Comparative Agility

Kenny Rubin
Laurie Williams

August 10, 2010

comparative agility

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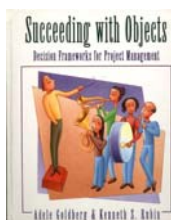

Background of Kenny Rubin

1 of about 120 world-wide

Former Managing Director

Author of:

- Trained more than 15,000 people in Agile/Scrum, Smalltalk and PM
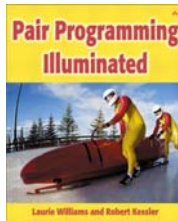- Provide Agile/Scrum coaching to developers and executives

Available in Q2 2011

Scrum: A Manager's Guide

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Background of Laurie Williams

- **Associate Professor of Computer Science at North Carolina State University**
- **Ex-IBMer**

Author of:

- **Trained more than 600 professionals in Agile/Scrum SW dev and PM**

Editor of:

Agenda

- Motivation
- The Assessment Framework
- Assessment Process
- Preliminary Industry Results
  - Exercise
- Sample Company Results
  - Exercise
- Future of CA

Scenario

- ▶ Our company has decided to use agile
- ▶ We get training and maybe some coaching
- ▶ After six months, management wants to know:
  - ▶ "How are we doing at adopting agile?"

Some specific questions

- ▶ Are we where we should be?
- ▶ In which areas do we need to improve?
- ▶ In which areas are we excelling?
- ▶ How are we doing relative to others?
- ▶ How are we doing relative to our competitors?
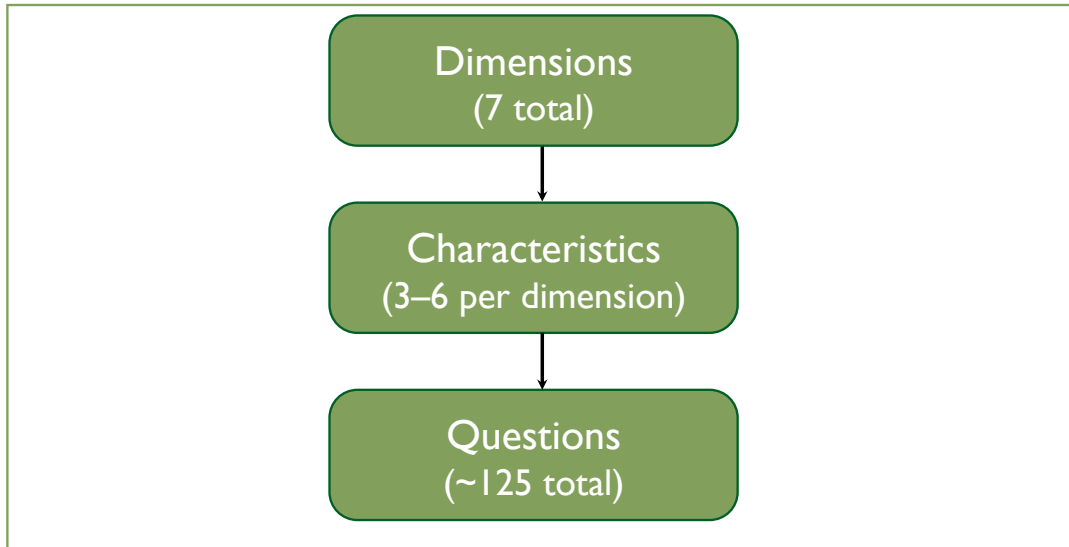
We need an assessment framework

