

Toward a Whole-(er) Team

Matt Ganis
IBM, ibm.com
Certified Scrum Master

Current slides available at: <http://webpage.pace.edu/mganis/ap1n>

Agenda

- What is a “Whole” team
- Experiences with Agile (XP)
- Measuring effectiveness
- Our projects (1, 2 and 3)
- What we finally ended up with

Who are we ?

IBM.COM Corporate Webmaster Team

- Responsibilities include:
 - The development/Support of applications that reside in the corporate portal
 - Day-to-Day operations of www.ibm.com
 - Standards for all external *.ibm.com websites
 - 3 site architecture
 - Zero percent down time
- Using Agile methods for the last 4-5 years (a hybrid XP, Scrum)

What is a “Whole” Team?

The Whole team practice recommends having a team that includes people with all skills and functions needed for creating the product:

- Developers
- Testers
- Designers
- Technical writers
- Customers

Why a Larger (whole) team ?

Larger teams struggle with Information Degradation

Agile software development methods fight this with the help of the feedback loops, by making it easy for people to clarify things and verify information exchanges



The Whole team practice is an extension of this idea to the extreme level - include everybody on the team and during the iteration they will be able to collaborate in order to produce a shippable increment of the software.



Research Question

Is It better to have a large whole team versus several small (interoperating) sub-teams ?

XP Evaluation Framework

In trying to understand the effects of making changes in our Agile teams, we need a way to evaluate the effect of these changes.

I'm currently using the:

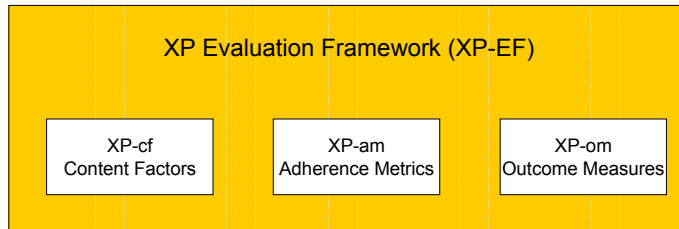
XP-Evaluation Framework

by Laurie Williams, William Krebs, Lucas Layman and Annie Anton:

"Toward a framework for evaluating Extreme Programming"

(see: <http://agile.csc.ncsu.edu/lmlayma2/papers/WKL04.pdf>)

XP-Evaluation Framework



The Extreme Programming Evaluation Framework (XP-EF) is a benchmark for expressing XP case study information.

The XP-EF is a compilation of validated and proposed metrics designed for expressing the XP practices an organization has selected to adopt and/or modify

Context Factors	Adherence Metrics	Outcome Measures
Recording factors such as team size, project size, criticality, and staff experience can help explain differences in the results of applying the methodology.	The XP-am enables one to express concretely and comparatively via objective and subjective metrics the extent to which a team utilizes Agile practices	Enables one to assess and to report how successful or unsuccessful a team is when using a full or partial set of Agile practices



Project 1

Agile Project 1: OneX (One eXperience)

Site wide redesign of all of the ibm.com websites
CSS's

Page Layout

Masthead/Footers

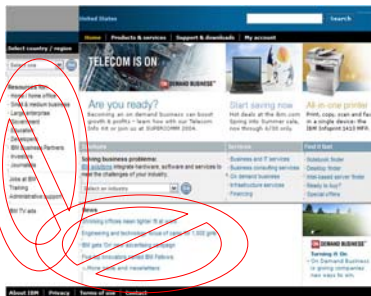
New applications for navigation

"Learn About" – Query-based content

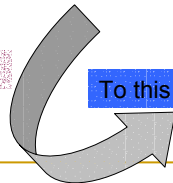
Product Finders (facetted browse)

G9 Countries

Followed closely by the other 80+ Country/Language



Convert from this



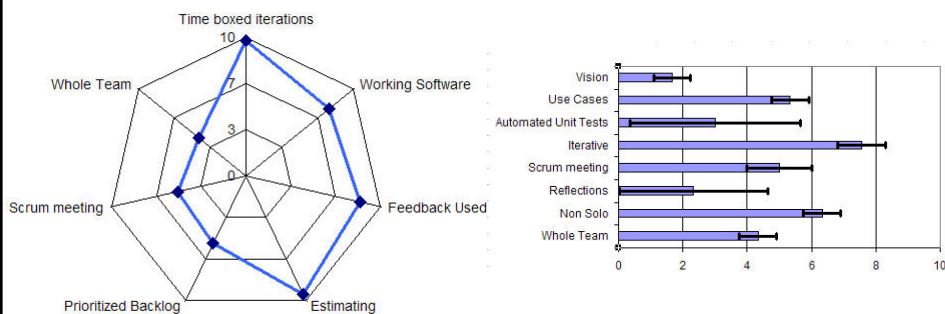
To this



Project 1: XP-cf (Context Factors)

