

# Migration to Agile

ThoughtWorks



### Overview

- Characteristics of software and software development
- The heuristics for building software
- How to go Agile
- XP values one way to leverage the characteristics
- XP practices concrete actions for an Agile process.
- Review and wrap up.



#### Software Characteristics

- Intangible
- Mutable
- Very difficult to define and design
- Easy to construct and run raw machine power
- Extensively testable
- Can be deployed with partial functionality
- Development technology is changing rapidly



# Heuristics for building software

- Automate everything that is repetitive
- Evolve as per needs, explore
- Build in small increments
- Test aggressively
- Get frequent feedback from actual use
- Implement in a minimal, simple way
- Avoid duplication functionality / process



# Agile values

- Communication
- Simplicity
- Feedback
- Courage



### Before We Start

- People
- Team structure
- Environment
- Implementation platform
- Enabling tools (repository / build / test harness / deploy / issue tracking)



### How to Implement Agile practices

- 1. Start small, watch benefit
- 2. Spot the pain
- 3. Bring in practices to relieve the pain
- 4. When it is no longer the biggest pain, repeat 2



# Agile practices - i

- The planning game
- Small releases
- Metaphor
- Simple design
- Testing
- Refactoring



# Agile practices - ii

- Pair programming
- Collective ownership
- Continuous integration
- 40-hour week
- On-site customer
- Coding standards



# Agile Activities

- Bidding
- Scoping
- Startup
- Delivery
- Maintenance
- Enhancements



### State of 'Flow'

- What is it like being 'agile'?
- Agile certification
- Investment for going agile



### Recap

- Get the principles right, practices will follow.
- Aligns with the reality of development.
- A low risk path to Agile.



### Thank You

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## Cross dependencies in practices

- Testing → simple design → continuous integration
- Simple design → Metaphor → Refactoring →
   Testing
- Coding standards → Pair programming → collective ownership
- Planning game → Onsite customer
- Collective ownership → Frequent releases →
   Continuous integration