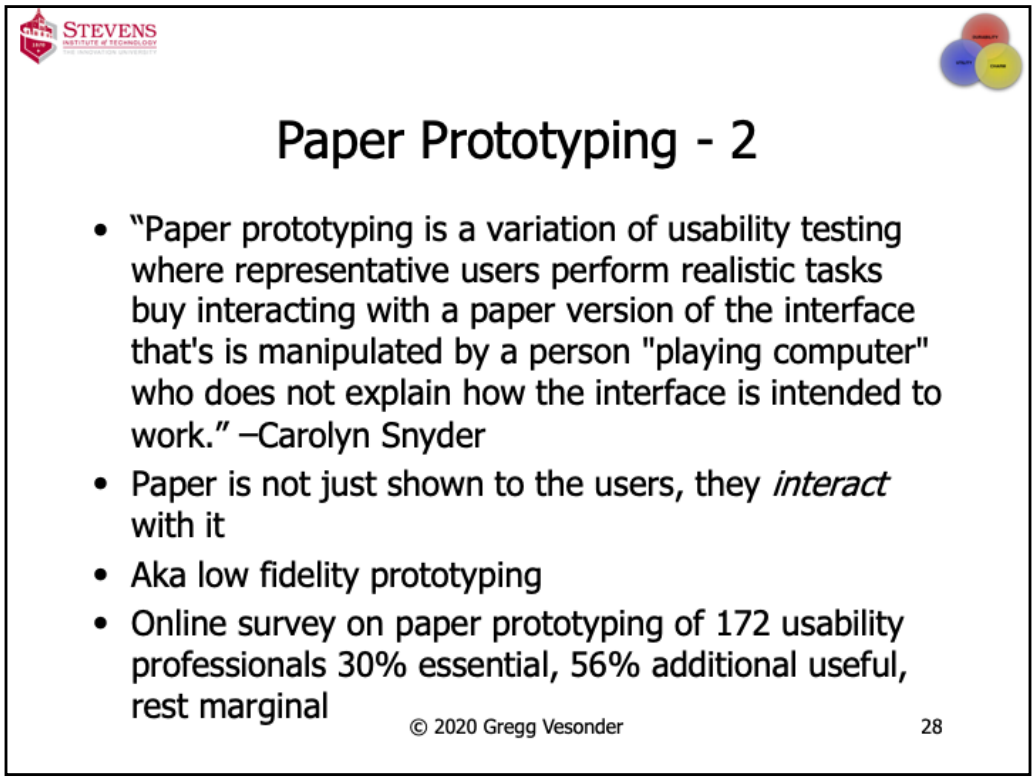
So this is what we covered



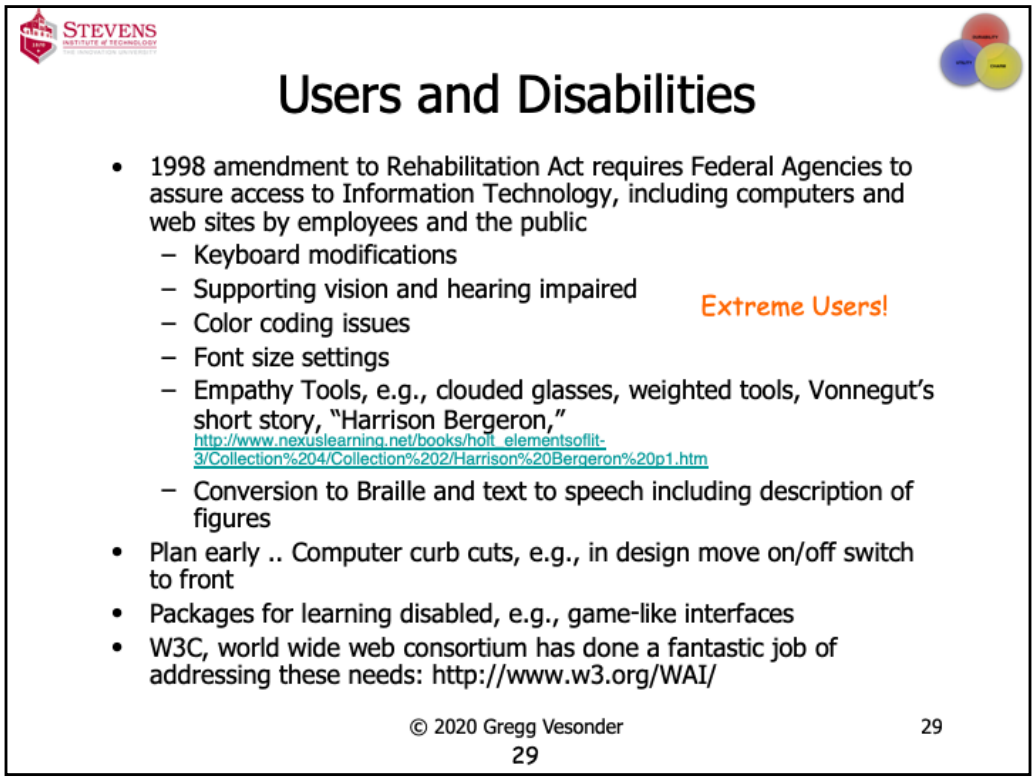
And this is where we began.