▶ An instrument for "measuring" agility

▶ Desirable attributes

  ▶ Must evaluate multiple dimensions of agility

  ▶ Must lead to actionable recommendations

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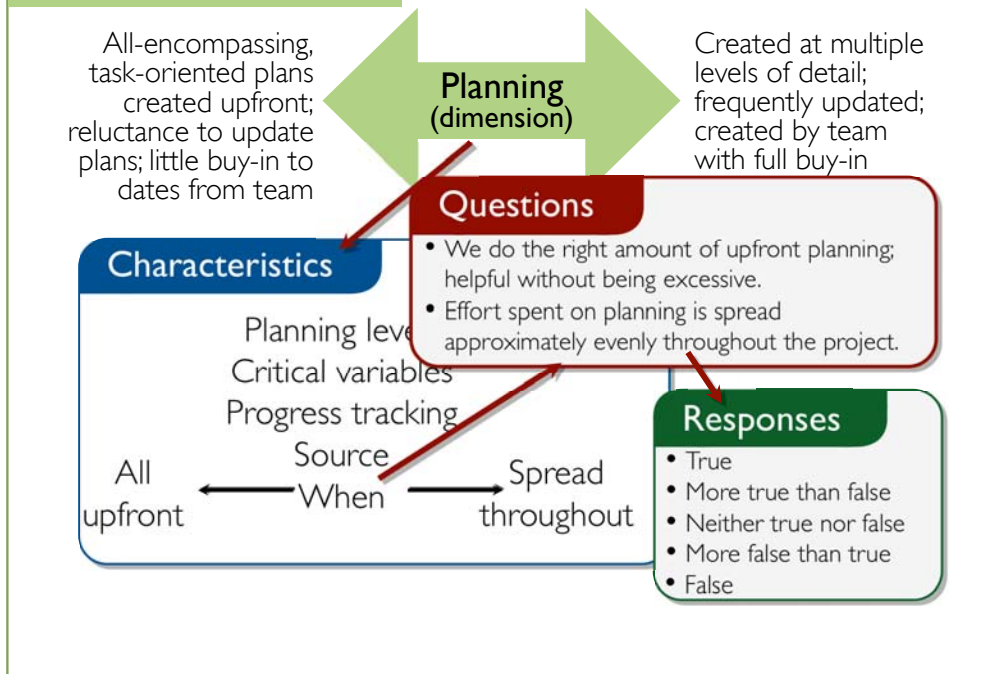- Future of CA

Assessment framework

Dimensions
(7 total)

↓

Characteristics
(3–6 per dimension)

↓

Questions
(~125 total)

Seven assessment dimensions

- ▶ Teamwork
- ▶ Requirements
- ▶ Planning
- ▶ Technical practices
- ▶ Quality
- ▶ Culture
- ▶ Knowledge creation

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An Example

All-encompassing, task-oriented plans created upfront; reluctance to update plans; little buy-in to dates from team

Planning (dimension)

Created at multiple levels of detail; frequently updated; created by team with full buy-in

Questions
- We do the right amount of upfront planning; helpful without being excessive.
- Effort spent on planning is spread approximately evenly throughout the project.

Characteristics

Planning leve
Critical variables
Progress tracking
Source

All upfront ← When → Spread throughout

Responses
- True
- More true than false
- Neither true nor false
- More false than true
- False

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Assessment philosophy

- ▶ Not trying to determine maturity levels
- ▶ Organizations do not need to be perfect
  - ▶ Only better than their competitors
- ▶ Lead to the idea of a Comparative Agility Assessment
  - ▶ "How am I doing compared to my competition?"
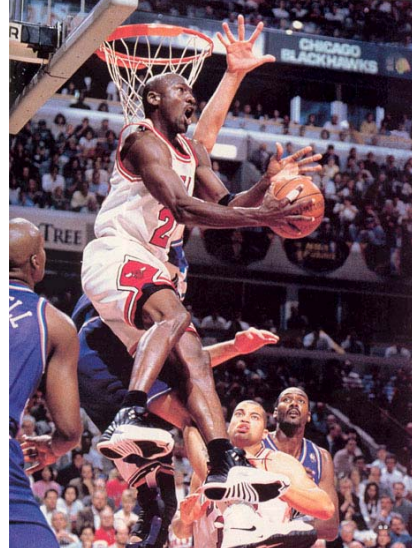
Assessment approaches

