

Process Wars – A New Hope

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WHERE TEAMS ARE **R-HEROES**



Please Note: All Star Wars related images have been removed from this version for copyright reasons

Rational. software

Agenda

- Prologue
- I. The Phantom Menace
- II. Attack of the Clones
- III. The Revenge of the Sith
- IV. A New Hope
- V. The Empire Strikes Back
- VI. The Return of the Jedi
- Epilogue

6-Episode Poster

Prologue

- We have come a long way
- We have seen many things
- Our experiences are many
- Share with you, we will

Yoda

Episode I – The Phantom Menace

- 1970's - Waterfall reigns supreme
- The complexities of software development are only just beginning to be understood
- The early days of mechanical and electrical switches never prepared people
- An attempt was made to bring order to the chaos through a sequential approach
- This flawed model was quickly adopted
- Easy to manage, but delivered poor and inconsistent results

Darth Maul

Episode II – Attack of the Clones

- 1980's - Many waterfall approaches
- Greater process ceremony
 - ▶ Big Design Up Front (BDUF)
- Waterfall embedded in culture
 - ▶ US Military - DOD-STD-2167A
- Variations on the same theme appear
 - ▶ SDM, SSADM, Sashimi, etc
- But the evidence was still clear...
Waterfall did not work
 - ▶ Standish Group – CHAOS Report

Clone Trooper

Episode III – The Revenge of the Sith

- Late 1980's early 90's - Increasing governance to improve delivery
- Defining measures of capability to increase effectiveness
- Measures included
 - ▶ CMM-SW
 - ▶ ISO 9000
 - ▶ SPICE (ISO 15504)
- But they didn't improve delivery, they just increased waterfall "ceremony"
- There had to be a better way!

Darth Sidius

Episode IV – A New Hope

- 1995 - The Emergence of RUP
- Rational acquires Ivar Jacobson's firm Objectory AB from Ericsson
- The 3-Amigos, Booch, Jacobson and Rumbaugh join Rational and propose UML
- Philippe Kruchten leads the development of the Rational Unified Process combining
 - ▶ Objectory
 - ▶ 15-years of customer experience
- Finally, an iterative process framework

Luke Skywalker

Episode V – The Empire Strikes Back

- 2001 - Agile Manifesto is Launched
- 17 “*organisational anarchists*” defined four values for better ways of developing software
- The result of 15 years of Agile methods momentum
 - ▶ Scrum, Crystal Clear, XP, ASD, FDD, DSDM...
- Collaborative practices are key
- Many jump on the opportunity to be what they think is “faster and cheaper”
- In some cases this led to “Fragilism”

Darth Vader

Episode VI – The Return of the Jedi

- OpenUP and Practices are born
- The development of a RUP kernel within the Eclipse Process Framework project
- The building of practices bringing together
 - ▶ Existing RUP content
 - ▶ Agile practices
 - ▶ Technology guidance
- An opportunity for balance within “The Force”

Han, Luke and Leia

The Eclipse Process Framework

- Not so long ago, a group of bold software developers got together to discuss approaches to software development
- They concluded that they should collaborate to produce:
 - *“a customizable software process engineering framework, with exemplary process content and tools, supporting a broad variety of project types and development styles”*
- The Eclipse Process Framework
www.eclipse.org/epf



