

MSF v.4 Innovations

Dmytro Malenko
dmalenko@softserve.com

Project Manager
SoftServe Inc.

Today's Agenda

- **Why new MSF?**
- **MSF for Agile Software Development**
- **MSF for CMMI Process Improvement**
- **What is next?**

Why new MSF?

- **World is changing...**
 - How often do you get updates to you software?
 - How dependent is your business on the software you run?
 - What home device (except for iron) does not contain micro-chip yet?
- **but...**
 - Have you ever seen application that runs without failure?

New ideas for new MSF

- Agile management
- Lean Production
- Theory of Constraints

W. Edwards Deming

- **Quality Assurance guru**
- **Japan economic miracle**

- **Variation in process**
 - **Common cause**
 - **Special cause**

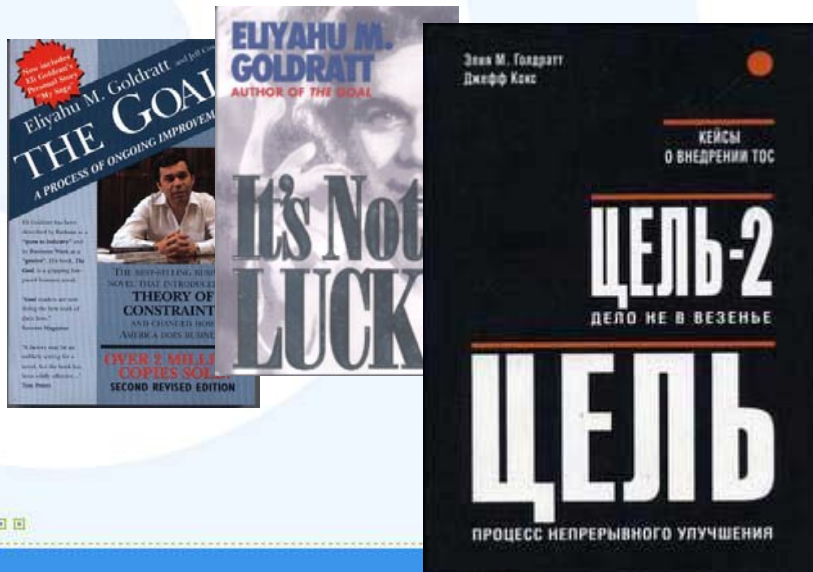


Lean Production

- Eliminate waste
- Minimize inventory
- Maximize flow
- Pull production from customer demand
- Meet customer requirements
- Do it right the first time
- Empower workers
- Design for rapid changeover
- Partner with suppliers
- Create a culture of continuous improvement

Eliyahu M. Goldratt

- Theory of constraints
- Business novel “The Goal”
- Sequel “It’s not luck”



- Translated into 23 languages
- Sold over 3 million copies

Theory of Constraints

5 focusing steps of TOC:

1. Identify system constraint
2. Exploit the constraint
3. Subordinate the rest of the system to exploiting the constraint
4. Elevate the constraint
5. Go to step #1

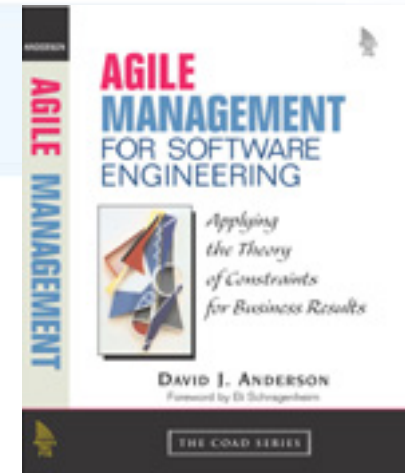
How to use this in software development

“Agile Management for Software Engineering”

David J. Anderson



- Now a Microsoft employee
- Works on MSF for CMMI Process Improvement



MSF v.4

Changes from MSF v.3

- **Key concepts transformed into *Mindsets***
- **Team model**
 - Role clusters transformed into *Advocacy Groups*
 - *Architecture* is now separate
- **Process model transformed into *Governance Model***
 - Phases transformed into *Tracks*
 - Milestones transformed into *Checkpoints*

