4ª CONFERÊNCIA DA QUALIDADE DE SOFTWARE

Panorama Atual e Perspectivas da Qualidade de Software

A 4ª edição da Conferência trará um panorama atual da Qualidade de Software no Brasil, com relatos de empresas que obtiveram excelentes resultados na implantação de programas de melhorias de processos e suas perspectivas para os próximos anos.

Venha participar das palestras e debater com especialistas da Engenharia e Qualidade de Software assuntos que podem interessar diretamente à sua empresa.

dias
28 e 29
Setembro 2011

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40 ANOS

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People and Processes

Myths on Software Development

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4ª CQS

Software Methodology Wars (Ken Orr/Cutter Consortium)

- ## Question:
  - What is the difference between a bank robber and a methodologist?

- ## Answer:
  - You can negotiate with a bank robber ☺

Remember…

- The only source of defects in software are humans

- Processes are used to:
  - Control the human variable
  - Identify problem sources
  - Make the outcomes repeatable

- Do we really need processes?

There is no silver bullet!!!

Process defined

- ## Websters:
  - "A series of actions or operations conducing to an end"

- ## Software process
  - Sequence of steps performed for a given purpose
  - Specific steps used in a specific organization to build systems
  - Specific activities that must be undertaken and artifacts that must be produced

What processes fits my project best?

- The common approach is:
  - How do I tailor the project to fit the processes we typically use?

- Tailor the processes to your project!!!
 - And not the reverse…
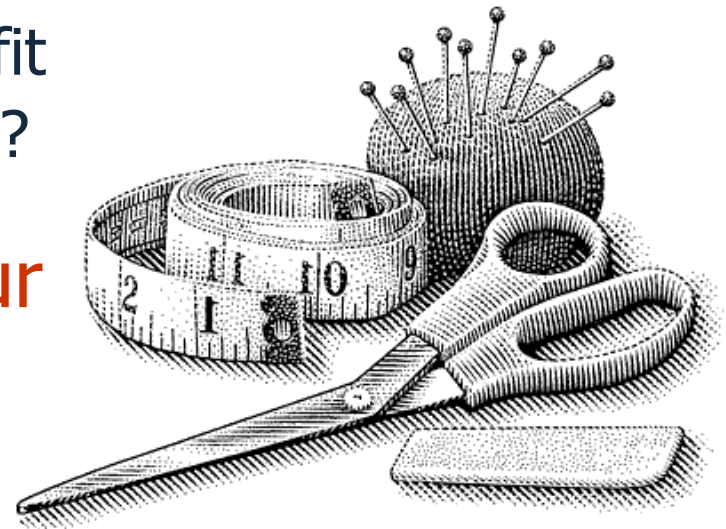
Myth: Defining processes is easy!!!

- **Be sure that you know:**
  - Why you are developing a process
  - What are the goals of the process

- **Ensure that processes are in-line with business goals**

- **Involve stakeholders**
  - They should develop the process

- **Be sure that the process is appropriate for organization/program/project**

Process Myths and Abuses (1)

- Belief that a given model is the Silver Bullet

- Imposing processes from above without involving people

- Beginning a process improvement effort without a baseline of current practices
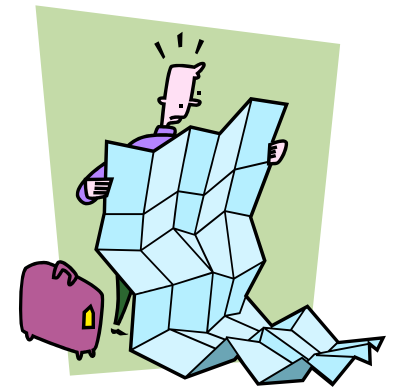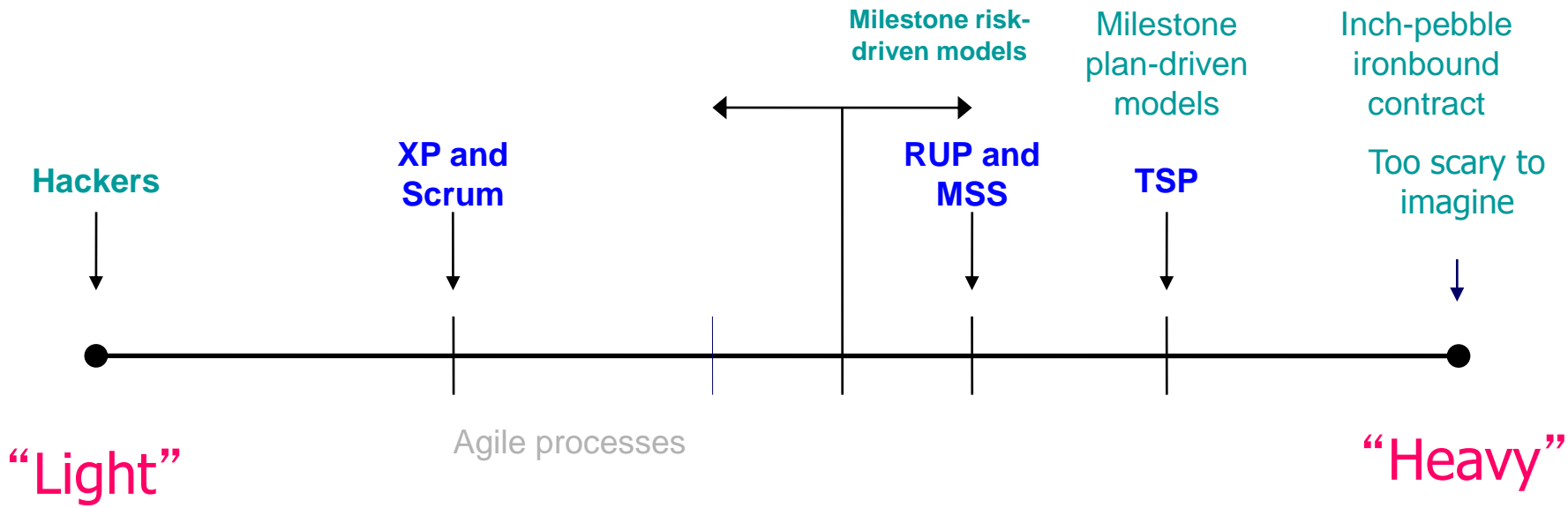
Process Myths and Abuses (2)

