

Enough of Process - Let's Do Practices

Ivar Jacobson,
Pan Wei Ng, Ian Spence

Contact: *ivar@ivarjacobson.com*



Enough Process – Let's Do Practices

**In the future, an ever present
but invisible process**

**Process becomes
second nature**

**The team's way-of-working
is just a composition of
Practices**

**We need a
new paradigm**

Practice is a First Class Citizen
the unit of adoption, planning and execution of process

**From the successes
in modern software
development**

**The Software
Engineering
Camp**

**Process
Maturity Camp**

**Agile Methods
Camp**

Examples:

Unified Process

CMMI, Spice

XP, Scrum

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NEW

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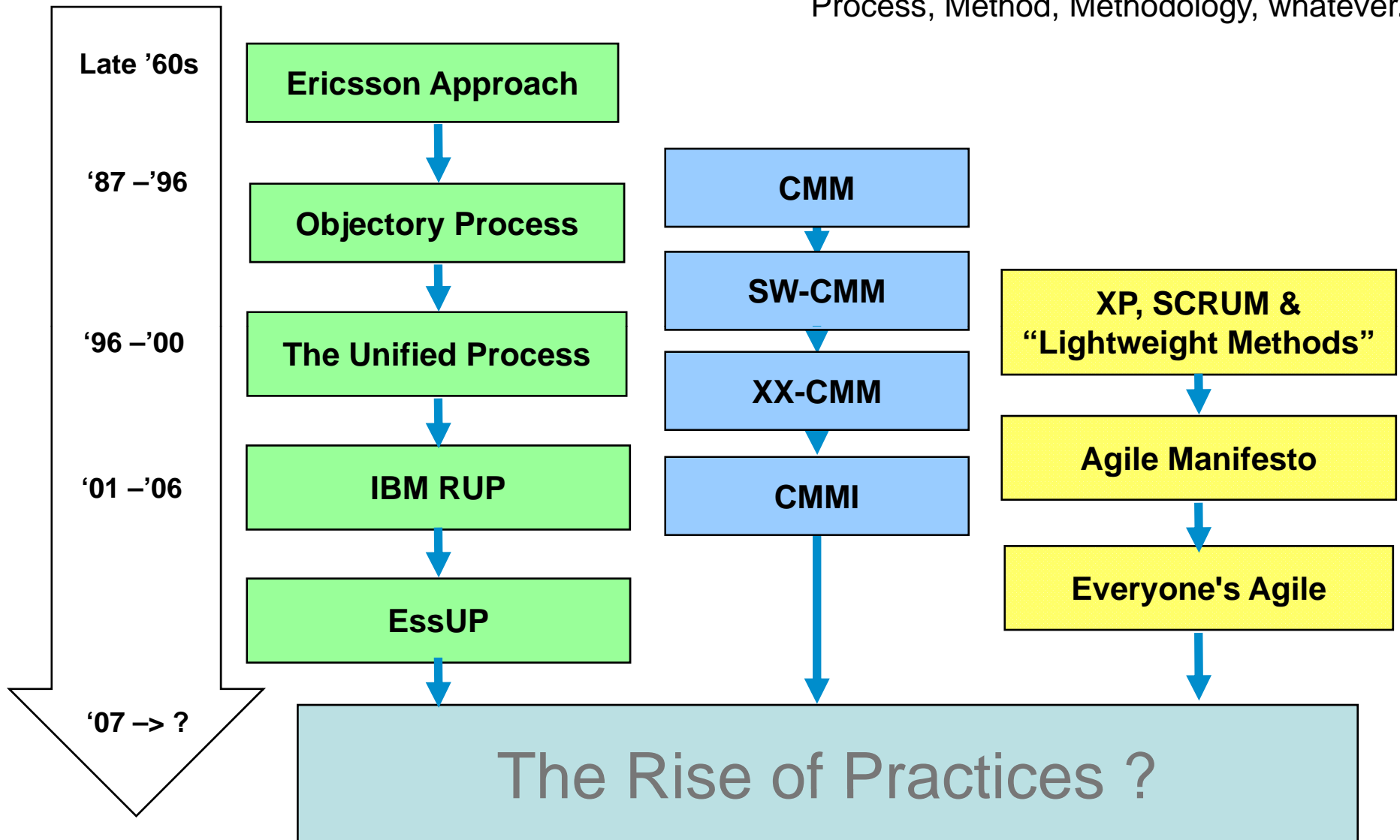
XP, Scrum

Agenda

- A little bit of history
 - Thoughts from 40 years of practice development
- What makes a good practice?
 - When is a best practice a well-formed practice?
- Harnessing the power of practices
 - The real enabler of sustainable change
- Wrap up

40 years of process* development

* Process, Method, Methodology, whatever...



What else have we learnt? They're hard to learn...



You can get knowledge from books . . .
....or from a web-site.

...and hard to love

- Every process tries to be complete
 - As a consequence every successful process will grow until it dies under its own weight
- Every branded process is just a soup of ideas "borrowed" from other processes
 - With some new idea(s)
- The process is out of sync with what the team does...
 - ...and the project – process gap get wider and wider
- The project has to adopt an entire process
 - No-one uses an entire process or limits themselves to practices from one process

It's no wonder no-one likes process.

A different perspective - 40 years of practice development

'87 - '96



Use-Case Driven Development Paper, OOPSLA, 87



The Objectory Process and Object-Oriented Software Engineering, Addison Wesley, 1992



UML, OOPSLA, 1995

IBM Method, 1996

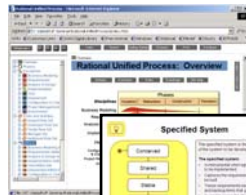


The Rational Objectory Process, 1997

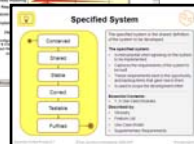
The Unified Software Development Process, Addison Wesley, 1999



'01 - '06



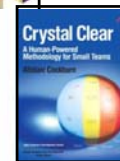
RUP



EssUP



Catalysis, 1998



Crystal, 2004



Company X, Y & Z Methods

More and more methods and processes using use cases.

'07 -> ?

And now a simple practice again...



Use-Case Essentials

What can we conclude from all this?

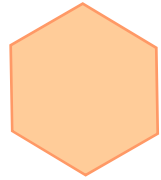
- There is no one-true process
- Processes and practices, like the rest of our industry, never stand still
- Good practices stand the test of time
- We need a new way to share the knowledge
 - books and web-sites are not enough

A new approach is needed – one that
frees the practices from the tyranny of processes.

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There are 100's of so-called practices...



