Applying Design Thinking for Your Website
Facilitators

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Agenda

- Introduction to Design Thinking
  - Magento 2.0 Launch
  - Behind the Scenes With Magento UX
- Design Thinking Process
  - Empathize
  - Define
  - Ideate
  - Prototype
  - Test
- Q&A
Magento 2.0 Launch
17 NOV 2015

Highlights:
- Open, Flexible Architecture
- Enterprise-grade Scalability and Performance
- Secure Payments
- Easier Maintenance and Upgrades
- Enhanced Business Agility and Productivity
Magento 1.14
Product Catalog

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Magento 2.0
Product Catalog
Reviews of Magento 2

Kalen Jordan
@kalenjordan

The Magento 2 admin is fast! It's so...so...beautiful.
A process for solving problems and discovering new opportunities with the customer at the center. Similar methods are taught at Stanford, IDEO, Google, IBM, eBay and Magento.
User Centered Design

Customer Driven Innovation

Human Centered Design

User Experience Design

Design Thinking
A Design Story From Magento 2.1
A New Feature for Magento 2.1: Staging

Staging will allow merchants to easily schedule changes to any of their site’s content.
Over one year ago the design team started work on this new feature...
After several months of research and design we believed we had a good first draft.

Early design wireframe
After building a prototype of our design we tested it with 10 merchants…
… and it did not go well.

“This is not making sense to me... This is not intuitive”
Participant 7
Our test scores told the same story.

We decided to start over…
Several months later we tested an improved design with much better results.
Participants feedback also improved dramatically.

This is much easier this time!

No problems!

I like it very much!

“How soon before can I start using this every day?”

Participant 3
It was the same team of designers facing the same problems. We had to solve for the same complexities.

So… what changed from design 1 to design 2?
After some investigation we realized our initial investigations had not included enough different types of Magento users.

What do you think about scheduling changes to your site content?

<?#@ $nameEr
($_SERVER['REQUEST_METHOD'] == "POST") # {

That would be great! Here is how it might help with promotions...

Technical

Non-Technical
The Staging design worked well for technical users. Non-technical users struggled.
We started over. By designing for the non-technical group first we achieved a design that worked well for all users.

Is it easy?

✔

Technical

Non-Technical

✓
Product Page for Magento 2.1

Scheduled Changes (x changes scheduled)
But there was more…

Along the way we discovered new ideas. We invented ways that Magento could help users even more.
Staging Dashboard for Magento 2.1
What did we accomplish?

- We avoided an expensive mistake
- We made Staging easier to use
- We discovered new opportunities
Introduction to Design Thinking

Empathize
Define
Ideate
Prototype
Test
What is Design Thinking?

Design Thinking is a repeatable method for creating great ideas and products. It is based on a rigorous understanding of your customers and their needs.

Source: IDEO
Why Design Thinking?

1. **Customer first.** It is powered by the people who matter most.
2. **Saves time.** Quickly transforms customer input into solutions.
3. **Saves money.** Offers a low-cost way to stretch budgets.
Five Phases of Design Thinking

- Empathize
- Define
- Ideate
- Prototype
- Test
Design Thinking with Agile

Empathize
Define
Ideate
Build
Test

iterative refining
Divergent and Convergent Thinking
Divergent and Convergent Thinking
Empathize

- Empathize
- Define
- Ideate
- Prototype
- Test
Phase 1: Empathize

You must relate to more than one perspective or mindset at a single time, even when they’re opposed. Your goal is not to emotionally invest, but to objectively uncover and understand as many viewpoints as you can.
Empathize

Creating meaningful solutions begins with gaining a deep understanding of people’s needs.
Empathize

This phase is about listening, observing, and being open to the unexpected. With the right preparation, empathizing with the customer will inspire you with new experiences and perspectives…

*IDEO and +Acumen, Human-Centered Design Workshop*
Have a beginner’s mind.

Our expertise and experience can quickly restrict us towards poor preconceived solutions. Seek to be surprised as you learn, observe and listen without judgment.
Get out of the building

Engaging your audience in their context, rather than bring them into yours, is far more valuable because you will be able to capture actions, emotions and values in a natural, real environment.
Engage with extreme users

Discovering the behaviors of extreme users will amplify the needs and desires of your audience.
Explore new areas of inspiration

Similar problems solved in different contexts can offer fresh insights to address your design challenge. For example, luxury hotel concierges inspired the development of Apple’s retail stores.
Define Your Target Audience

1. **Who** do we envision will use our solution?
2. **What** are their pain points, needs, goals?
3. **How** are they currently solving these needs?
Tools and Methods

- Secondary Research
- Competitive Analysis
- Analytics
- Surveys

- Group Interviews
- Semi-Structured Interviews
- Diary Studies
- Contextual Research
Define

Empathize  Ideate  Prototype  Test

Define
Phase 2: Define

Identifying user needs and business requirements early in the process.
Define

This phase is about collecting information from the previous phase to help you see the challenge in a meaningful way.
Why Define?