- ▶ Consultative
  - ▶ Administered to a team of people by a consultant
  - ▶ Consultant fills in the questionnaire based on responses collected during interviews
- ▶ Self-administered
  - ▶ Individuals working on projects complete either paper or online version of the survey
- ▶ Survey found at:
  - ▶ www.ComparativeAgility.com

Sample from online survey

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Surveys by Geography

3.33% 2.51% 0.41% 0.14%

30.57%

65.29%

35.33%

- North America
- Europe
- Asia
- South America
- Australia
- Africa
- Antarctica
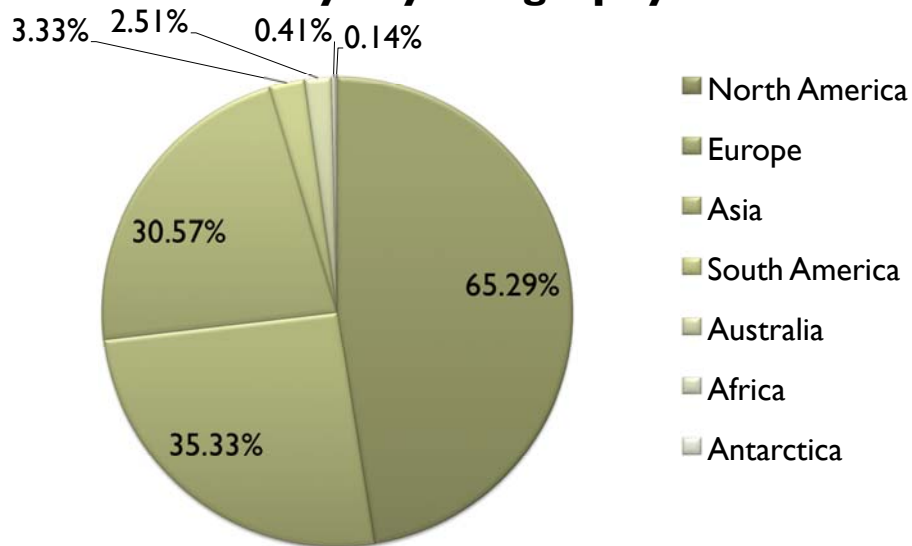
Agile Experience of Respondents

24.7%

11.5%

12.5%

51.4%

- 0-6 months
- 7-12 months
- 1 year
- Longer
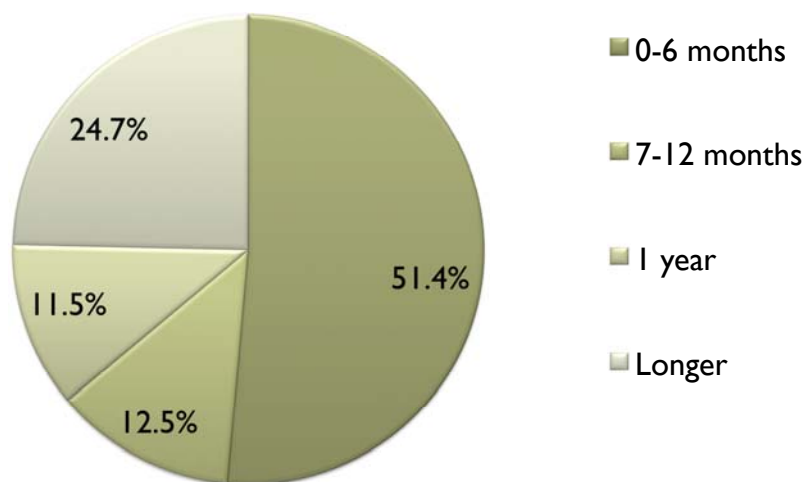
Number of People on Project
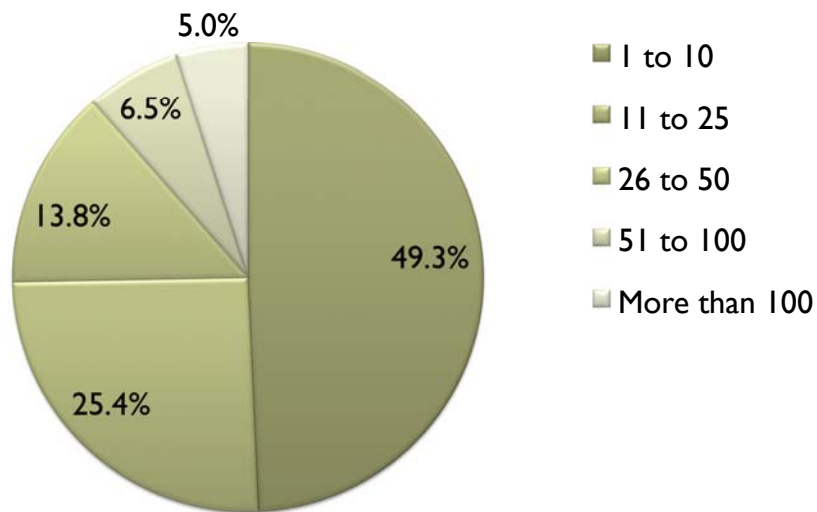
- 1 to 10
- 11 to 25
- 26 to 50
- 51 to 100
- More than 100