Innovations in MSF v.4

- **Governance separated from capacity**
- **Lean project management**
- **Qualities of service**
- **Constituency- and Event-Driven Risk Management**

Foundational principles

- **Partner with customers**
- Foster open communications
- Work toward a shared vision
- Quality is everyone's business, every day
- Stay agile, adapt to change
- **Make deployment a habit**
- **Flow of value**

Mindsets

- **Quality Is Defined By Customer**
- **Pride of Workmanship**
- **Team of Peers**
- **Frequent Delivery**
- **Willingness to Learn**
- **Get Specific Early**
- **Qualities of Service**
- **Citizenship**

Mindsets

Quality is Defined by Customer

Qualities of Service

Principles

Foster Open Communication

Stay Agile, Adapt to Change

Willingness to Learn

Partner with Customers

Team of Peers

Pride of Workmanship

Quality is Everyone's Job Everyday

Get Specific Early

Work Toward a Shared Vision

Make a Deployment Habit

Citizenship

Frequent Delivery

Flow of Value



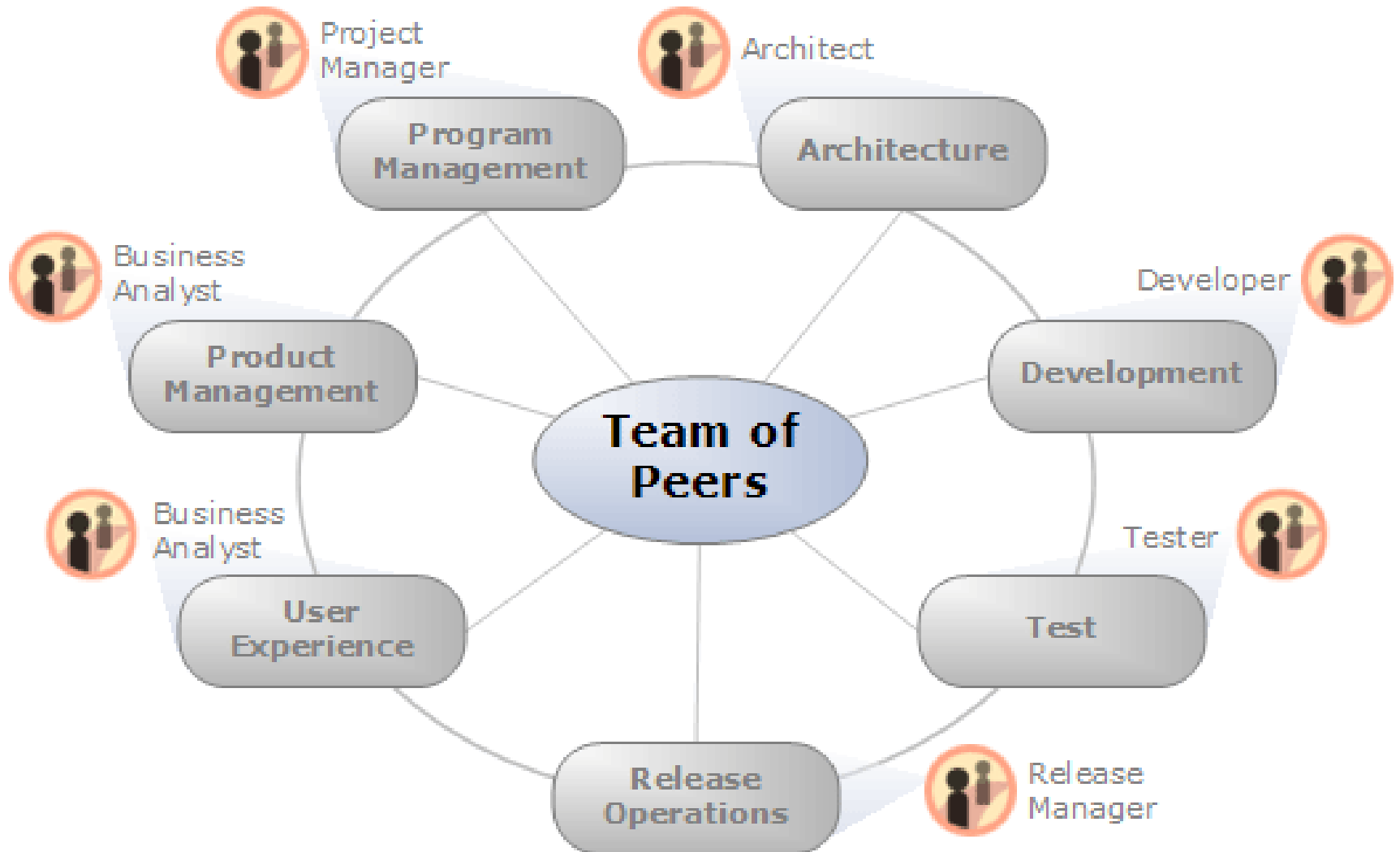
Two variants of MSF

- **Share same foundation**
- **Same Team Model but different mapping to Roles**
- **Different Governance Models**