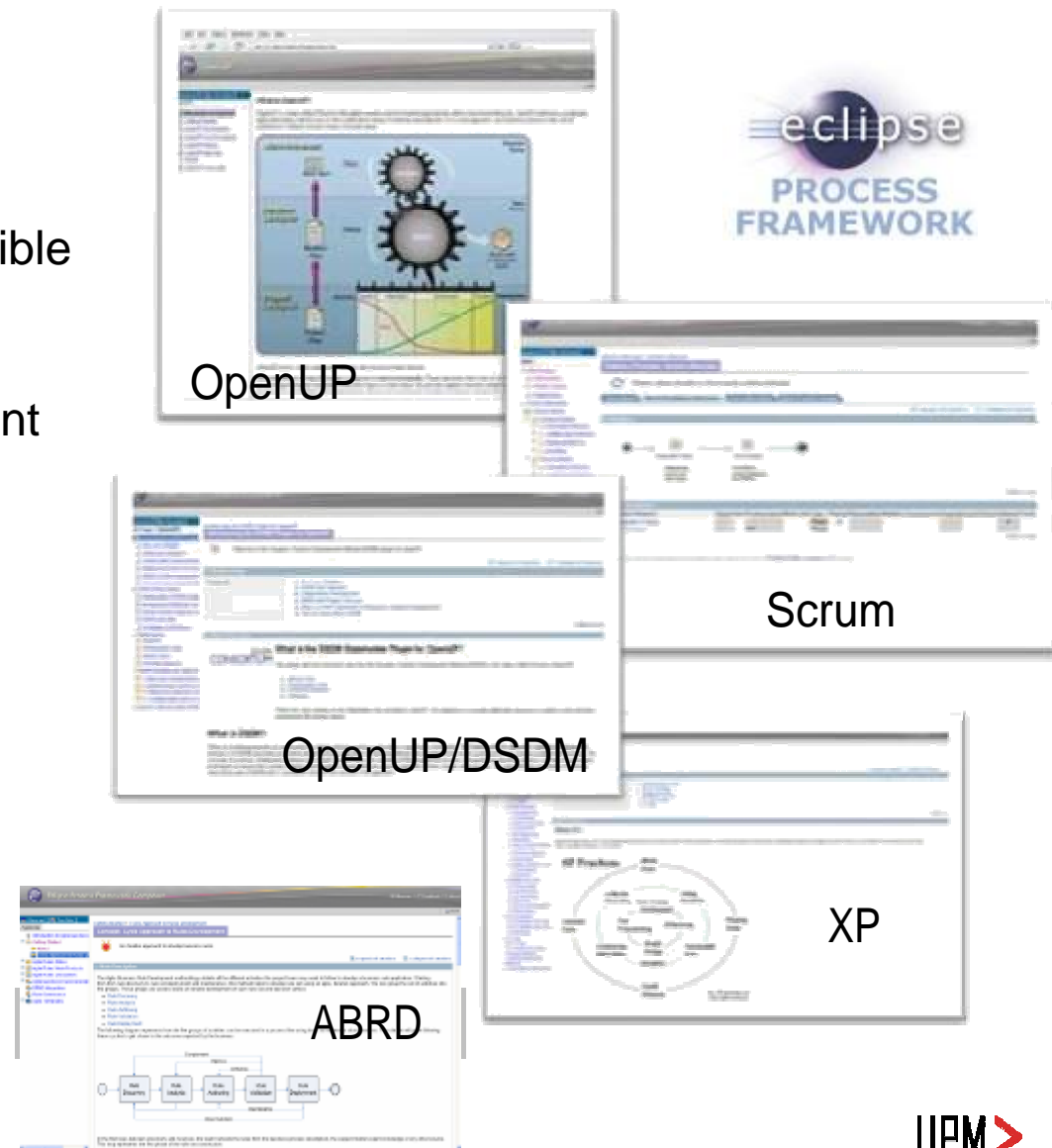
EPF Goals – Process Content

- “To provide exemplary and extensible process content

for a range of software development and management processes

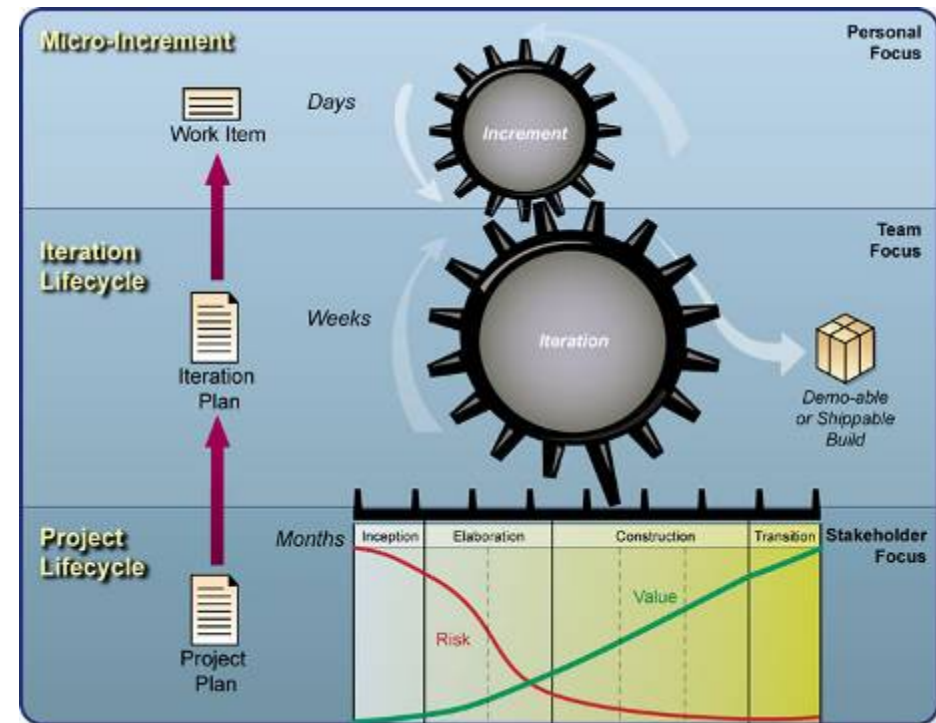
supporting iterative, agile, and incremental development,

and applicable to a broad set of development platforms and applications.”



Open Unified Process (OpenUP)

- An iterative software development process
 - ▶ Minimal - only fundamental content is included
 - ▶ Complete - can be manifested as an entire process to build a system
 - ▶ Extensible - can be used as a foundation on which process content can be added or tailored as needed
- Borrows from RUP, Scrum, XP, DSDM, Eclipse Way, Agile Modeling, ...



Is the OpenUP “Process Kernel” Enough?

- OpenUP is complete
- But most organizations and scenarios require at least a little more
- So how do you extend your process capability?