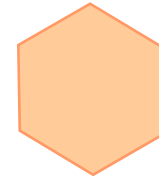
Business Modeling



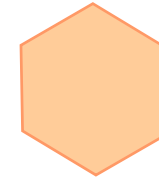
Test-Driven Development



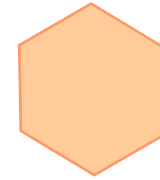
Scrum



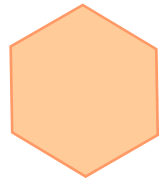
Product-Line Engineering



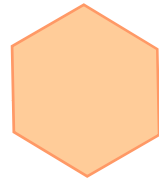
Risk-Driven Iterative Development



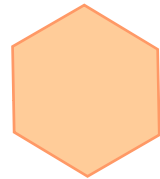
Systems Engineering



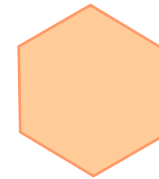
Aspect Orientation



Robustness Analysis



Retrospectives



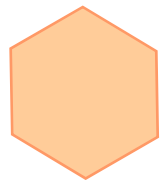
Business Process Re-Engineering



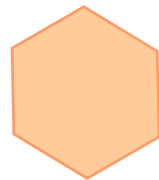
Use-Case Driven Development



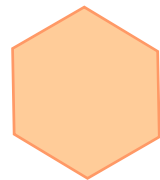
Pair Programming



PSP



User Stories



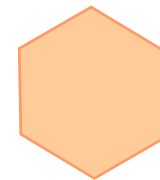
SOA



Prince2





















Use-Case Modeling



Program Management

...but are really all the same kind of thing?

There are 100's of so-called practices...

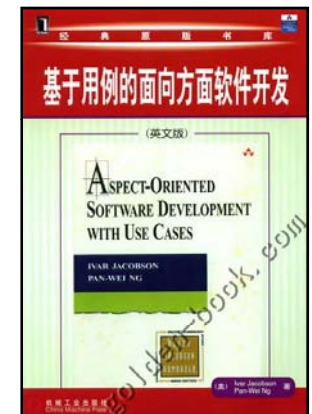
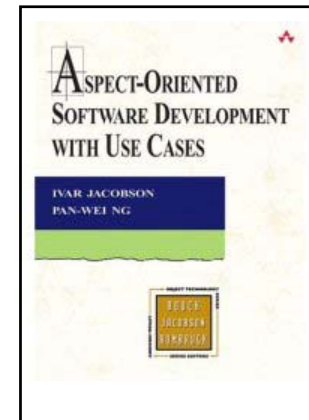
 Business Modeling	 Test-Driven Development	 Scrum	 Product-Line Engineering	 Risk-Driven Iterative Development	 Systems Engineering
 Aspect Orientation	 Robustness Analysis	 Retro-spectives	 Business Process Re-Engineering	 Use-Case Driven Development	 Pair Programming
 PSP	 User Stories	 SOA	 Prince2	 Use-Case Modeling	 Program Management

...but are really all the same kind of thing?

We need a shared definition of “practice”

Pragmatics

- A practice provides a way to **systematically** and **verifiably** address a particular aspect of a problem.
 - A Practice has **a clear beginning and an end** allowing it to be separately applied
- Examples of practices are
 - Iterative development
 - Use case driven development
 - Project management à la Scrum
 - Team practice incl workshops, war room, pair programming, etc.

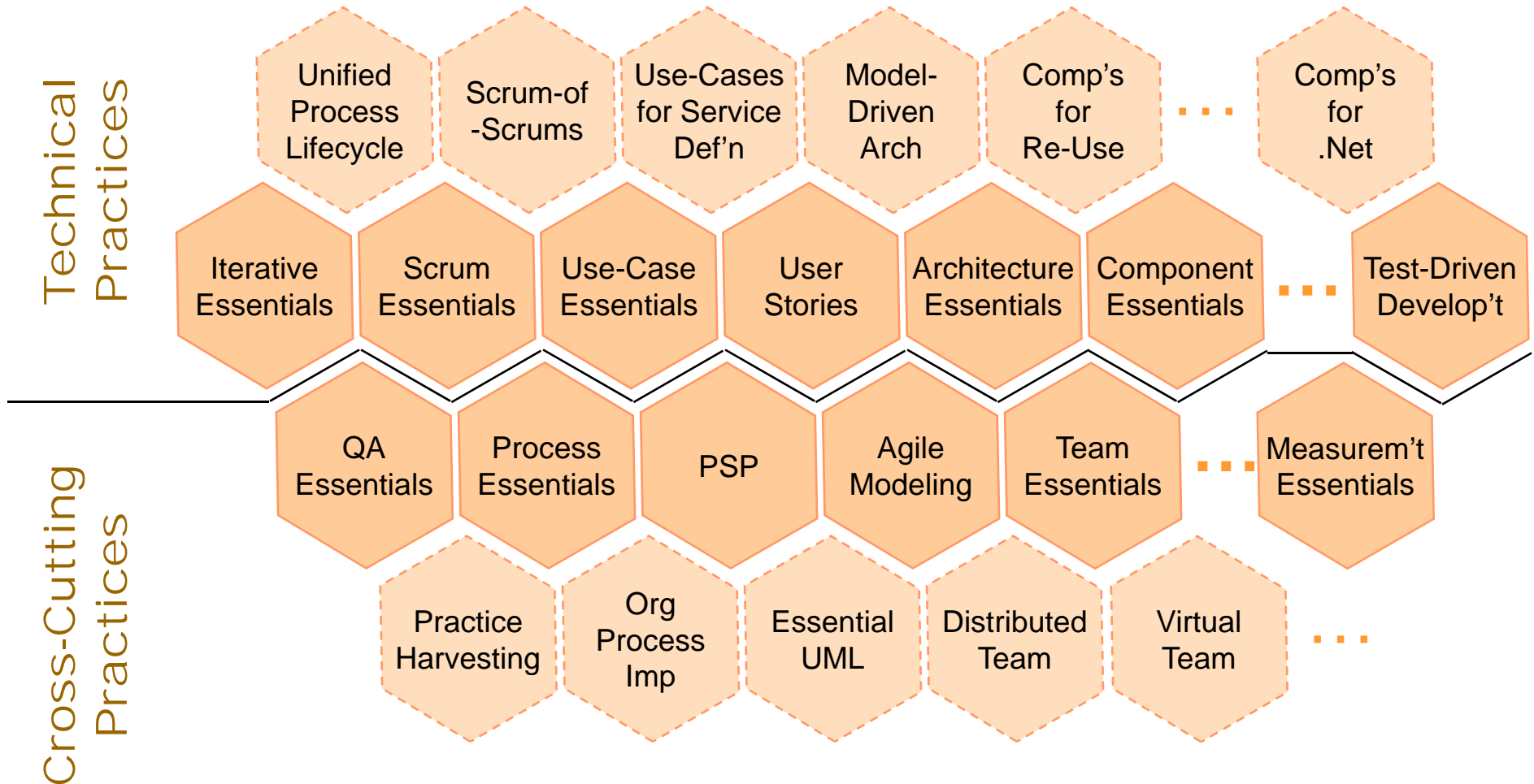


More precisely

- A use-case module in our AOSD book
 - It has a beginning and an end
 - It may be a peer practice or extend an existing practice



There are different kinds of practice



Key:

