SMARTer Agile

practical agility in wicked complexity

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How Wicked?

In general terms, high (and rising) levels of:

- Complexity (business/technical unknowns)
- Diversity (experience/perspective)
- Conflict, real or potential (passion/importance)
- Urgency (should have been solved yesterday)

In more specific, technical, project terms:

- New projects with large (10s to 100s), diverse, weakly-connected stakeholder groups
- Existing projects struggling with persistent defects
- Complex change integretion challenges
- Mounting technical debt
- Multi-team, multi-funder, and/or multi-user

What's your own version of wicked complexity?

In those situations, how big is your stakeholder universe?

Why SMARTer?

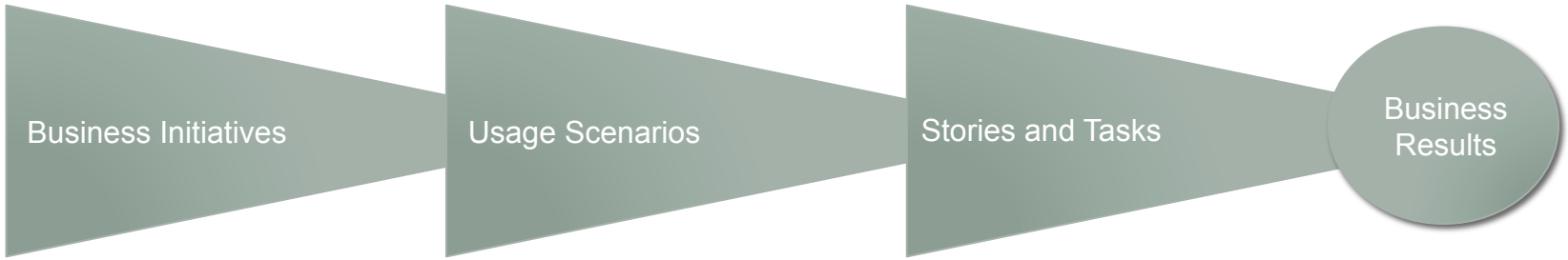
- Strategic, scalable, software solutions *from…*
- Marketplaces for multi-team, multi-stakeholder collaboration *to…*
- Adapt and Accelerate any agile engineering approaches *with…*
- Robust, business results-based product requirements *rapidly…*
- Translated from business vision to technical terms and development teams.

In short: **S**olutions **M**arketplaces **A**ccelerate **R**equirements **T**ranslation.

These words are all good and true. I just wish they spelled something that isn't already widely used for something else. The lowercase "e" is fun. (Don't scale without one of those!) What would you call this approach?

Foundational Research

- Software project failures: (nearly) always and everywhere traceable to inadequate requirements elicitation and articulation process.
- Dr. Sandra Walsh: “What would an evolutionary framework for facilitating agile requirements elicitation look like?”
- Six Years to Answer: Inspected existing methods, devised new approach, tested in team studies, recently published book. http://bookstore.xlibris.com/Products/SKU-001014561/The-OpenXP-Solution.aspx
- OpenXP: marries robust analysis in Open Space, a usage scenarios approach to “journeys” or “epics,” Scrum project management, and XP engineering practices. Defers to root texts for details on each method.



Walsh's OpenXP Approach

Step	Purpose	Output
Phase One: OST-based Analysis		
OST 1: Create theme	Provide the centre focus, the objective for the meeting	One sentence meeting agenda posed in the form of a question
OST 2: Voice concerns	Elicit requirements as concerns directly relating to theme	High level requirements raised as concerns surrounding the theme
OST 3: Explore concerns	Describe, elaborate and explore requirements collaboratively and identify appropriate improvements	High level requirements more comprehensively examined and a set of potential improvements identified
OST 4: Prioritize improvements	Organise business improvements based upon priorities	Prioritized set of high level business improvements
Phase Two: Linking Activity		
Link 5: Develop scenarios	Establish more refined detail for the highest priority improvement	Potential usage scenarios (Flexible format – can use multiple modes of expression)
Phase Three: XP-based Software Development		
XP 6: Create user stories	Create more detailed requirements from personalised scenarios	Lower level requirements
XP 7: Prioritize user stories	Organise the order in which stories will be completed	Prioritized set of user stories
XP 8: Plan iteration	Organise prioritized stories into iterations	Planned iterations of stories to be implemented
XP 9: Implement stories	Write code to develop stories	Working software

Goal: Better, faster, cheaper results via better, faster, cheaper elicitation and communication of business requirements to technical teams.