- Through the use of “**Practices**”

R2-D2 and C3-PO

- A process extension that can be applied independently, or in association with others
- Open-source, commercial or proprietary

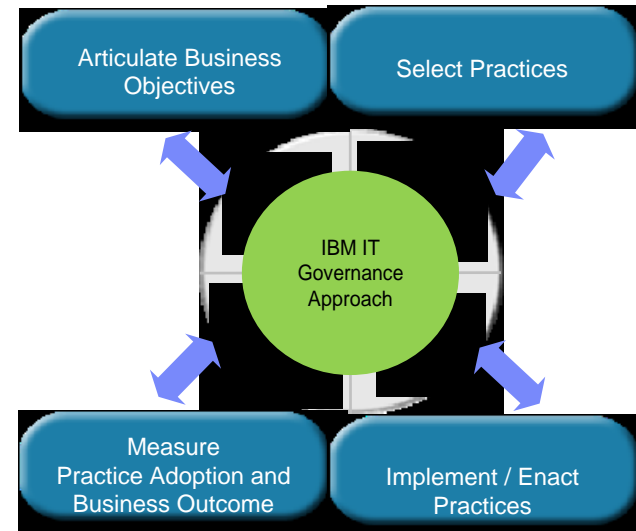
Building Your Process from Practices

- A practice can be adopted independently from other practices
 - A practice is a documented approach to solving one or several commonly occurring problems.
 - A practice has a positive impact on one or several business objectives
 - The adoption of a practice, and its impact on business objectives, can be effectively measured
- Commercial Practice Contents
 - ▶ **Motivation** - why you need it
 - ▶ **Getting started**
 - ▶ **Enablement process** and reference material
 - ▶ **Tools** for implementing the practice
 - ▶ **Services** aiding its implementation
 - ▶ **Measurements** of adoption level
 - ▶ **Related practices**

Lego Star Wars

Why practices?