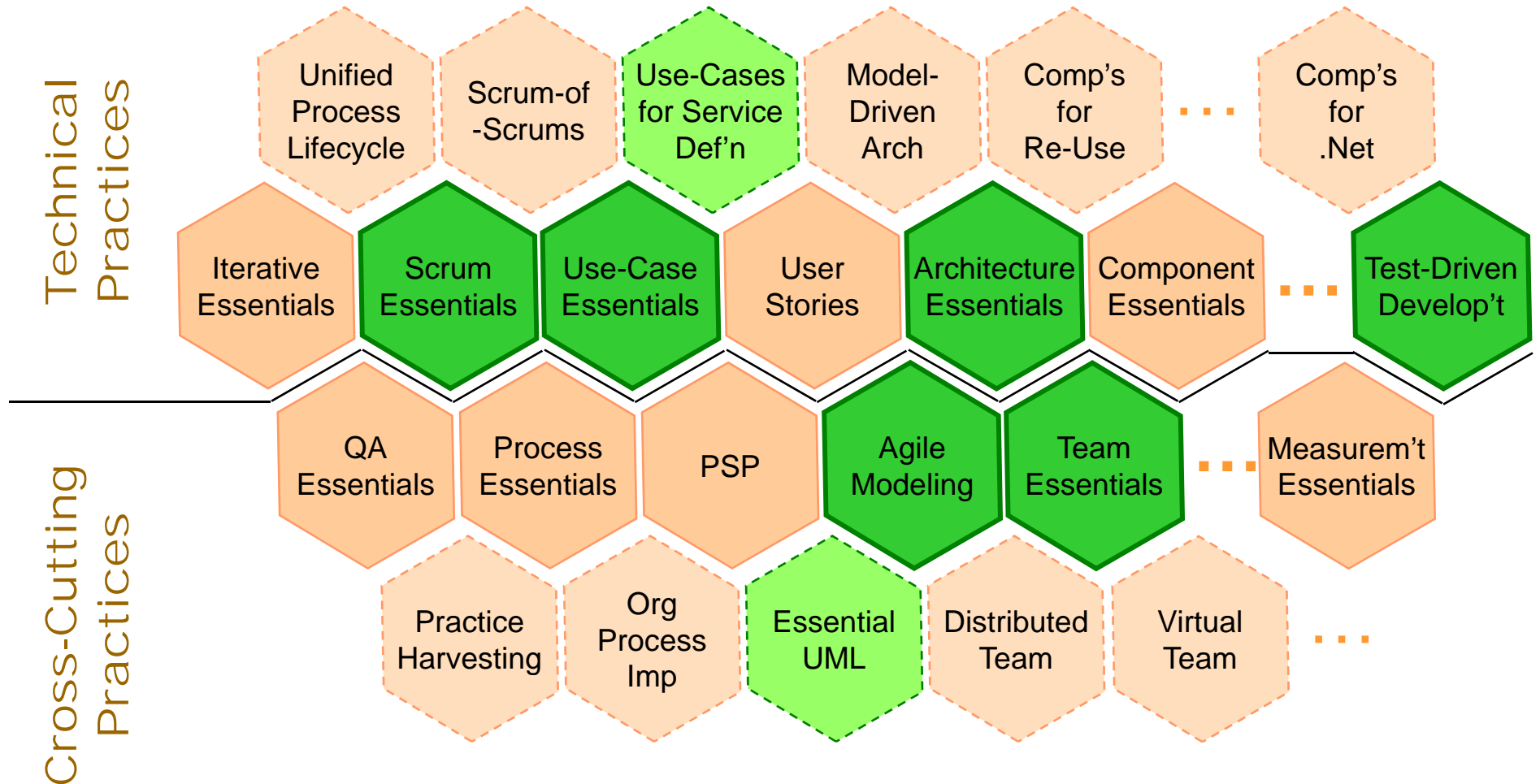


Peer Practice



Extension Practice

Processes are just collections of practices



Key:



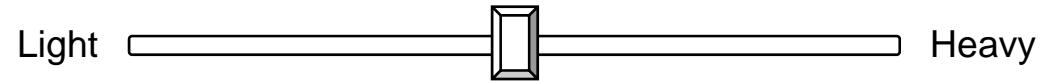
Peer Practice



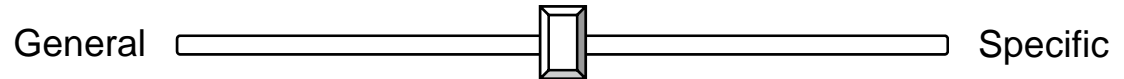
Extension Practice

Practice descriptions have many dimensions

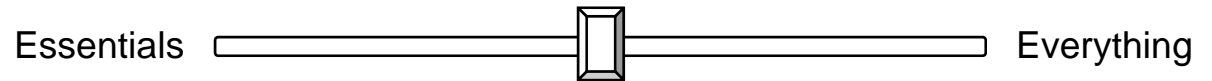
Weight:



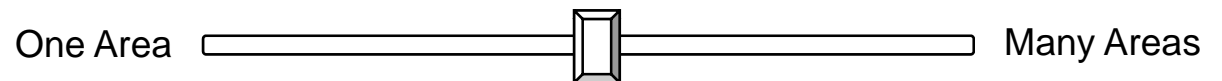
Application:



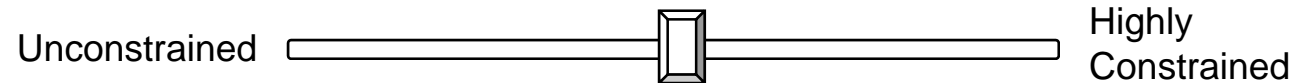
Depth:



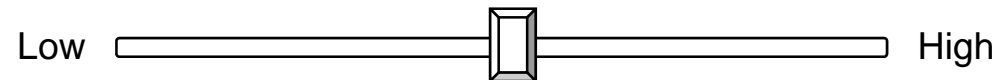
Breadth:



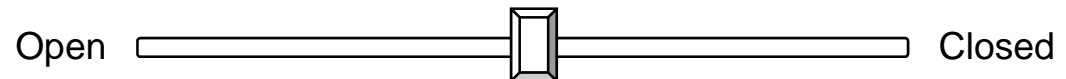
Prescription:



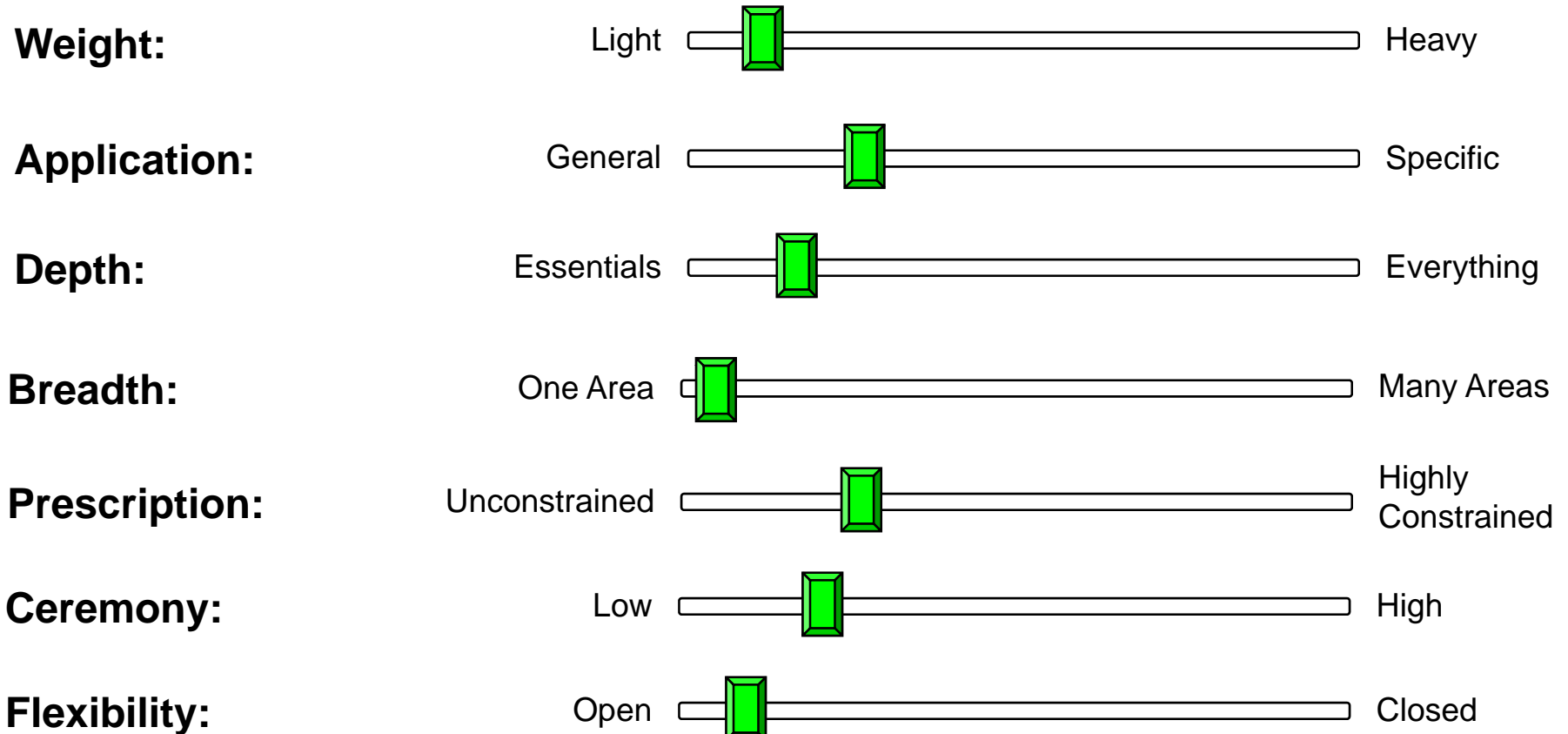
Ceremony:



Flexibility:

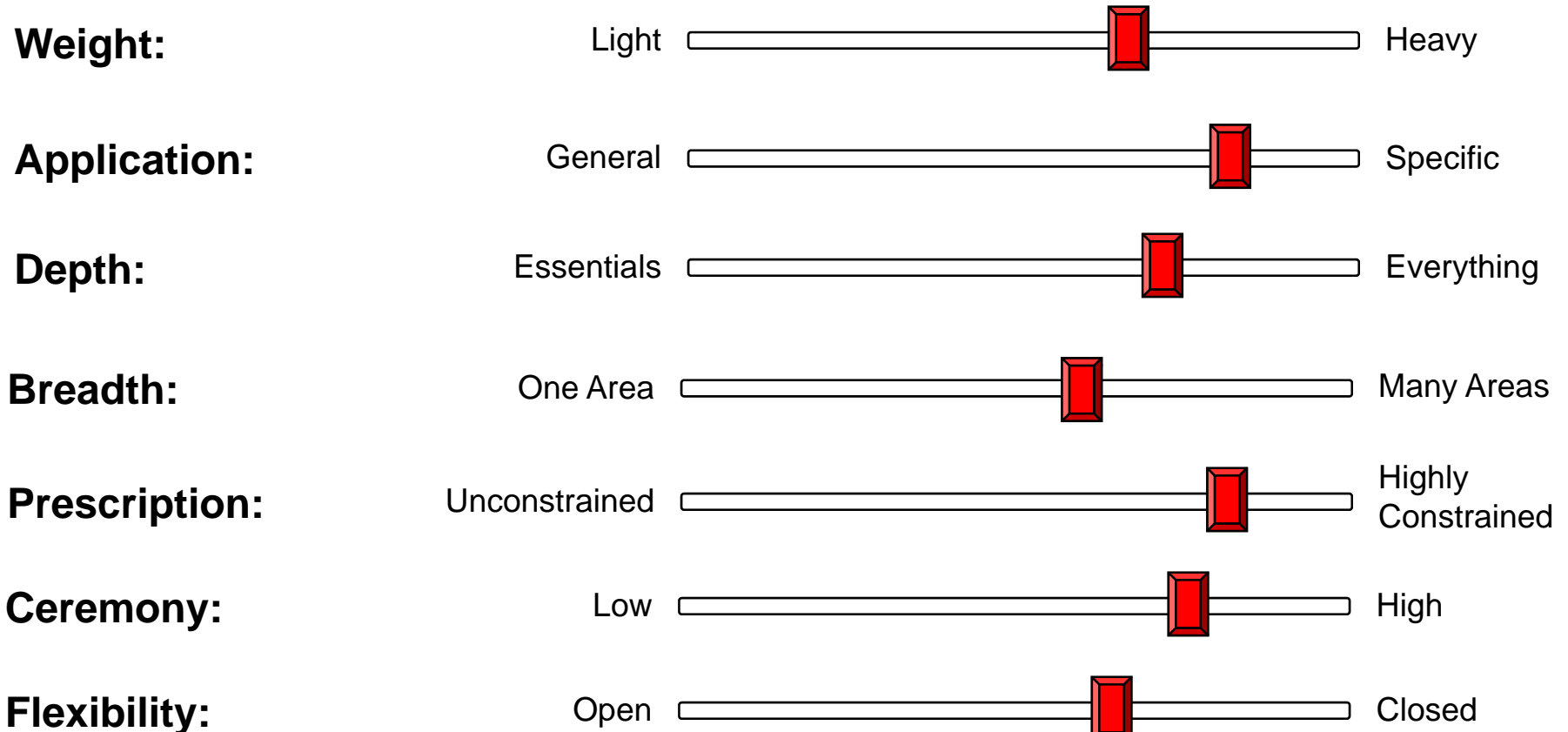


Practice descriptions have many dimensions



**Start with a lightweight, flexible definition
that captures the essentials**

Practice descriptions have many dimensions



Add detail, prescription, ceremony, and formality by extension

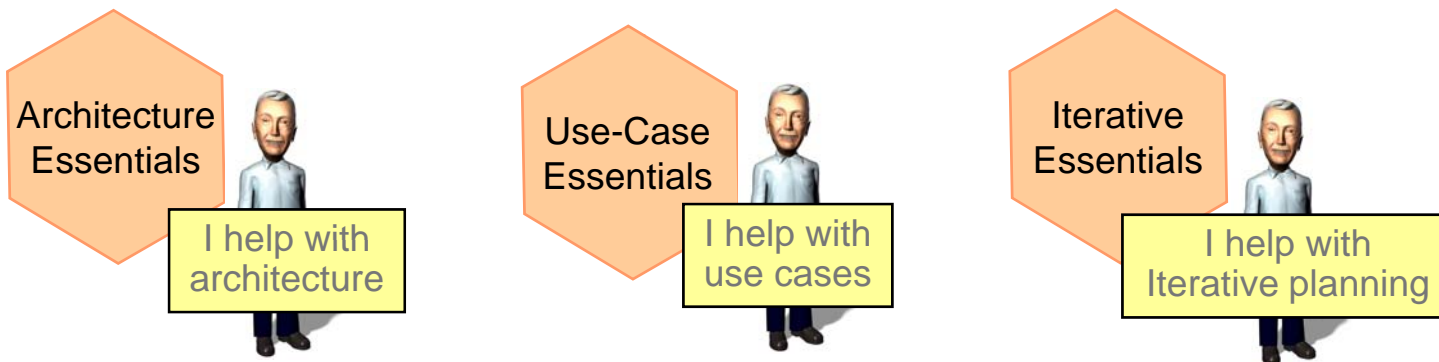
But don't go too far



**Adding more and more detailed,
step-by-step instructions doesn't help anybody.**

People want smart, interactive practices

Smart Practices come with intelligent agents and automated guidance.