49.3% — 25.4% — 13.8% — 6.5% — 5.0%

Scope of the Survey Response

- Team
- Department
- Division
- Organization

68.2% — 13.7% — 4.5% — 13.6%

Scope of the Survey Response

- 4.4%
- 14.6%
- 43.2%
- 28.9%
- 32.6%

- ■ Commercial Software
- ■ Internal Development
- ■ Web Development
- ■ Contract Development
- ■ Other

Seven Dimensions

Teamwork
Requirements
Planning
Technical Practices
Quality
Culture
Knowledge Creating

1   2   3   4   5

- ■ -2 Std
- ■ -1 Std
- ■ Mean
- ■ +1 Std
- ■ +2 Std
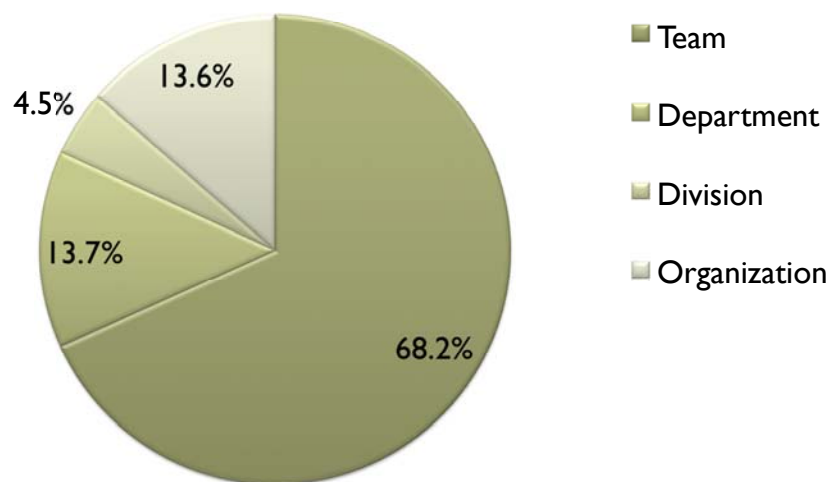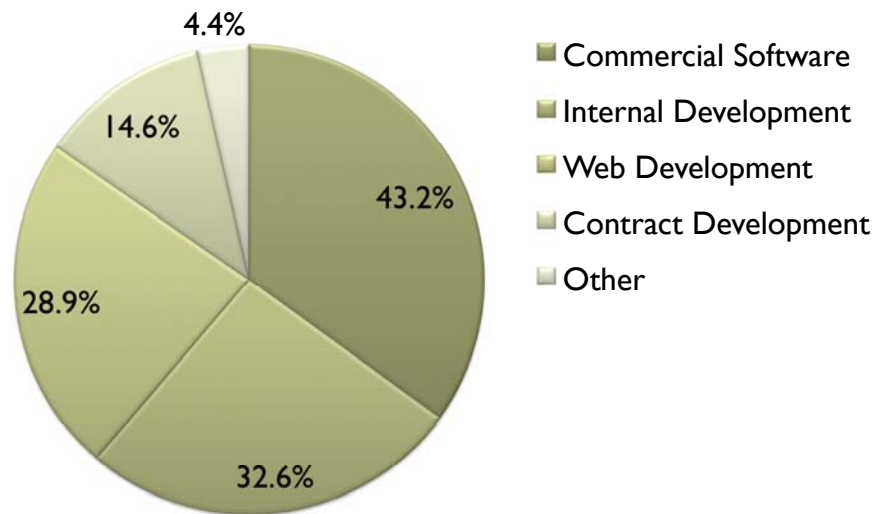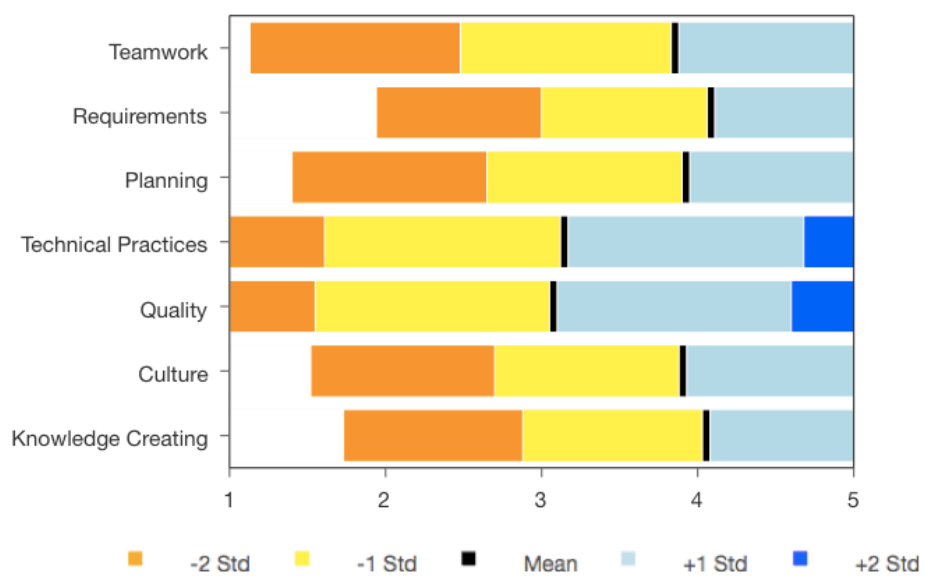
Example Question-level Data

Industry Pair Programming Data

Question	
Production code is written using pair-programming.	
People switch pairing partners at least once a day.	
When someone goes on vacation we don't worry about who will cover his or	
We have a physical and computer infrastructure that supports pair programming.	

Legend:
- -2 Std
- -1 Std
- +1 Std
- +2 Std
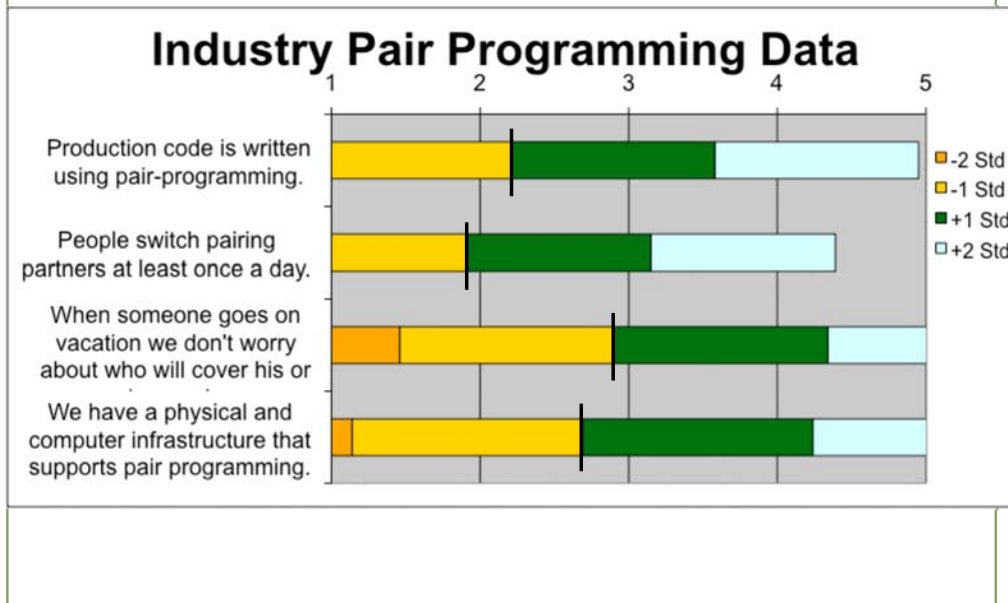
Exercise