• Make sure you’re tackling the correct problem.
• Involve your customer in the innovation process as they share unique perspectives.
Defining the Problem

Identifying and solving the right problem is the heart of innovation.
Define Methods

- Customer Problem Statement
- Customer Journey Maps
- Root Cause Analysis
- Concept Models
- Task Analysis
- User Scenarios
- Use Cases
**Customer Problem Statement**

- **Who** is the customer?
- **What** goal has to be achieved?
- **When** does the issue occur?
- **Where** is the issue occurring?
- **Why** does problem exist?

I am a ______________________
____________________________

I want to _________________
____________________________

but the Problem is _____
____________________________

because _________________
____________________________
A journey map helps create a shared understanding of customers' interactions with the product over time.
Customer Journey Map Example

Exploratorium Museum (Adaptive Path)
Root Cause Analysis

• Get below the surface problem
• Break the chain
• Holistic customer experience
• Create a plan
Ideate

Empathize  Ideate  Prototype
Define  Test
Phase 3: Ideate

Have you got a well-defined, precise problem? Now focus on finding a solution. In the ideate phase, you let can your creativity go wild – there are no bad ideas.
Ideate

Ideation = “Idea Generation”
What is Ideation?

The best idea is rarely \textit{(if ever)} the first idea. Our first ideas tend to be the most practical in their approach. But if the solution were obvious, would there really be a problem to solve?
What is Ideation?

Generating lots of different ideas helps remove the filters from our thinking. We make creative leaps from one idea to the next, and begin to develop deeper concepts.
Idea Curve

brilliant

boring

absurd
Ideation Methods

Rapid Sketching
Rapidly generate as many design ideas as possible

Active Brainstorming
Leverage the collective thinking and energy of the group

Process Flows
Create flow charts to visualize the steps of the process and identify opportunities

Participatory Co-Design
Have the team co-design with people who will ultimately use the solution
Rapid Sketching (Crazy 8’s)
Prototype

Empathize → Ideate → Define → Prototype → Test
Phase 4: Prototype

Because we can’t easily test a fully built-out solution, we’ll build a simulation, or prototype, to represent and better understand our design.
Prototype

A model of the real product. Prototypes should be faster, cheaper, and easier to build than the real product.
Why Prototype?

• What if your idea turns out to not be as perfect as you thought?
• The cost of making a mistake after launch is much greater than the cost of making a mistake early in the project.
Prototyping Process

1. Decide on the type of prototype needed
2. Determine the level of fidelity
3. Define the user scenarios
4. Build it!
Examples

Low Fidelity Prototypes

Magento 2
Paper prototype
Magento 2.0
High Fidelity Prototype
Product Catalog

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Test

Empathize
Define
Ideate
Prototype
Test
Phase 5: Test

Does your solution work? Can it be improved? Use your prototype on real people for real-time feedback so you can iterate on your design.
The Value of Evaluation

- Collecting feedback is key to your success
- The more times you evaluate the better
Quantitative vs. Qualitative

Quantitative
Numbers and data focused
Measurable data

- 22 cm tall
- 60 cL of wine

Qualitative
Observed and not measured
Appearances and feelings

- Great taste
- Fruity aroma
- Beautiful red color
Heuristic Review
A heuristic evaluation is a comparison of your prototype to a standard set of rules.

Expert Review
An expert evaluation is similar to a heuristic evaluation, except that it adds in a person's interpretation of design best practices.
Research Methods (Behaviors)

Cognitive Walkthrough
Observing customers in real scenarios.

User Interviews
Interviewing users to collect more feedback.

Usability Testing
Creating tasks for a test participant to do while interacting with your prototype.
Research Methods (Attitudes)

Surveys
Surveys depend on your ability to ask perfect questions without meeting your audience.

Focus Groups
Focus groups are for judging people’s opinions about ideas.
Summary
Design thinking is a process for innovation. Anyone can do it.

Magento has used design thinking to improve Magento 2.0.

You can help by volunteering for future research efforts.
Thank You!
Questions?

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