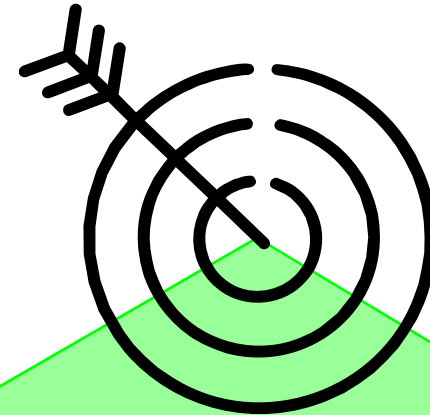
Add active guidance, review, checking and help by automation.

Practices need to embrace what's happening

Mash Ups

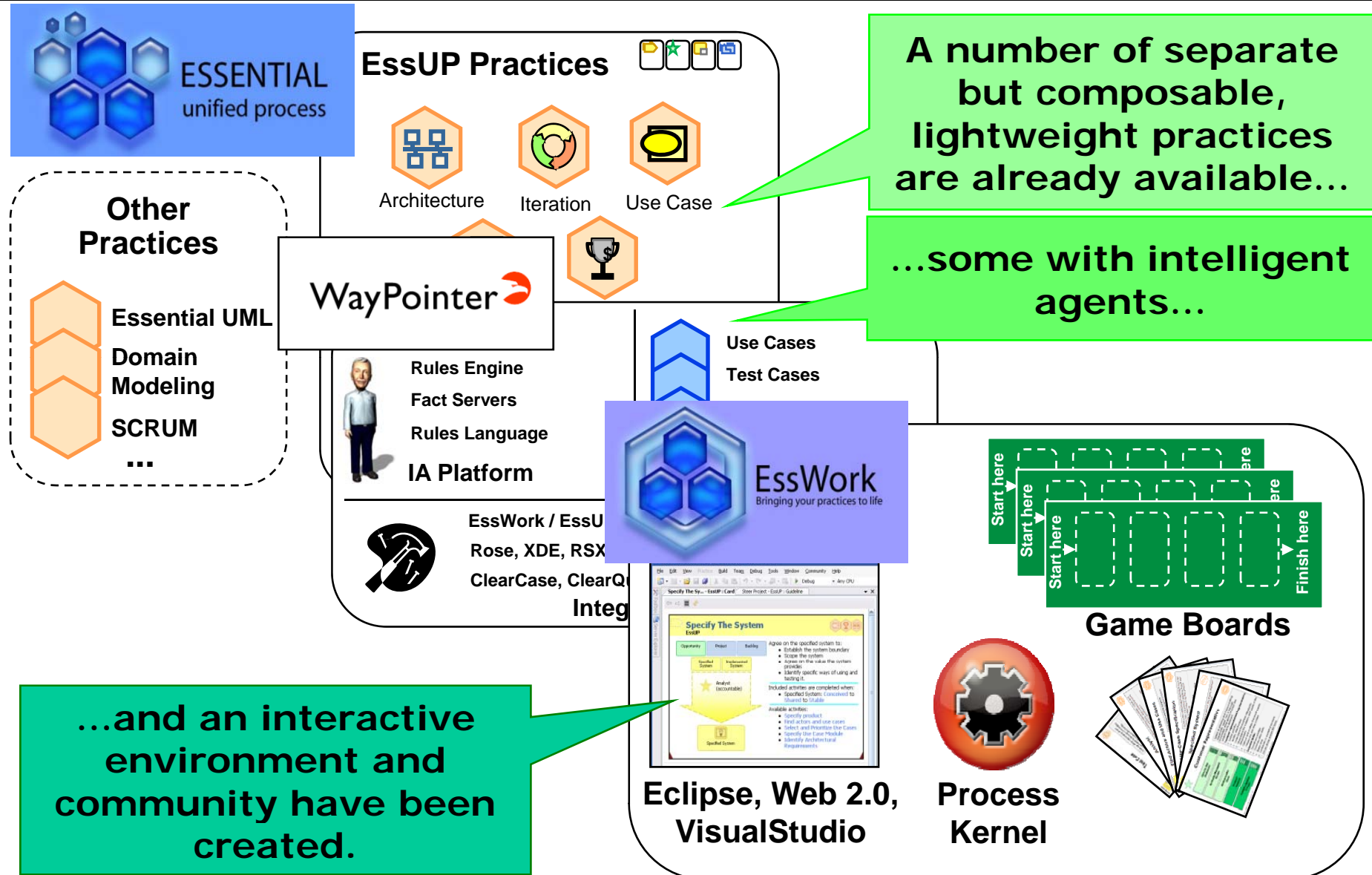
Smart Tools

Social Networking



**Lightweight,
composable,
sociable,
intelligent
practices**

This isn't just hot air



We've more than enough best practices...

- Separate the practices from one another
- Combine them in innovative and exciting new ways
- Stop re-inventing the wheel
- Learn from the past
- Focus on collaboration and improvement
- Stop throwing the baby out with the bath water

...let's make them useful.

We've more than enough best practices...

- Separate the practices from one another
- Combine them in innovative and exciting new ways
- Stop re-inventing the wheel
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- Focus on collecting
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**Free the
Practices**

...let's make them useful.

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Changing things is hard...

“Many team and organization change and improvement efforts are lost or badly bewildered. Decades of studies have consistently shown that 50–70 percent are failing.”

