The Third Decade of Agile
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1st Generation

- XP, Scrum
- Team centric
- Few principles known
- Designed for products being built by a team
- Used in IT organizations

Challenges

- Team formation not always advisable
- Unfamiliar roles
- Often too much change
- Management not included
- There is a lack of flexibility which is needed in IT environments & product environments which require heavy maintenance
2nd Decade

Kanban
Lean
Scrum@Scale, SAFe, LeSS

Bottom up

Complexity

Approaches have become like the cathedral

Challenges

• It’s not either or
• Dealing with complexity
• One size does not fit all
• Bottom up isn’t working
• Top down management doesn’t work either
• Missing simple product management methods

When an approach quotes a Lean or Flow principle see if it’s actually in the system
The purpose of an organization is to provide **value to the customers and a great working environment** to their employees so they can manifest a sense of purpose and acknowledgement.

**3rd Decade**

What shifts are needed? 
What challenges do we need to overcome?

Create the bazaar
(inclusive diversity)
The Shifts Needed

1. **from development to Business Agility and Flow**
2. from people to systems thinking and Lean Management
3. from starting attitude to changing culture
4. from dogma to science
5. From the cathedral to the bazaar

- The purpose is Business Agility
- Focus on the value streams, not teams nor programs
DEFINITION

Goal and Benefit of Business Agility

The realization of the highest business value in a shorter amount of time, predictably, sustainably, and with high quality.

By working in small delivery increments we continuously adjust to what is needed – enabling change to direction at lower cost.

DEFINITION

Minimum Business Increment (MBI)

The minimum amount of business value that can be built, deployed and consumed that makes sense from a business perspective. It contains all the pieces required for realization of value. An MBI is not a reason to deliver less. It is a reason to deliver sooner.
### MVPs and MBIs – not the same

<table>
<thead>
<tr>
<th>Purpose of Investment</th>
<th>MVP</th>
<th>MBI</th>
</tr>
</thead>
<tbody>
<tr>
<td>New product</td>
<td>MVP</td>
<td>MBI</td>
</tr>
<tr>
<td>Start small</td>
<td>MVP</td>
<td>MBI</td>
</tr>
<tr>
<td>Light marketing and support</td>
<td>MVP</td>
<td>MBI</td>
</tr>
</tbody>
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When sequenced, enables local decisions within the larger context. Something epics and features which are not releasable on their own don’t do.

- **Investing for information about the product**
  - MVP
  - MBI
- **Maturity of product**
  - MVP
  - MBI
- **Size at start**
  - MVP
  - MBI
- **Need for marketing**
  - MVP
  - MBI

- **Expecting a return in from product built**
- **Enhancement**
- **Start with initiative and break down into small chunks**
- **Existing clients to market and support**

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### Business Agility

*is about*

**Business Value Increments**

*not Development Cycles*

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**Project to Product** -
connect the business with technology via the Flow Framework™.

Mik Kersten
Common Organizational Structure

The Nature of Our Work
We Manage Our People This Way

Who Is Managing The Value?

even though our value flows this way

Time-to-Market

This is the value stream

Marketing  Product Management  Development  Support
Time-to-Market

how often does work wait?

What percent of the time is our work moving forward?

How much of the time is it waiting for something else to be done?

How would you know?

No one is managing this in most companies.
If you only quantify one thing, quantify the Cost of Delay.

Don Reinertsen 2009, *Principles of Product Development Flow*

Cost of delay is how much does a delay cost you in dollars (or services that could have been rendered if you are a not-for-profit). For example, if a product will return $200,000 per month, the cost of a four month delay is $800,000.
Planning, Collaboration, and Dependency Management

A well-defined development intake and planning process so that work is focused on the most valuable items

Implementation and Integration

Networks, self-organizing, mostly autonomous teams
Release and Realization

A focus on the customer along with validating our efforts

Ops, marketing and support are integral parts of the effort

Plan-Do-Study-Adjust

Continuous learning on both practices and understanding why they work
Lean -> Flow

Lean:
- Systems thinking
- Leadership / Management
- Small batches
- Attend to time (“just in time”)
- Attend to quality
- Control systems by reducing variation

Flow: Make systems robust to variation
- Don Reinertsen
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- Systems are more about the relationships between the components than they are about the components.
- Take a systems-thinking approach that includes how people will both react and misunderstand the framework.
Reductionist thinking does not work with complex systems

Which part of the airplane is responsible for FLIGHT?

Optimize the whole; don’t optimize locally!

http://www.youtube.com/watch?feature=player_detailpage&v=OqEelG8aPPk

“What if Russ Ackoff gave a TED talk?”

A bad system will beat a good person every time.

People are already doing their best, the problems are with the system.

Edwards Deming
We trust the people, we don’t trust our system.

Lean respects people by focusing on the system – *which must be managed*.

Edwards Deming paraphrased for the Agile world

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A system must be managed. It will not manage itself. Left to themselves, components become selfish, competitive, independent profit centers, and thus destroy the system ... The secret is cooperation between components toward the aim of the organization.

W. Edwards Deming
Curling sweepers as a metaphor for management

Are any of these people less committed than the others?

Who are the managers?

Towards Middle Up Down Management: Accelerating Information Creation
Ikujiro Nonaka, 1988

The New New Product Development Game.
Hirotaka Takeuchi and Ikujiro Nonaka, 1986.
“Culture eats strategy for breakfast.”

-Peter Drucker

What if you don’t have an Agile ‘culture’?

Is there anything that we can do about it?

You get more trust by working together than you do by talking about why you need it.