Innovation: Dr. Sandra Walsh used Open Space Technology to rapidly develop a multi-layer understanding and fully-engaged stakeholder universe, as the foundation for software development.

Connection: Walsh's teams developed usage scenarios to further refine and translate business context for XP-based development team(s).

Adaptation: the SMARTer Agile approach recognizes Walsh's linking work as a "fancy" form of action planning, appends that as the final output step in the Open Space context work, and generalizes the whole approach to support any Agile engineering practices.

The “SMARTer Agile” Approach

Working Context via Business Analysis Marketplace (Open Space)

1. Planning Conversations => Stakeholder Summit/Series Invitation (incl. invite list, place/time and communication infrastructure (collaboration places/platforms)
2. Summit Opening => Business Issues and Opportunities Identified, with Champions
3. Working Conversations => Documentation of Business Requirements
4. Sorting/Prioritizing Process => Business Backlog of Ready and Researchable Issues
5. Usage Scenario Sessions => User Journeys detailed for top priority issues

Working Software via Agile Development (Scrum, XP, Kanban, etc.)

1. Create user stories, sizing based on complexity
2. Prioritize user stories and confirm top stories' readiness for development
3. Select user stories for each iteration, creating tasks/estimates
4. Complete tasks to deliver stories commitment for iteration
5. Review completed stories with stakeholders (at the end of each iteration)
6. Inspect and adapt development process with team (inline or at end of each iteration)

Practical Outcomes

- Better Communication – open, engaging, purposeful
- Better Requirements – grounded in business improvements
- Better Understanding – multi-perspective, multi-layer context
- Better Investments – earlier go/no-go decisions, better estimates
- Better Connections – more stakeholders, better qualified
- Better Scaling – efficient, organic, multi-team, multi-function, w/testing
- Better Recovery – process reset vs. redesign
- Better Enterprise Agility – business and tech working together

Open Space Case Stories

A few examples of business requirements written in Open Space meetings,
by large groups and/or high-level participants, for multi-team/multi-stakeholder systems…

- AT&T, Atlanta Olympic Games, two dozen skeptical experts created a new plan for the company's pavilion building, completing 10 months of work in TWO DAYS.
- Structural Dynamics Research Corp (SDRC), annual Customer Council for Strategic Direction, brought together representatives from13 largest customers to co-design the next year of releases of automated design software.
- City of Peoria, the Future of Peoria's Neighborhoods, engaged hundreds of citizens in crafting requirements and setting priorities for the city's ongoing maintenance and development work, a backlog the city worked for 10+ years.
- Peoria School District, the Future of Education in Peoria, engaged hundreds of citizens in crafting requirements and setting priorities for efforts to improve Peoria's schools.
- Chicago Community Trust, the Future of Illinois Food Security, statewide summit generated requirements and priorities for providing "healthy food for all," statewide.
- Ocean Leadership, the Future of Ship-to-Shore Education, developed and chartered pilot projects for multi-team, NSA-funded, national ocean science education initiative.

…from 30+ years of global experience in Open Space.

Additional Notes

- Four powerful drivers of Agile success, make other Agile methods smarter
  - Invitation and voluntary self-selection vs. assignments and mandates
  - Broad, active stakeholder participation vs. token stakeholder representation
  - Experiential learning of values and principles vs. enforcing prescribed behaviors
  - Technical requirements and tasks deeply and directly tied to specific business needs and issues
- Highly flexible: Introduce in any “complex” project/setting, scale/shape to fit unique needs/issues
- Open Analysis can be done in summit or serial meetings, in shortest time possible, with go/no-go decision at the conclusion of step 1.4 and/or 1.5.
- Key (CRACK) stakeholders surface in Open Space: Collaborative, Representative, Authorized, Committed and Knowledgeable breakout session conveners become obvious stakeholder core
- Minimum Viable Participation or Scrum of non-Scrums: Core Scrum/XP team(s) can keep cadence, supporting teams and stakeholders connect via intra- and inter-team stand-ups
- Open Space teaches agility through individual choice, collaborative interactions, personal commitment and responsibility, transparent working documentation, and adapting to change within strategic parameters.
- Low start-up cost, short lead times, high returns, and learning endures

Where to Start?

Where's Your Wicked Complexity?

- Product/Initiative?
- Business Stakeholder Universe (ALL stakeholders)?
- Development Team(s)?
- When and Where?
- What would Wicked Success look like?