Context Factor	Value	Comments
Project length	4 months	
Team	4 Java Developers 2 xml developers 1 customer rep.	
Team Locations	Single location	Other parts of the team are remote, but the core agile team was co-located
Agile Experience Level	none	First project attempted using Agile methods for all team members
Length of Iterations	2 weeks	Stict adherence to 2 week iterations
Technology	Java, XML	Strong Java developers experts in XML

Project 1: XP-am (Adherence Metrics)



Project 1: XP-om (Outcome Measures)

Quality	<ul style="list-style-type: none">■ External function tests were problematic (poor)■ Overall delivered code - zero defect
Cycle Time	Perception: Reduced from at least one year to 4 months
Flexibility	<ul style="list-style-type: none">■ Able to adjust to new requirements■ Reported problems about understanding changes■ Challenging at times
Consumability	Deploy and Test were troublesome
Customer Loyalty	High level of satisfaction (insisted we adopt Agile for 100% of projects)



Project 2

Incremental Profiling Overview

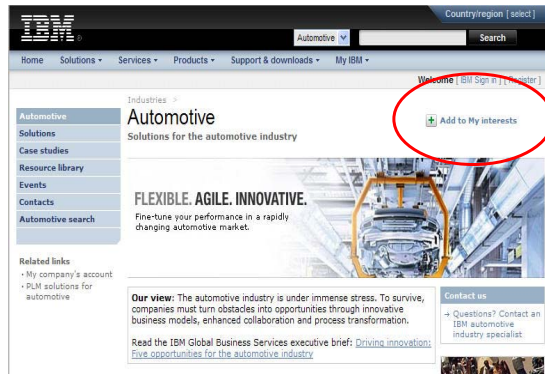
➤ Incremental Profiling intended to be enabled on product, offering and solution pages

➤ Visitors can easily add or remove the topic as an interest to their profile

➤ Incremental Profiling module would reflect the current "state":

- Add to my interests
- Remove from my interests

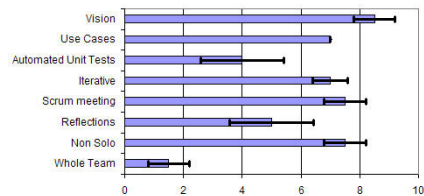
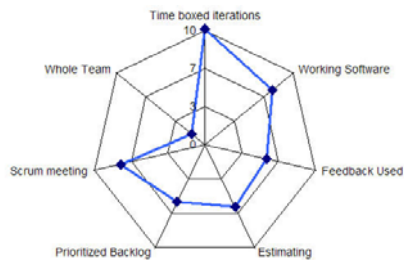
➤ Web services implementation will centralize Web Identity access and reduce deployment cost



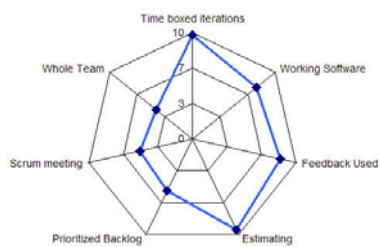
Project 2: XP-cf (Context Factors)

Context Factor	Value	Comments
Project length	3 months	
Team	4 Java Developers 1 customer rep.	Purely a development team (not multidisciplinary) New customer (transition)
Team Locations	Single location	core agile team was co-located
Agile Experience Level	1 of the 4 had Agile Experience	Original Team disbanded. One Developer remained Customer was Part of original Team
Length of Iterations	2 weeks	Stict adherence to 2 week iterations
Technology	Java, HTML, Database	

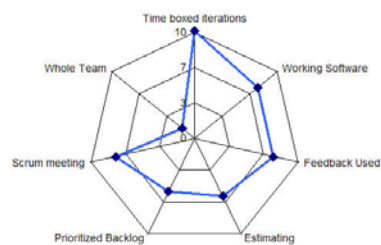
Project 2: XP-am (Adherence Metrics)