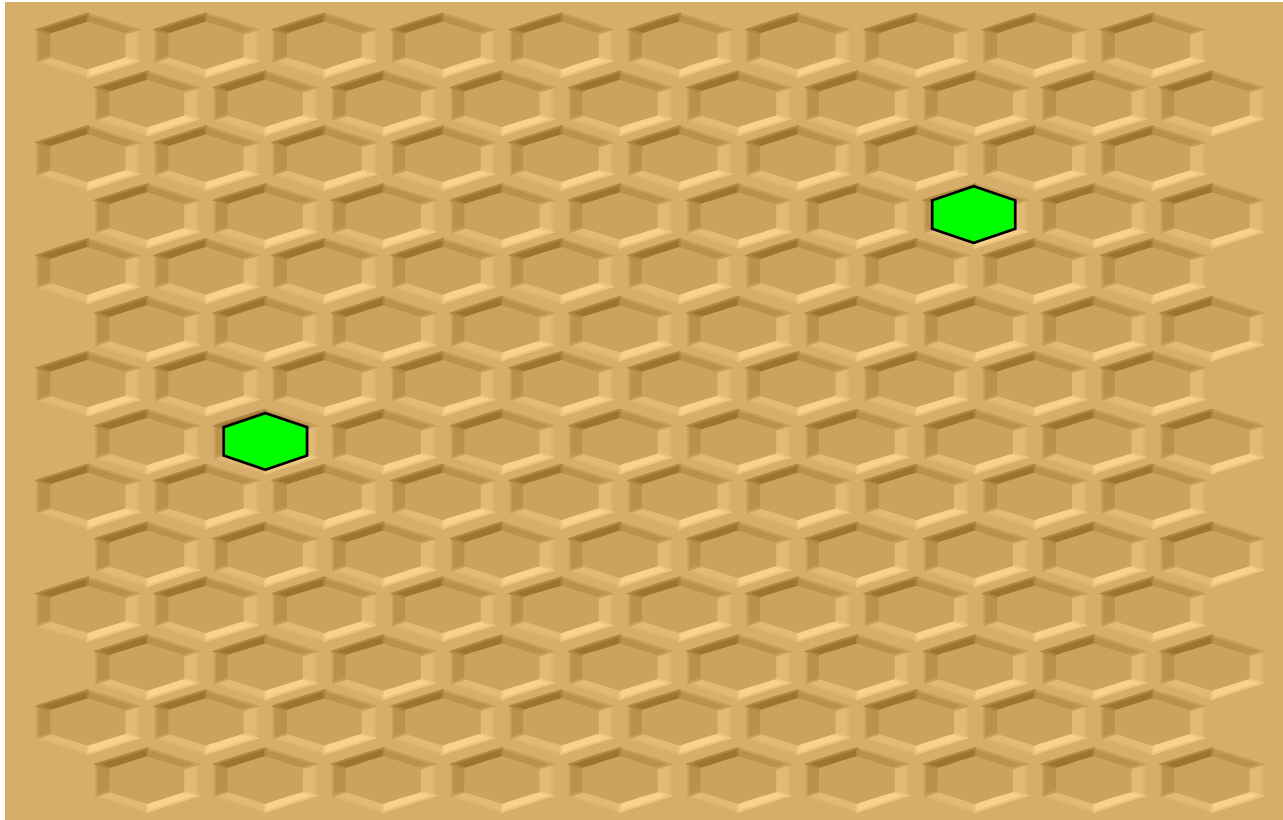
Jim Clemmer, Pathways to Performance,
Macmillan Canada and Prima Publishing

“...there’s enough evidence of success to say that change is possible – and enough evidence of failure to say that it isn’t likely.”

Peter Senge, the ‘father’ of the learning organization

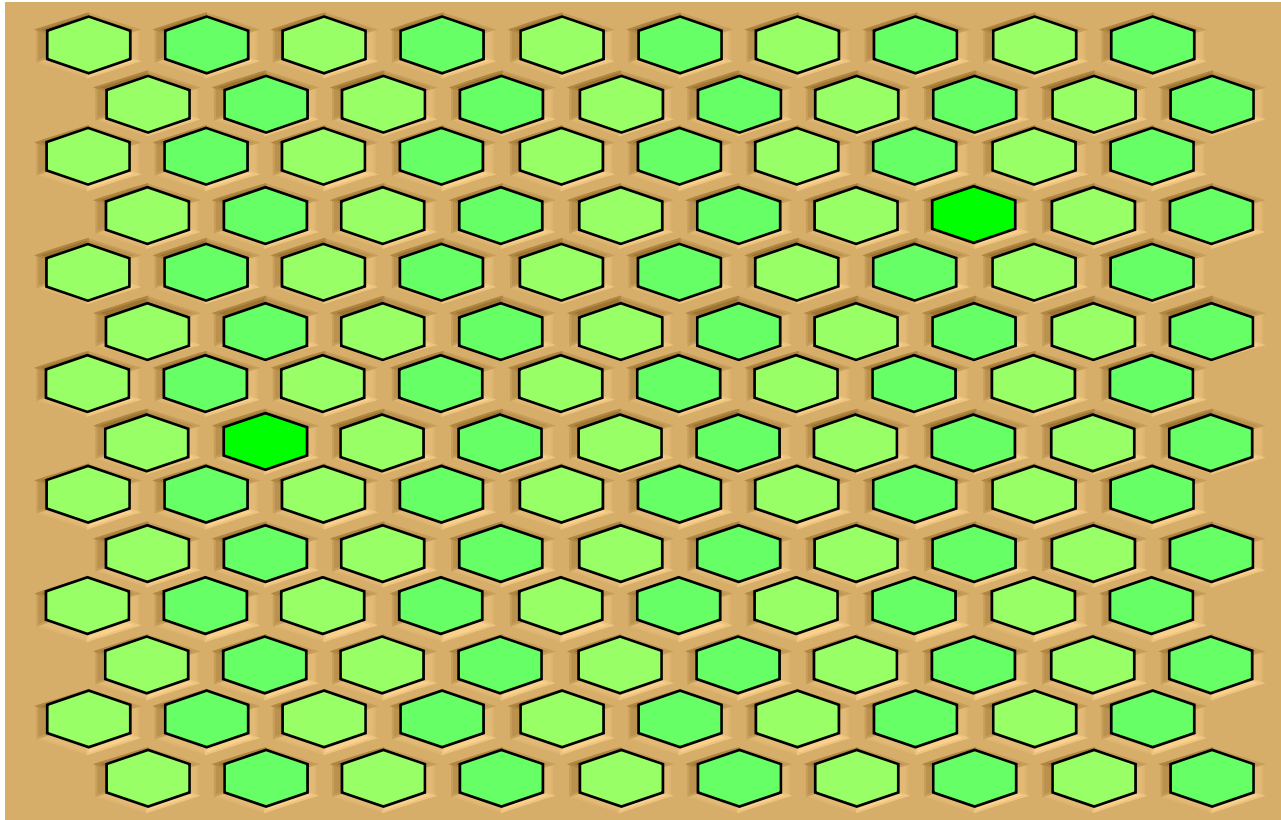
...and changing people is even harder.