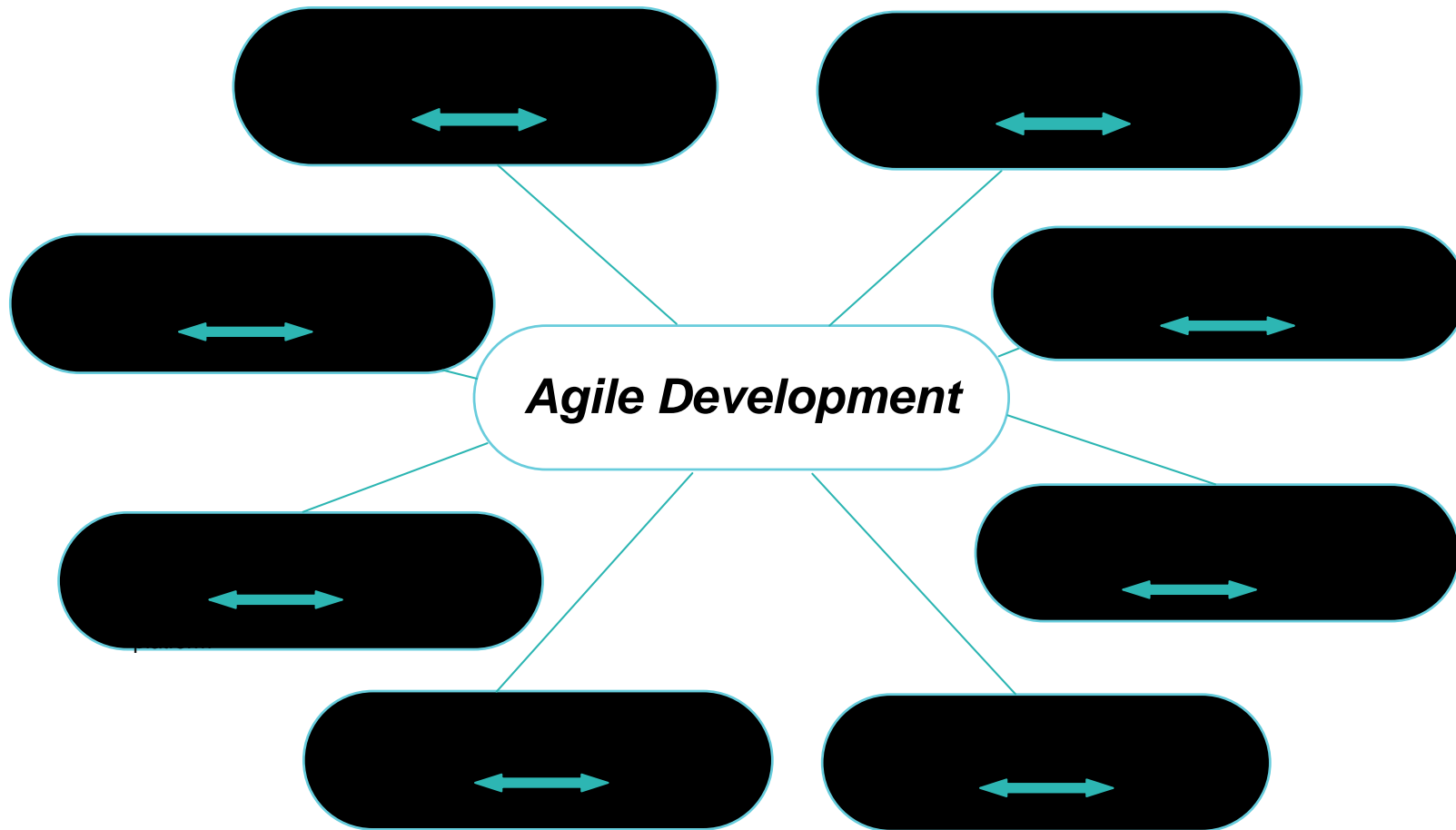
- Easier adoption of lighter processes
 - ▶ Only use what you really need
 - ▶ Adopt one or a few practice at a time
- Allow alternatives
 - ▶ One-size fits all is too limiting
- Enables richer eco-system
 - ▶ Easy to develop a practice
- Focus on what matters
 - ▶ Practices vs. process wars
- Provides One-Stop-Shop
 - ▶ Courses, tool features, services, articles, process content, enactment, ...
- Motivate by business objectives
 - ▶ Time-to-Market, Improve Quality, Increase Innovation
- Measure results
 - ▶ Assess impact of practice on business objectives