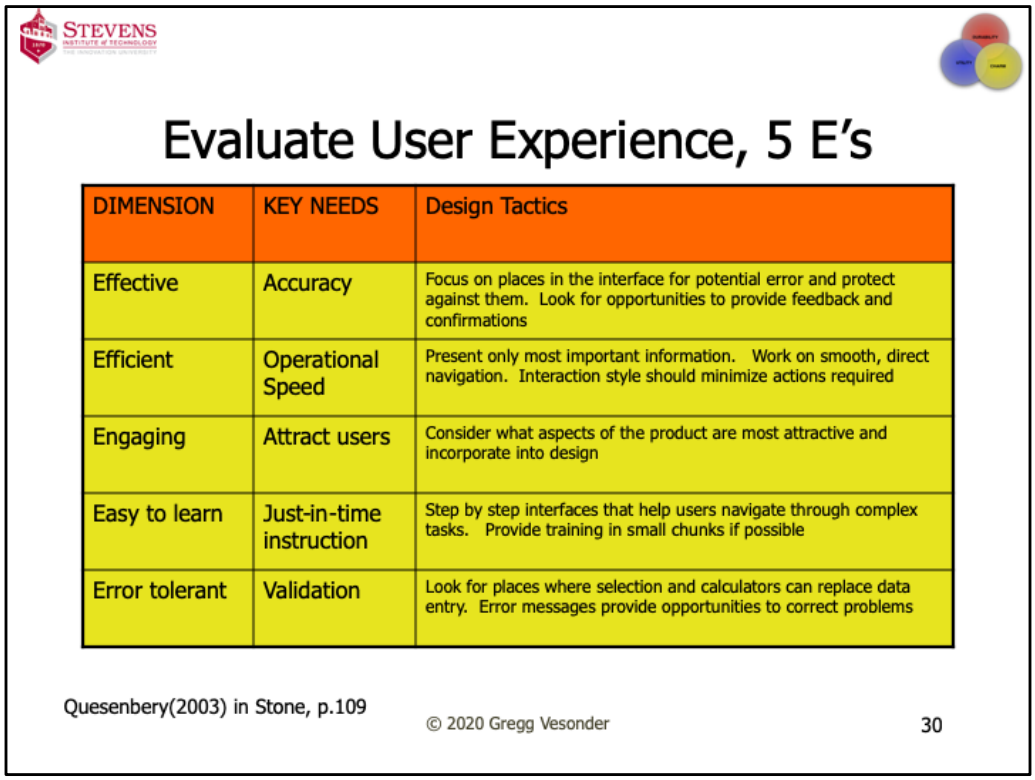
So once you decide on your project, you want to understand how the user reacts to the experience. The earlier you get the information the more likely your design will reflect the users needs since you understood them early in the design process. Paper prototyping is a useful technique to get this information in an efficient manner.



This is just more motivation to use paper prototyping. How do you use it? You simply draw stages in the proposed user experience on separate sheets of paper and then ask the user to "press" buttons on the paper, move sliders and the like. As the user selects options, you as the computer provide the next sheet according to their input. You may have to draw a sheet on the fly if a user chooses an unexpected next state! Each project should do a paper prototype before they attempt their first balsamiq or equivalent prototype.



I feel strongly about designing for users with disabilities. We so often forget about them. When I was in charge of development for a speech recognition and text to speech project I was struck by the needs of the deaf and blind communities. They were dismayed that so little consideration was given to their needs. Besides the obvious accessibility issues, considering their needs is great economically. As this generation ages, they will have difficulty hearing and seeing yet they have grown up as information technology users. This growing segment constitutes a valuable and lucrative segment of our population. So if you are not enamored by my humanitarian pleas, understand that it should also appeal to your economic interests! The short story Harrison Bergeron by Vonnegut depicts a society in which every one with special skills is handicapped so that they are consistent with the government's prescribed norm. Worth the read. They are also extreme users, often designing for them will result in benefits to the rest of the population, e.g., relying more on speech recognition and text to speech results in hands free operations that work well in the car.



These are the E's. Recall you have to choose one to optimize. They are fairly obvious and some cannot be co-optimized. There is an old saying in software engineering, projects can be fast, cheap or good – choose 2 of the 3. You can have it fast and good but not cheap or cheap and fast but not good, well you get the idea. For your project I would like you to select one to improve and part of the selection process should be how you can measure the improvement. Not always as simple as you might think.

References

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- Holtzblatt K., Wendell, J. and Wood, S. Rapid contextual design, Morgan Kaufmann, 2005, ISBN: 0-12-354051-8.
- Maeda, J. The laws of simplicity, MIT Press, 2006.