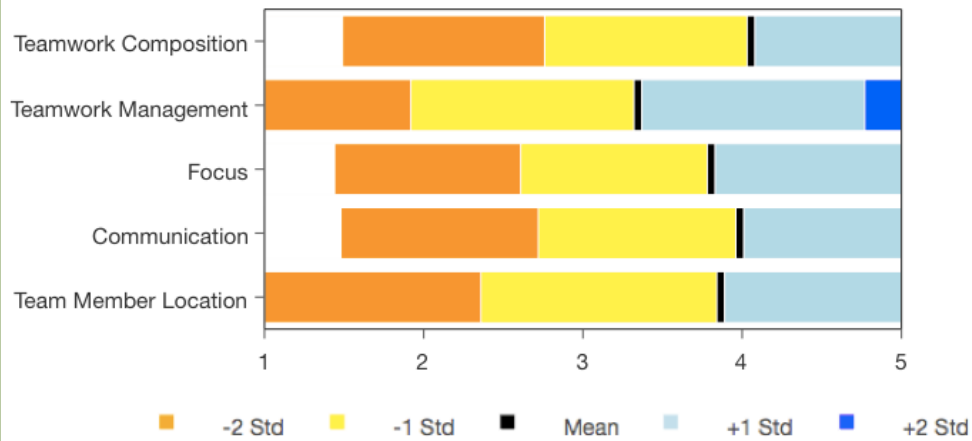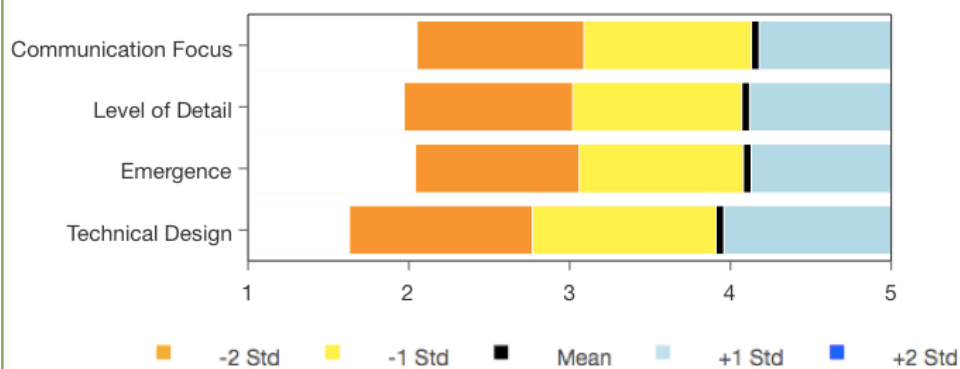- Rationalize industry trends
  - Why are some aspects of agile more easily and/or readily accepted than others?
  - What aspects of agile should we focus on, as an industry, to improve results?