What methodologists think happens in an organization



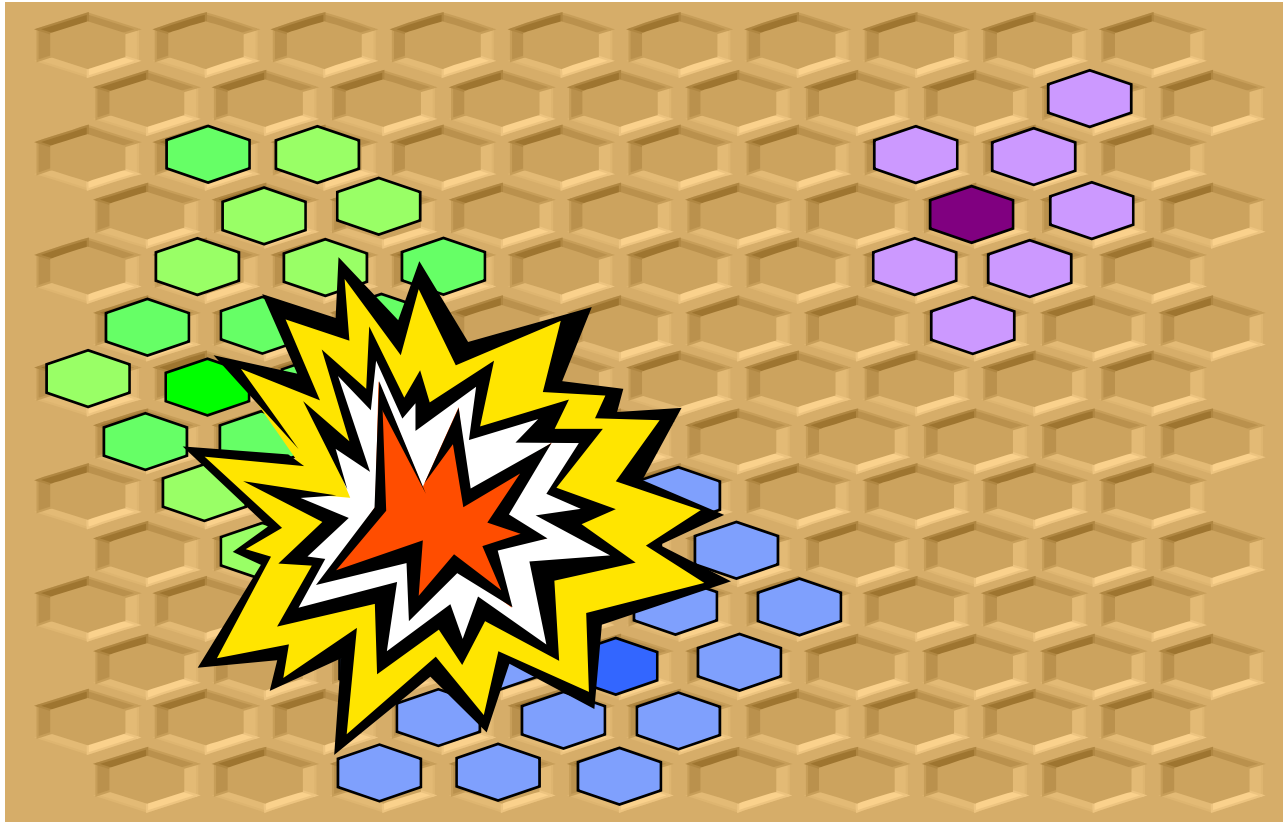
You put the process into one or two pilot projects...

What methodologists think happens in an organization



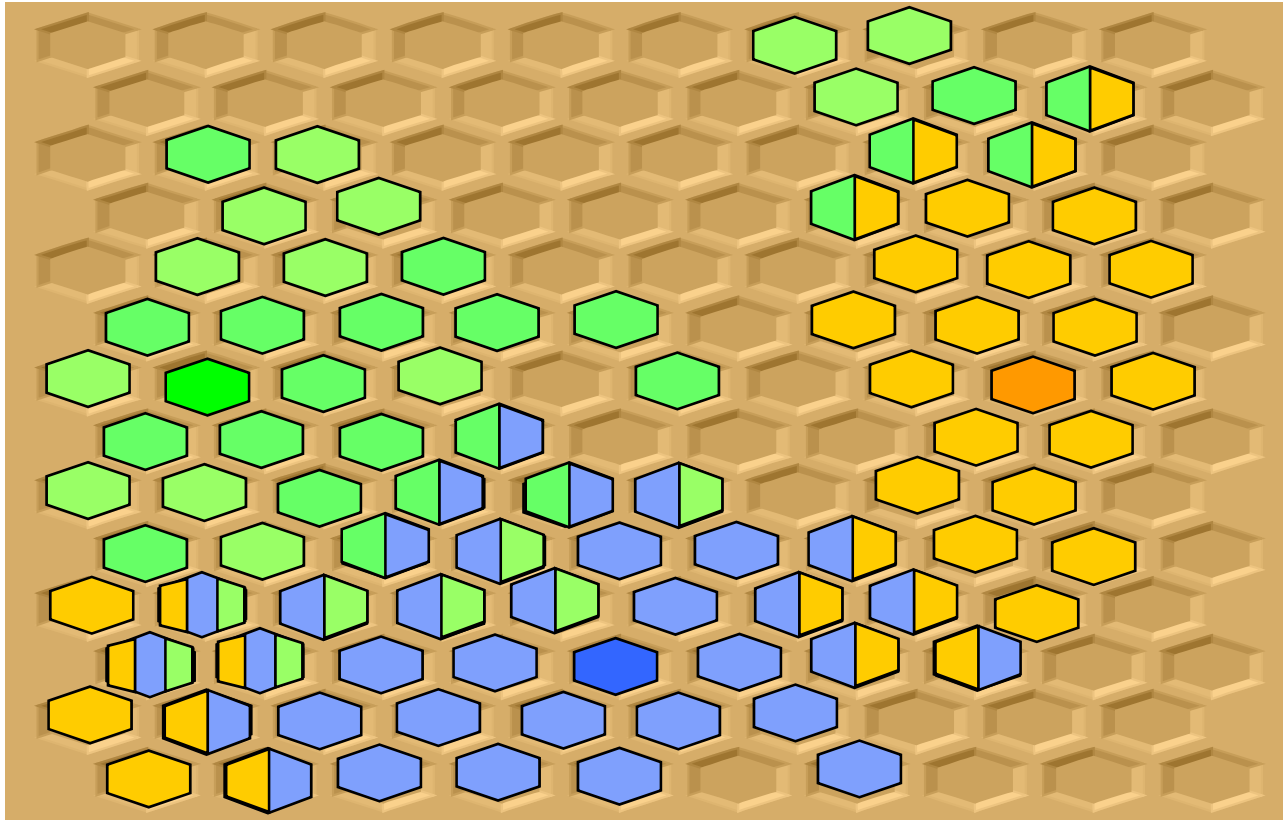
**You put the process into one or two pilot projects...
...and then roll it out to everyone else.
When everybody is using it the job's done.**

What really happens



**Whilst the first process is being rolled out other processes start to appear and spread.
Successful ones continue to spread – others stall.
When they collide “process wars” break-out.**

Harnessing the dynamics of practice adoption

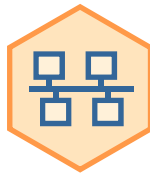


Practices can harness these dynamics to support long-term sustainable change.

They avoid conflict and interference by enabling seamless composition.