Compare Projects 1 and 2



Project 1



Project 2

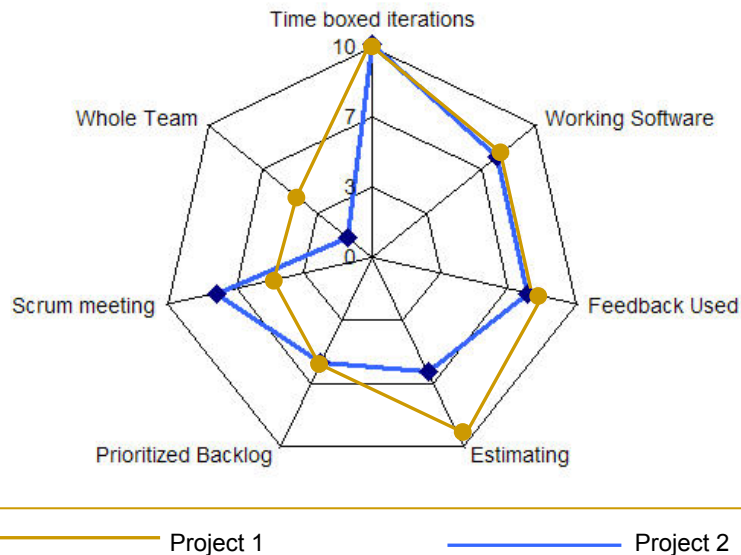
Estimating is getting worse (since not all disciplines are represented)*

Scrum meetings (standups) improve due to a single team

Feelings of isolation increases (whole team decrease)

* Retrospective results

Comparison From Project 1 to 2



Project 2: XP-om (Outcome Measures)

Quality	<ul style="list-style-type: none"> External function tests were problematic (poor) Overall delivered code - zero defect
Cycle Time	3.5 – 4 months Fast turn around on requirements, slow to finalize on the User Experience
Flexibility	<ul style="list-style-type: none"> Problems adjusting to new requirements (UED) Challenging at times (lack of direction)
Consumability	Deploy and Test were fine Adoption was problematic
Customer Loyalty	Satisfied customer, but not overly thrilled Concern over the time to come to closure on key decisions

Project 2: Retrospective action plans

- Presentation for mgmt/Stakeholder teams (myths and misconceptions about Agile)
- Increase External team participation: Web Identity, Project mgmt teams, business owner teams
- Need a resident Agile “champion”
- The team needs to adhere more to the Agile principles (refactoring, etc)
- Request additional resources
- Increase participation (of external teams) in our planning games

Team is looking for more participation and a greater understanding of their methodology



three

Project 3

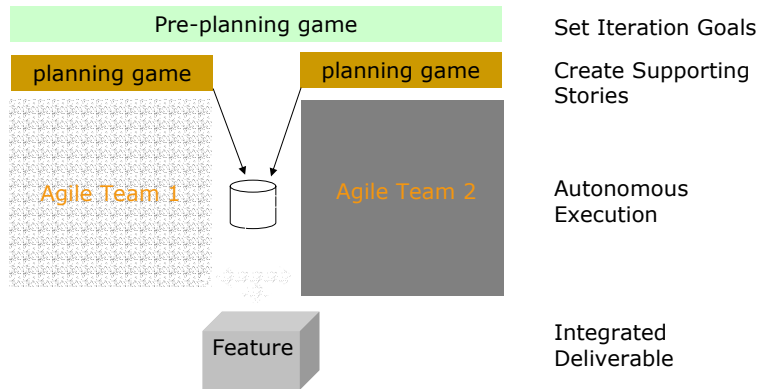
Project 3 – OneX2x

- Another redesign of the IBM page standard
- Implementation of web 2.0 model
- Dynamic page creation

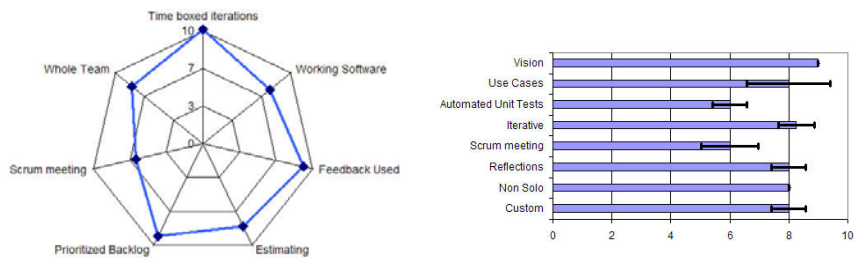
Project 3: XP-cf (Context Factors)

Context Factor	Value	Comments
Project length	4 months	
Team	4 Java Developers 3-4 User Design 3-4 customer Reps.	Moving toward multidisciplinary teams Multiple customers
Team Locations	Predominate Single location (multiple locations)	same time zone (same county)
Agile Experience Level	Experienced Dev team Inexperienced customers/UE	Use of Agile well understood in the organization (dev) Lack of experience in practicing the methods (outside dev.)
Length of Iterations	2 weeks	
Technology	Java, HTML, Database	