Teamwork

Requirements

Planning

Technical Practices

Quality

	Automated unit testing	Customer acceptance tests	Timing

Legend: ■ -2 Std ■ -1 Std ■ Mean ■ +1 Std ■ +2 Std

Culture

	Management style	Response to stress	Customer involvement	Title and salary alignment	Infrastructure	People

Legend: ■ -2 Std ■ -1 Std ■ Mean ■ +1 Std ■ +2 Std

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Knowledge Creation

	1	2	3	4	5
Reflection					
Timeboxes					
Team learning					

■ -2 Std   ■ -1 Std   ■ Mean   ■ +1 Std   ■ +2 Std
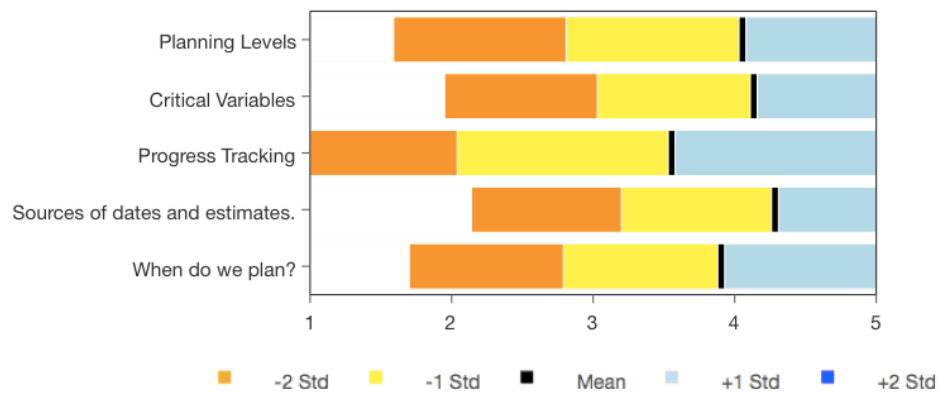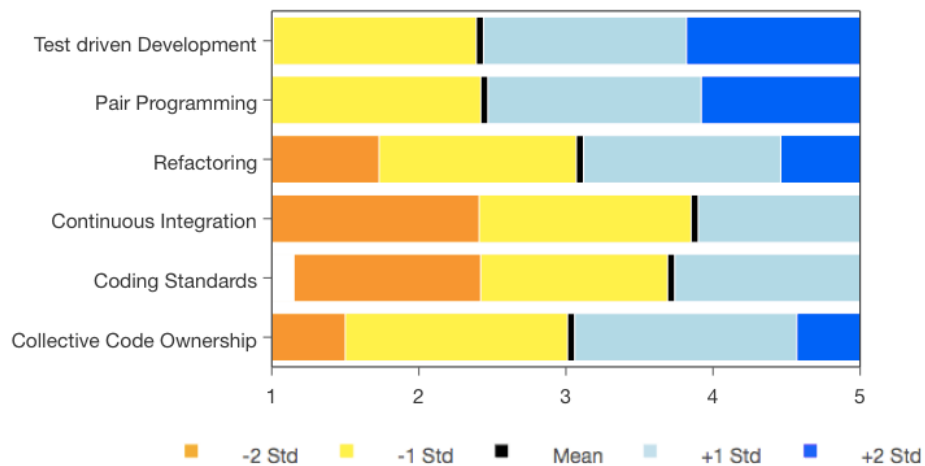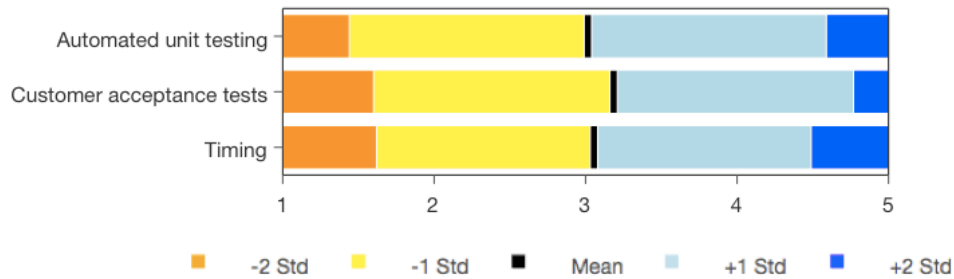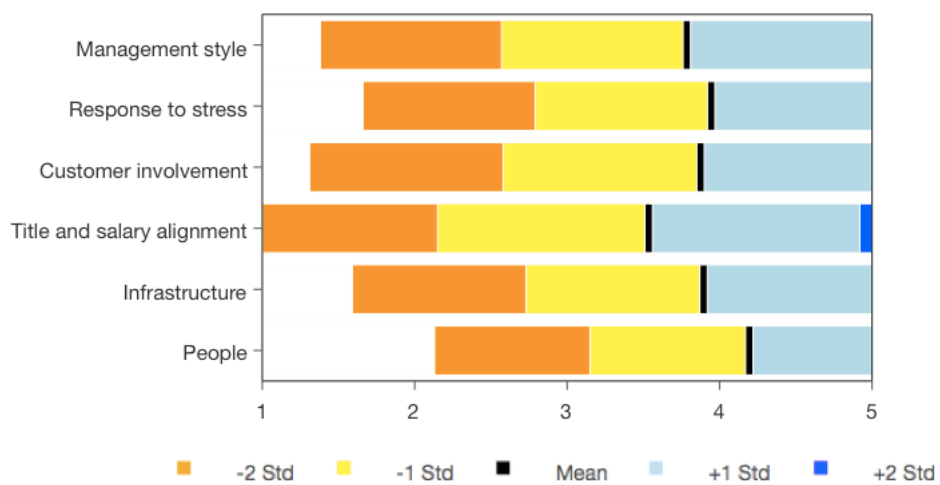
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How does a company use this data?

