Adopting User Experience in An Agile Environment

Delivers value by creating products that are useful, usable and desirable

Sumonthip (Moni) Gmitro
Who Am I?

Sumonthip (Moni) Gmitro, UXMC

- User Experience (UX) Designer at Boeing
- UX Research and Design in aviation and healthcare industries
- Lean UX to support Agile development environment
- Facilitate User-Centered Design workshops
- Lead Boeing User Experience Community of Excellence
Agenda

• What is UX?

• Agile environment without UX

• Why does UX matter?

• UX with Agile

• What do we do next?
What is **UX**?

Global Product Data Interoperability Summit | 2017

**Server Error**

404 - File or directory not found.
The resource you are looking for might have been removed, had its name changed, or is temporarily unavailable.
What is **UX**?

“Person’s perceptions and responses resulting from the use and/or anticipated use of a product, system or service.”

– International Organization for Standardization

"User experience" encompasses all aspects of the end-user's interaction with the company, its services, and its products.

- Don Norman, Nielsen Norman Group

“How you feel about every interaction you have with what is in front of you in the moment you are using it.”

- Moni Gmitro
What is UX process?

Problem Space

Creating Choices

Making Choices

Solution Space

Creating Choices

Making Choices

Empathize

Define

Ideate

Prototype

Test
Adopting Agile

We’re going to try something called Agile Programming?

That means no more planning and no more documentation. Just start writing code and complaining.

I’m glad it has a name.

That was your training.
Adopting Agile - Continued

The project status is “yellow light.”

In user testing, we found that the product locks up every twelve seconds. The interface is incomprehensible and the manual is pure fiction.

I think it’s clear what we need to do...

Ship it and hope somebody writes a “Dummies” book about it.
Adopting Agile Without Requirements by Product Owner

Product Backlogs

Epics/User Stories

Sprint Backlogs

Code/Build

Test with Product Owner

Production Release

Test with Product Owner

Production Release

Test with Product Owner

Production Release

Product Backlogs

Sprint Backlogs

Code/Build

Test with Product Owner

Production Release

Test with Product Owner

Production Release

Test with Product Owner

Production Release

Product Backlogs

Sprint Backlogs

Code/Build

Test with Product Owner

Production Release
Adopting Agile Without UX Case Study

Global Product Data Interoperability Summit | 2017

Pre-Project (Scoping)
- Plan / Schedule w/ Dates & Resources
- STP-Charter & Mission Statement
- In/Out of Scope
- Deliverables SharePoint (Migrate) – for Decks/Communication
- Funding / Benefits Analysis
- Additional UX Budget
- Estimated Completion Data/Analysis
- IPT Structure / Customer & Stakeholder
- Send/Document Resources
- IT Resources Documented
- IT & BCA Governance Reviews
- Project Description
- Metrics

Define Other Business Processes
- Define Other Business Processes
- Deliverables (Prioritize Existing List)
- Interface
- Meeting Cadence – Operating Rhythm
- Business Processes SharePoint

Empathize Phase (Discovery)
- Conduct Task Analysis
- Non Functional Requirements
- Contextual Inquiry
- Day in the Life activity
- Develop Personas
- Write Scenarios
- Build Storyboards
- Card Sorting
- Common Roles from AETP
- Design DB Infrastructure Analysis
- Create Sprints / Plans
- Group Level Process Management
- Data Ordering Epic
- History / Existing Data
- Application UI Setup
- User Setup
- Airplane Setup
- Tech Stack Sign Off
- Infrastructure Information
- Implement Metrics / Track KPMs
- Communication Plan
- Vision – Validate Original Intent
- Prioritize Backlog
- Test Plan
- Sketching & Test Sketch
- GUI / UX Review by Users
- GUI for Laptops
- Zoning – Parallel Design
- Test the Zone
- IA GUI Information Architecture
- Wireframes & Acceptance Criteria
- Prototype & Test
- Prototype Review
- Develop Automated Tests

Define Phase (Framing)
- Set our goals
- Research Users/Tools
- Establish Test Dataset
- Evaluate As-Is Application
- Scope – Requirements wish list / document