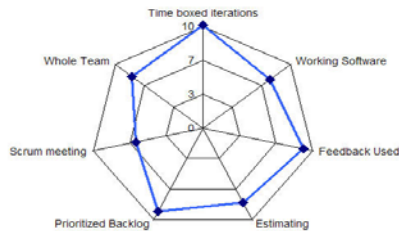
Expanding Agile methods organization



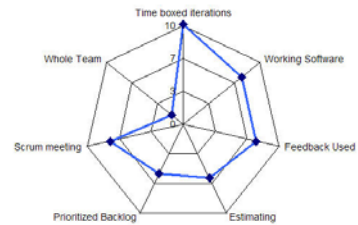
Project 3: XP-am (Adherence Metrics)



Adherence metrics between 2 and 3

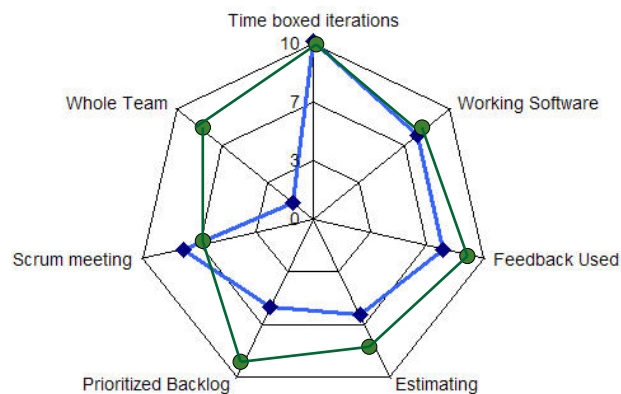


Project 3



Project 2

Comparison of Project 2 and 3



— Project 2

— Project 3

Project 2: XP-om (Outcome Measures)

Quality	■ External function tests went very well ■ Overall delivered code - zero defect
Cycle Time	4 months
Flexibility	■ Rapidly changing/adjusting to new requirements
Consumability	Deploy and Test were fine Adoption was widespread
Customer Loyalty	Extremely Satisfied customer

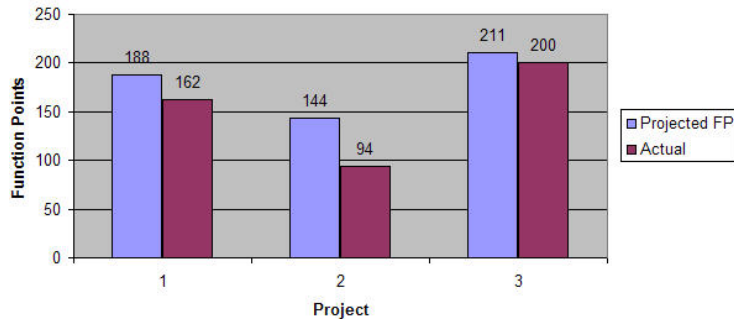
Project 3: Retrospective action plans

- Excellent communications plan
- Every Business owner, Site Architects, and IA's participated on the writing of the scenarios. The general intent of the capability was formed with a common understanding across these functions.
- The same people involved in the scenarios were not always involved in the later work. Site architects moved around their roles, and some learning was lost. The Webmaster team did not participate
- A lack of common understanding across the project team creating a hard dependency on SA and webmaster resource to answer questions, address issues, and otherwise explain how requirements were being implemented Request additional resources
- WM team inaccessible to everyone except Site Architecture. Walled off and not considered 'part of the team'.

Team is looking for more participation and a greater understanding of their methodology

Function Point Analysis

Comparison of Projected Function points and completed Funtion Points



Percentage of Completed Function Points

86%

65%

94%

Retrospective Analysis

Retrospective Results for all three Projects

Project 1				Project 2				Project 3			
Team Related Comments		Customer Related Comments		Team Related Comments		Customer Related Comments		Team Related Comments		Customer Related Comments	
↓		↑		↓		↓		↑		↑	
Pos.	Neg.	Pos.	Neg.	Pos.	Neg.	Pos.	Neg.	Pos.	Neg.	Pos.	Neg.
14%	16%	9%	1%	12%	16%	7%	17%	18%	10%	17%	7%

Conclusions

- Moving toward a whole team:
 - Increases customer satisfaction (communication)
 - Increases team satisfaction
 - Seems to increase Productivity*
- In IBM.COM our use of Agile continues to grow and expand into the larger organization
 - Started with just development
 - Moved into business owner's, design, architecture
 - Need to get better at Deploy (different organization)

Thank you

ganis@us.ibm.com

Slides available at:
<http://webpage.pace.edu/mganis/apln>
(after 1pm today)

Final Configuration