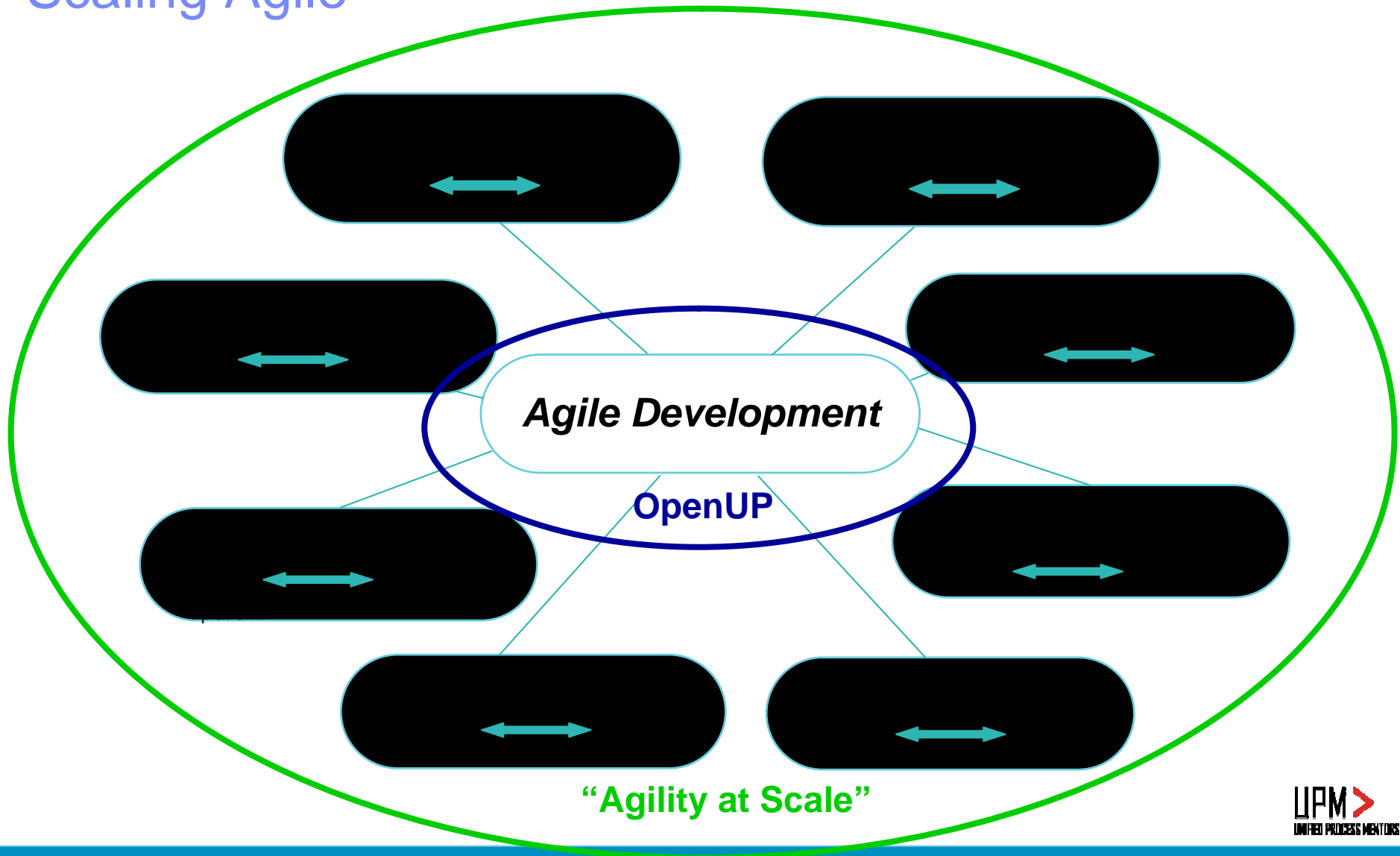
How do Practices help us be more Agile?