Developmen 1 begins in Sprint 1

Developmen 1 March 6-31

= In work
= Not Started
= Completed

Prototype
- UX
- User Story Decom & Groom
- Prioritize / Filter
- PPR/Ready
- Kickoff / RAS Meetings
- Offline Tag Ups
- Acceptance Criteria
- Testing (FAA – Boeing & HCL)
- UI/UX Testing

Sprint 1

Zoning

- Parallel Design
- Test the Zone
- IA GUI Information Architecture
- Wireframes & Acceptance Criteria
- Prototype & Test
- Prototype Review
- Develop Automated Tests

Hand off Prototype to Developers

Iterate on the Prototype Feedback & Implement

BOEING is a trademark of Boeing Management Company
Copyright © 2017 Boeing. All rights reserved.
Copyright © 2017 Northrop Grumman Corporation. All rights reserved.
GPDIS_2017.ppt | 10
• 62 product planning tasks were recognized

• ~ 3.2% of the tasks were completed

• ~ 56.5% of the tasks were being worked on

• ~ 40.3% of the tasks were not started

***The team had less than 10 days before coding***
• **UX** specialist got brought into the project right before team started coding

• **UX** evaluation results showed that...
  
  • Team did not have sufficient data to start coding
  • Existing wireframe is based on a proven to be bad UI pattern
  • Product Owner did not feel like team needed to work with end-users
  • User stories were created based on a Product Owner’s decision
  • End-users did not feel like the MVP aligns with their objectives
• Agile is here to stay

• One of Agile Challenges is
  • Absence of User Research & Usability Testing
    • “We work under internally imposed deadlines and sometimes need to push things out without testing, which is suboptimal for users.” Julia, UX Designer
    • “It’s really hard to make usability testing happen. We are short-staffed and don’t have a primary researcher. We’ve borrowed someone from marketing, but he doesn’t know the product enough or abide by our philosophy of ‘we love our users’.” Julia, UX Designer
    • “We don’t have time to run user testing.” Victor, Software Engineer

Reference: https://www.nngroup.com/articles/doing-ux-agile-world/
User Research & User Testing

Can users use my app?
Pre-Project
What goals do we want to achieve (Use Cases)?

Discovery
What problem are solving? What for?

Framing
How will we solve the problem?

Delivery
Is the solution working?

Exploratory user research, Insights, Personas, Value proposition

Ideate, Synthesize, Shape system

Continued User Research
Design & Development
Running A Smooth Agile Team

Global Product Data Interoperability Summit | 2017

**Discovery**
What problem are solving? What for?
- Research
- Understand

**Framing**
How will we solve the problem?
- Frame
- Test

**Kick-Off**
- Research Planning
- Week 1: Know the Story
- Week 2: Synthesis of Insights
- Week 3: Wireframes, Test
- Week 4: Prototype, Test

**Check-In**
- Sketch Concepts/ideas
- Create Experiments
- Validate the Story
- Wireframes
- Prototypes
- Iterate

**Inception**
- Write the scenarios to test
- Validate the New Activities
- Low Fidelity User Testing
- Iterate your Persona (if needed)
- Up the Quality of the user test
- Framing/Prep for Inception

---

Collect assumptions
Create Personas
Competitive Analysis
User/Customer Interviews
**Validate the Story**
Case Study - Results

Team quickly identified a list of users

Tested the wireframes with users

Feedback became backlogs

Backlogs got incorporated and prioritized into the Sprint to ensure the team deliver Minimum Viable Product that is useful, usable and desirable to end-users

Product Owner saw the value and became an advocate of UX

End-users & stakeholders are more willing to stay engaged

We released the product on time with minimal change requests
What Do We Do Next?

Agile + UX = Agile UX NOW
What Do We Do Next?

• Keep Teams Consistent

• Be Proactive Not Reactive

• Have a Dedicated Scrum Master, Especially at the Beginning

• **UX** Must Work at Least One Step Ahead of the Sprint
In conclusion

• Agile will continue to gain momentum as organizations discover the benefits.

• **UX** professionals must adapt to Agile and **UX** processes

• The Agile user-experience process is more than just being a thoughtful designer

• Don’t allow user research to run away from you during the compressed timeline of the Agile process
Q & A

Global Product Data Interoperability Summit | 2017

Sumonthip (Moni) Gmitro, UXMC