- ▶ Stock their improvement backlog with items for teams (including non-delivery teams) to work on
- ▶ Identify Big Hairy Audacious Goals (BHAGs) to ask teams to meet
  - ▶ Identify leading and lagging indicators of success to gauge and measure progress

Exercise

- ▶ Analyze results in the exercise handout
- ▶ Create an improvement backlog with items for this team
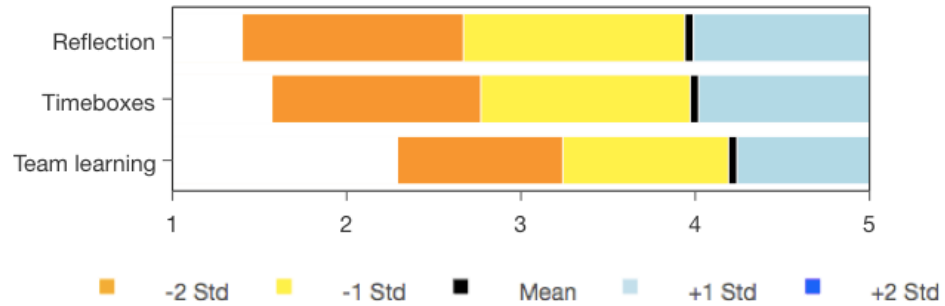
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Future of CA

- ▶ <u>Comparative Agility II</u>
  - ▶ Revised to be balanced and consistent with industry agile trends
  - ▶ Statistical examination of questions to determine correlations and remove statistically unnecessary questions
- ▶ Revision process (Laurie Williams, Kenny Rubin, Mike Cohn)
  - ▶ Map Comparative Agility I questions to agile principles and practices
  - ▶ SurveyMonkey survey
    - ▶ "After all these years, what does it mean to be agile?"
    - ▶ Establish industry acceptance of Agile Principles and practices
  - ▶ Balance quantity of questions related to principles and practices
    - ▶ Elimination, revision and addition of questions

How you can participate

- Visit the website for details:
  - www.ComparativeAgility.com
- Take the survey, its free!
  - Immediately get a report summarizing your answers
- If you want to take it as a team, request a special "collector"

- Community feedback process for Comparative Agility II feedback.comparativeagility.com

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