The Practices in the Essential Unified Process

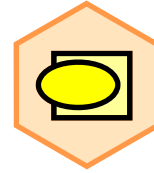
EssUP Practices



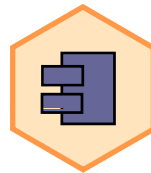
Architecture



Iteration



Use Case



Component



Product



Process



Team



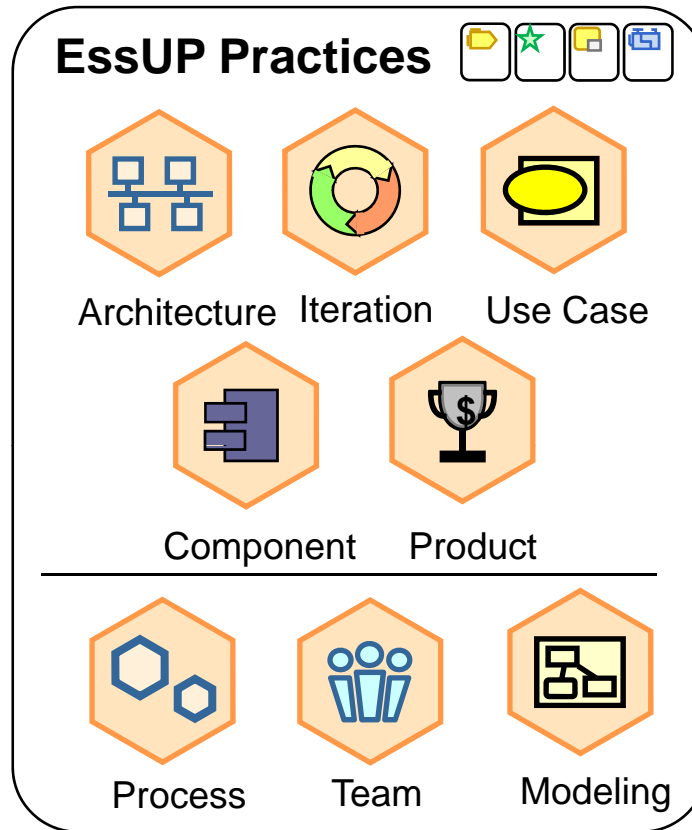
Modeling

**Technical
Practices**

**Cross-Cutting
Practices**

EssUP practices have been successfully applied by many companies in many markets.

They all start with two or three new practices



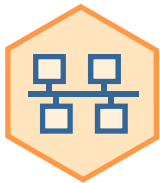
Select the most valuable practices and start using them.



**“The way to get started is to quit talking and begin doing.”
Walt Disney (Pioneer of animated cartoon films. 1901-1966)**

Different teams use different selections of practices

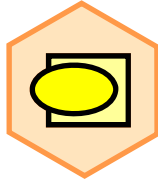
Major Investment Bank



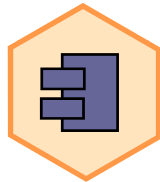
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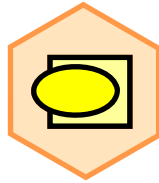


Modeling

Education services company



Iteration



Use Case



Product

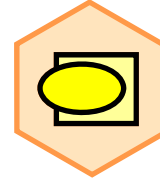


Team

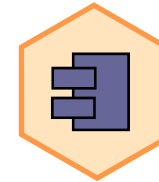
A small team doing maintenance



Scrum



Use Case



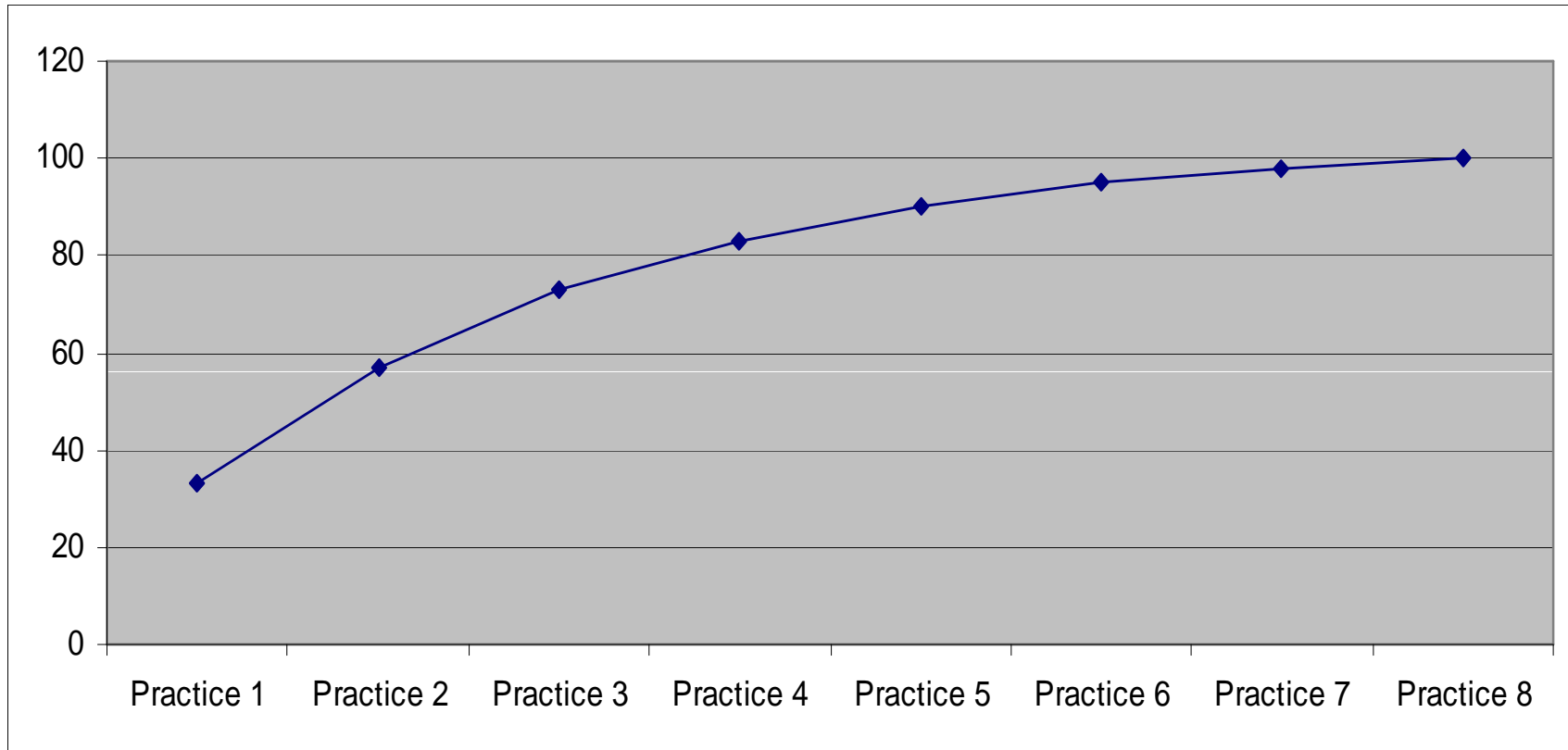
Component



Team

Every team is different.
Every practice adoption is different.

How Practices Add Value



The majority of the benefit comes from changing a small number of the right practices.

Practice separation has many benefits

- You can learn practices individually
- You can apply practices separately
- You can adopt the practices you want, when you want, and at the pace that suits you
- You can mix-and-match practices from any source
- You only have to change the practices that need changing

Practice Separation: The key to successful, long-lasting process improvement.

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Lessons Learned

- Changing everything is too much and bound to fail
- Evolutionary and incremental change is possible...
...and practices provide the right unit of change
- Practice separation makes it easy to get started
- Always start from the essentials and only add more when needed
- Introduce tools and intelligent agents to support and sustain the change

Practice separation and incremental practice adoption really work.

Enough Process – Let's Do Practices

**In the future, an ever present
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**The team's way-of-working
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**We need a
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the unit of adoption, planning and execution of process

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Examples:

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XP, Scrum

But we need your help

- Don't be satisfied with brittle closed processes
- Don't be sucked into process wars and process engineering
- Don't close your mind to changes and innovations in the industry
- Build on the good practice you use today...
- ... to create new and exciting ways-of-working
-and evolve the next generation of truly best practices

Let's capture and share all our practices.



Thank You

ivar@ivarjacobson.com

Welcome to booth #1509