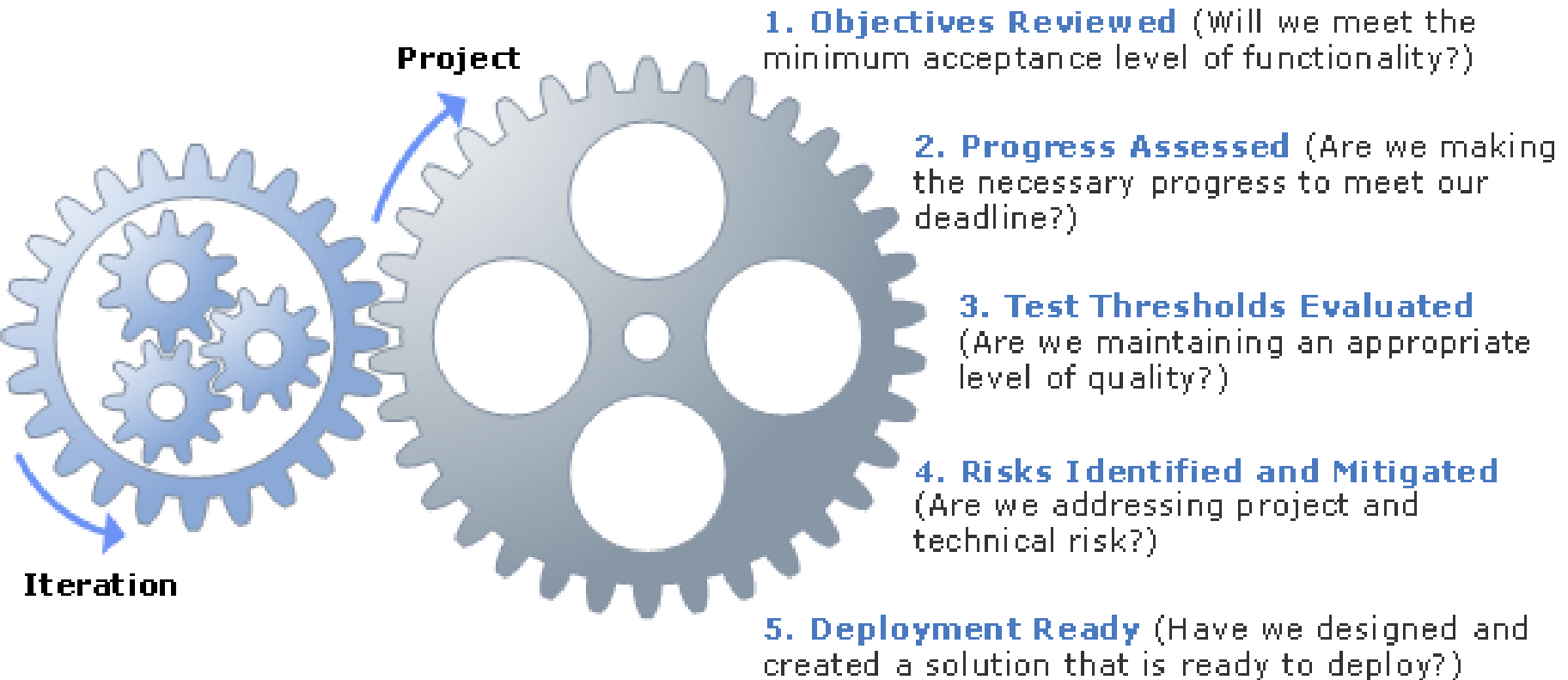
MSF for Agile Software Development

- Allows to implement “enterprise ready” lightweight iterative process
- <http://msdn.microsoft.com/vstudio/teamssystem/msf/msfagile>