It is easier to work yourself into a new way of thinking than to think yourself into a new way of working

Shift from frameworks to work
Culture is important, but changing it directly is not possible. Culture is no more likely a target than the air we breathe. It is not something to target for change. Culture is an idea arising from experience.

That is, our idea of culture of a place or organization is a result of what we experience there. In this way a company’s culture is a result of how people collaborate with each other.

Culture is critical, and to change it, you have to change your method of collaboration.

Focus on agreements, behaviors, specific expectations, tools and routine practices.

Lean systems make this easier because they emphasize explicitly defined agreements and use visual controls to make the work and agreements visible.

Resistance is not to change.

In practice, all systems do insist on exercising their own creativity. They never accept imposed solutions, pre-determined designs, or well-articulated plans that have been generated somewhere else.

Too often, we interpret their refusal as resistance. We say that people innately resist change.

But the resistance we experience from others is not to change itself. It is to the particular process of change that believes in imposition rather than creation. It is the resistance of a living system to being treated as a non-living thing.

It is an assertion of the system’s right to create. It is life insisting on its primary responsibility to create itself.

A Simpler Way. Margaret Wheatley & Myron Kellner-Rogers

It is better to help developers do their job than to provide them a framework within which to figure it out.
Approaches must include the way people react to them

If they don’t:

• they are not systems-thinking approaches
• people will make the same mistakes across adoptions
• a symptom will be that proponents lay the blame on the adopters
  • “Well, they didn’t follow it”
  • “Management wasn’t involved”
  • ...

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Hypothesize that the framework is the best way to do what it is trying to accomplish.

• How do we measure improvement?
• Cost of delay
• Cycle time
• Need to validate predictions
• Requires frameworks to be able to evolve as we learn more

The difference between science and religion is religion can't abide being wrong while science seeks to be wrong. Neil Tyson
Don’t be a slave to the practices, be a slave to the principles. **Troy Magennis**

1. Increase ability to safely compare teams, mostly trends to identify if every team impacted by system issues. Make teams aware metrics aren't just to beat them up, and they can be used to highlight manager and process dysfunction.

2. Using data for forecasting. Why? Because it takes a system view of how long, not just a team view.

... more

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*Build a community of people who can work together, each providing their own expertise.*

*Based on science, Flow, Lean and Agile*

*Inclusive diversity*
The Challenges to Overcome

1. Be able to make reasonably accurate predictions whether a change will be beneficial
2. Create a well-defined, customized starting point
3. Provide options to adopters to avoid reinventing the wheel
4. Be able to expand an approach and without adding complexity
5. Be architected so they can accommodate the prior three points
6. Simple model for Agile product management that works at all levels
7. Attend to technical practices
8. Effective, economical, distributed training

Challenge

- But we’re in a complex system so accurate predictions are not possible

Solution

- Recognize patterns exist, attend to relationships in the system and check on what happens
Complex systems still have patterns

different kinds of predictability
Complexity does not mean we can’t make predictions.

Value Stream Impedance

Whatever slows us down from getting value realized:
- Number and size of work in process
- People in a value stream not working together
- How people are both geographically and managerially located
- Sequence work is done in (test-first lowers this)
- Too much WIP
- Too little automation
- Long feedback cycles
- The disparity between management structure and the way the real work takes place
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Challenge
- No one size fits all
- But a pre-set starting point is not likely to be well suited to the organization.
- Starting with a framework means there is **not enough time** to teach key practices up front.

Solution
- Create a starting point for your organization based on its needs. Focus on practices needed with as little framework as possible.

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- Providing too many options can be confusing, but not providing enough options requires re-inventing the wheel
- Adding options can make things complicated

Solution:
- Organize options in pattern groups which contains patterns, or ways to solve problems based on particular context. This makes for easy navigation. Also, indicate which options should be used.
- *Don’t be a slave to practices. Be a slave to principles*
Simple start but not built for expansion

Simple start, built for expansion

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**Challenge**
- Adding capabilities seems to naturally add complexity
- Frameworks based on simplicity cannot grow if they can't do this. Other frameworks will get more complicated as they grow if they don't do this.

**Solution**
- Use a framework of patterns with well-defined relationships to each other. Base this on the value stream so can be clear how they create the context for each other.
The Challenges to Overcome

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**Frameworks must be architected**

Use pattern language approach of each pattern creating the context for the other one.

Enables substitution by other people.

This enables creating a bazaar solution

- Consultants can add to the framework in a disciplined, cohesive manner
- Consumers can find who they need

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**Challenge**

- Alignment is difficult across levels. Integrating different perspectives doesn’t work well.

**Solution**

- Provide clarity on what to work on across all levels. Use lowering cost of delay as the guide.
- This both states the smallest value that can be realized as well as all the items needed to realize it.
- Use a concept equivalent to the MBI (can also use the MVP)
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**Challenge**
• The demand for experienced Agile is growing faster than supply can fill.
• Most current Agile training is using old-school classroom methods
• These are causing biggest impediment to Agile adoption today

**Solution**
• Use scaled-learning and flipped classroom methods to lower training costs dramatically while improving retention.
• Avoid 0 -> 60 certifications
Synopsis

Shift to:
✓ Business agility and flow
✓ Systems-thinking
✓ Attend to culture
✓ Science
✓ Bazaar

Learn how to:
✓ Make predictions
✓ Create tailored starting points
✓ Provide options
✓ Expand an approach and without adding complexity
✓ Have a good architecture
✓ Align around value
✓ Attend to technical practices
✓ Use modern training methods

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Product Owner

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