- Can be adopted independently and incrementally
 - ▶ Allows for adoption of practices that make sense for the organization
- Focused on Results
 - ▶ Can be measure, deliver capabilities and resulting work product(s)
- New practices can be substituted into Process
 - ▶ without disrupting the process as a whole
- In the past adoption of RUP has sometimes failed
 - ▶ Typically due to the sheer size of the process, complexities, and dependencies
- Practices allow for easier process adoption
 - ▶ a divide & conquer approach

Additional Challenges with Agile in the Mainstream



Scaling Agile



DEMO

OpenUP Examples of Practices

The screenshot displays the Eclipse Process Framework Composer interface. The title bar reads "Eclipse Process Framework Composer" with links for "Glossary", "Feedback", and "About". Below the title bar, there are tabs for "Where am I" and "Tree Sets". The main content area is divided into two panes. The left pane, titled "EPF Practices", shows a tree view of "OpenUP" practices, including Management Practices (Change Management, Iterative Development, Risk-Value Lifecycle, Two-Level Project Planning, Whole Team) and Technical Practices (Continuous Integration, Evolutionary Architecture, How to Adopt This Practice, Key Concepts, Work Products, Tasks, Guidance, Evolutionary Architecture Practice, Evolutionary Design, Independent Testing, Shared Vision, Test-Driven Development, Use-Case Driven Development). The right pane, titled "Practices", shows a "Practices" section with an "Edit/Info" button and a "Hide Treebrowser" button. Below this, there are "Expand All Sections" and "Collapse All Sections" buttons. A "Relationships" section is visible, containing a "Contents" table with two entries: "Management Practices" and "Technical Practices". At the bottom of the right pane, there is a "Back to top" button and a paragraph of text: "This program and the accompanying materials are made available under the Eclipse Public License v1.0 which accompanies this distribution. OpenUP Copyright."

Epilogue

- We still have a long way to go...
- Many alignment challenges are being overcome
- The content still has to be right
- Practices need to be fully understood
- The opportunity to adapt process for your needs has never been greater
- Adopt process at your own pace
 - ▶ Scale UP rather than DOWN
 - ▶ Incrementally add or replace Practices
- Continuous process improvement rather than complete replacement

Out-take of Han, Luke and Leia

**“May the force
be with you!”**



QUESTIONS

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Special Thanks

R2D2

Yoda

Han Solo

Princess Leia

R2 TQ

Peter Haumer

Kelli Houston

Phillipe Kruchten

George Lucas

Luke Skywalker

“Old-Ben” Kenobi

Anakin

Skywalker

C3PO

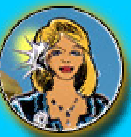
**Bruce Macisaac
& Grant Larsen**

Ivar Jacobson

Scott Ambler

C3 Per Kroll





THANK YOU

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