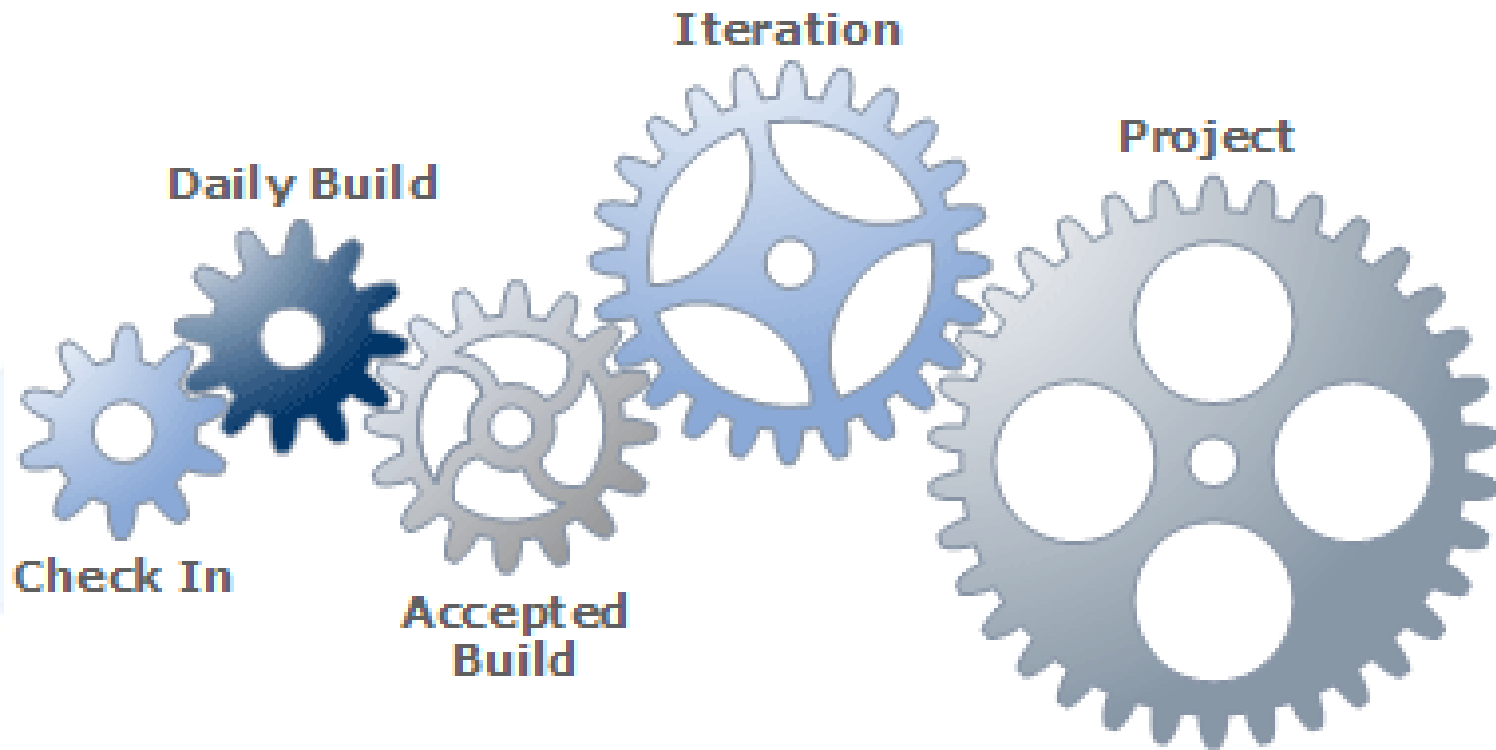
Team Model



Governance model



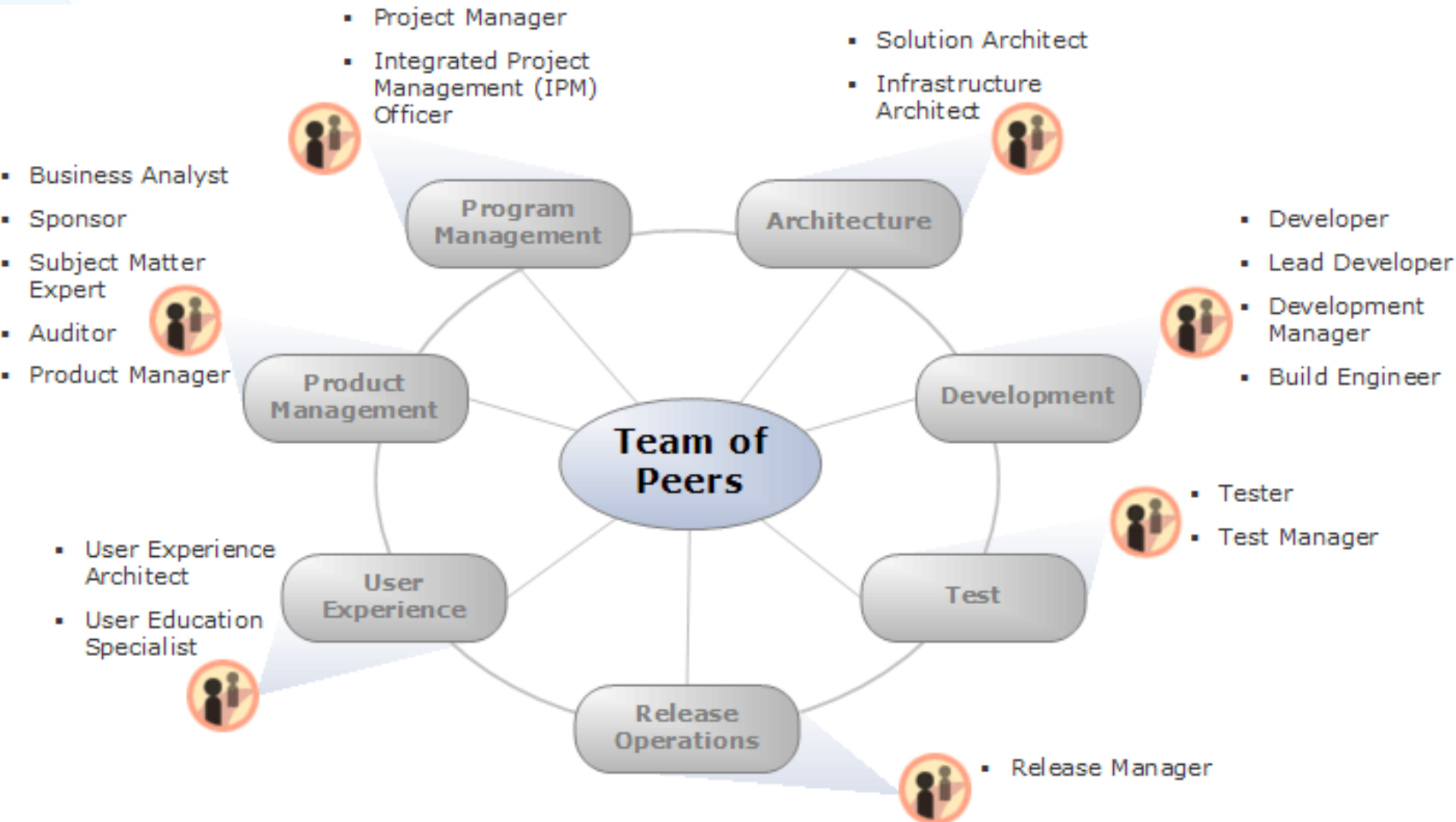
Cycles



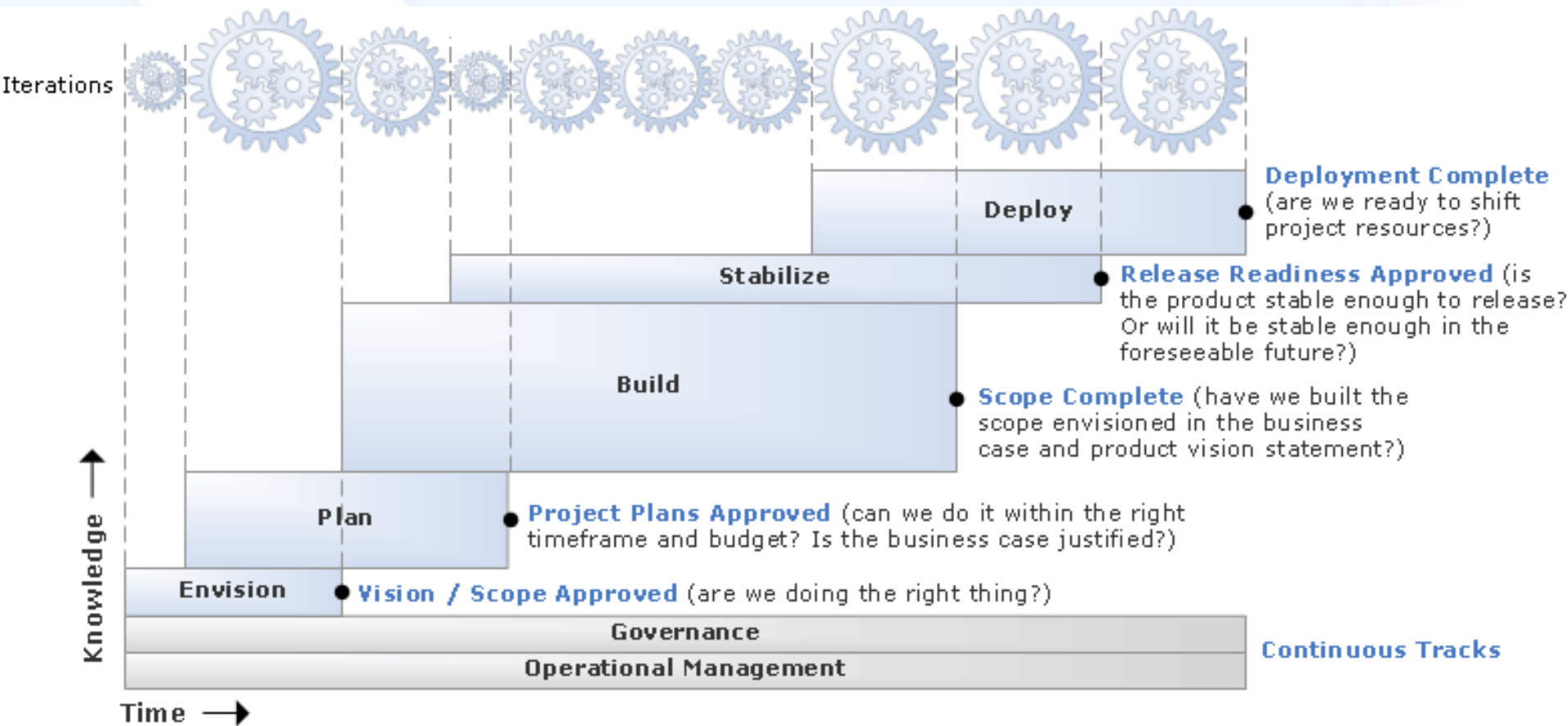
MSF for CMMI Process Improvement

- Allows to implement CMMI Level 3 process
- Covers up to 35% of required practices for CMMI Level 4 and Level 5
- <http://msdn.microsoft.com/vstudio/teamsystem/msf/msfcmmi>

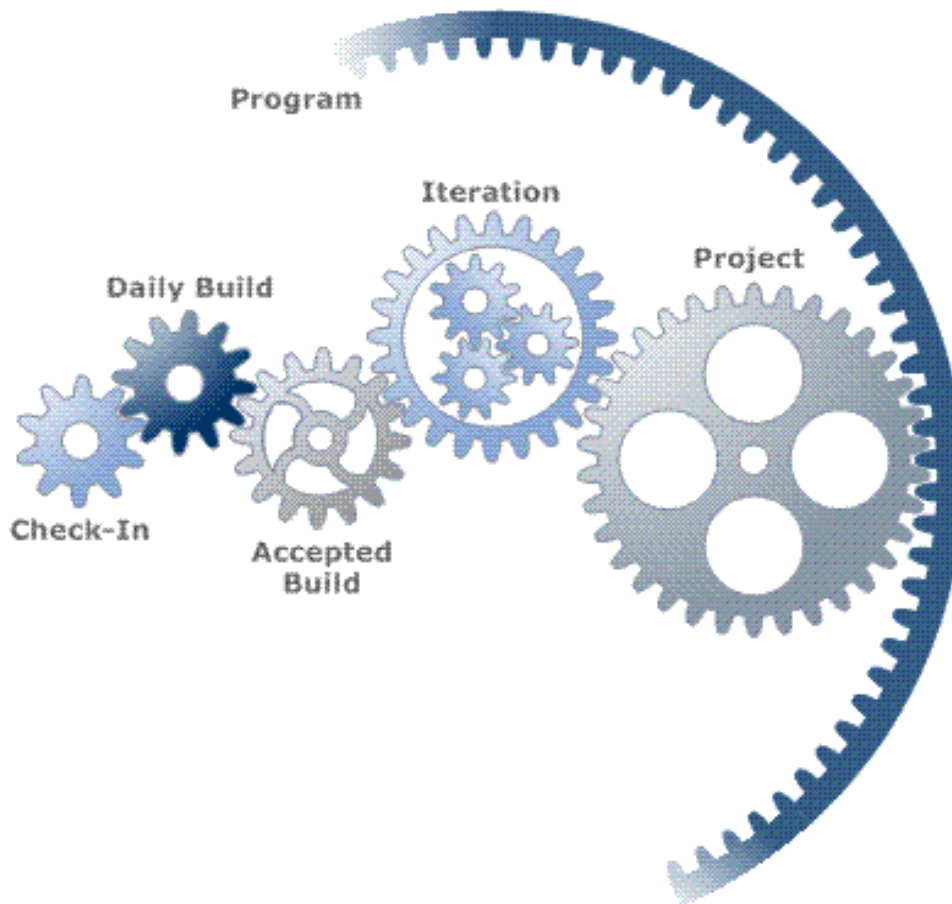
Team Model



Governance model



Cycles



More on this topic

- **The W. Edwards Deming Institute**
 - <http://www.deming.org>
- **David J. Anderson site**
 - <http://www.agilemanagement.net>

Your questions

- Now...



- ...and tomorrow
 - dmalenko@acm.org