- ## Inability to apply a maturity model in light of business needs
  - Undertaking process improvement without consideration of business goals
  - Following the "letter of the law" instead of the "intent of the law"

- ## Assuming that high quality processes automatically mean high quality designs, code, and implementations
  - Chances are better that the quality of these artifacts will be better, but there is no guarantee

Process Myths and Abuses (3)

- Assuming that low maturity organizations will automatically produce low quality designs, code, and implementations
    - Successful organizations with low maturity processes typically have lots of "maestros"
    - These organizations may produce reasonable, even innovative systems
    - However the results are unpredictable!!!

- High maturity organizations are guaranteed to enjoy high profitability

- High maturity can only be achieved through high ritualization

Mythological process spectrum…

Milestone risk-driven models

Milestone plan-driven models

Inch-pebble ironbound contract

Hackers   **XP and Scrum**   **RUP and MSS**   **TSP**   Too scary to imagine

Agile processes

"Light"   "Heavy"

Weight = amount of project overhead / code ☺

Adapted from Justin Rockwood, "Choose your Weapon Wisely", 2003

Agile processes… are they a Myth?

Why Agile?

- High flexibility
  - Market changes
  - Technology changes
  - Unclear requirements

- More coding, less paper-work

- Higher quality, quicker

Are these just myths?

http://www.agilealliance.org/

# Again… it's never too much repeating…

DO NOT make your project fit the processes!!!

- Find the right processes and tailor them to your project!!!
  - And if then can NOT be tailored?

- Any processes should be seen as a tool to assist development, not an end in and of it self!

Choosing a process… avoiding abuses!

- **A big problem!!!**

- **Looking for a recipe…**
    - There is no silver bullet
    - Do not tailor your project to a process, instead tailor the "right" process

- **Supermarket shopping**
    - Do not pick all the "best" techniques within processes and mix them together
   - But you can use some in tailoring
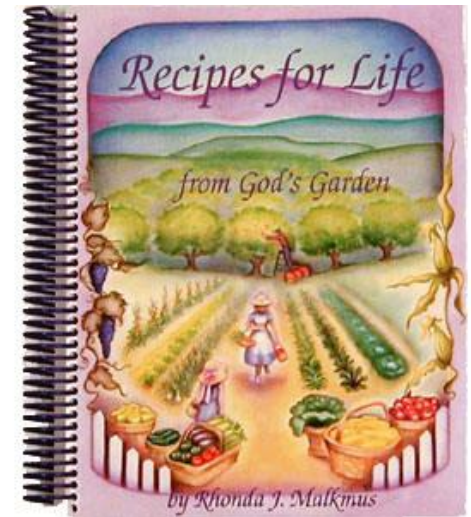
What about People????

Myth: Technical people stereotype

- In slang may be called:
  - Techies, Tech Geeks, Geeks, Dweebs, Nerds…
  - Miss any? ☺

- Associated with Computers?
  - Not always…

- Badly dressed (and that is subjective ☺)

- Non sociable outside the "techie" domain

- More???

Are technical people different?

- What they like?

- Affinity for technology?

- Knowledge?

- Ego?

- Stubborn?

- Team players?

Oh, so that explains the difference in our salaries!
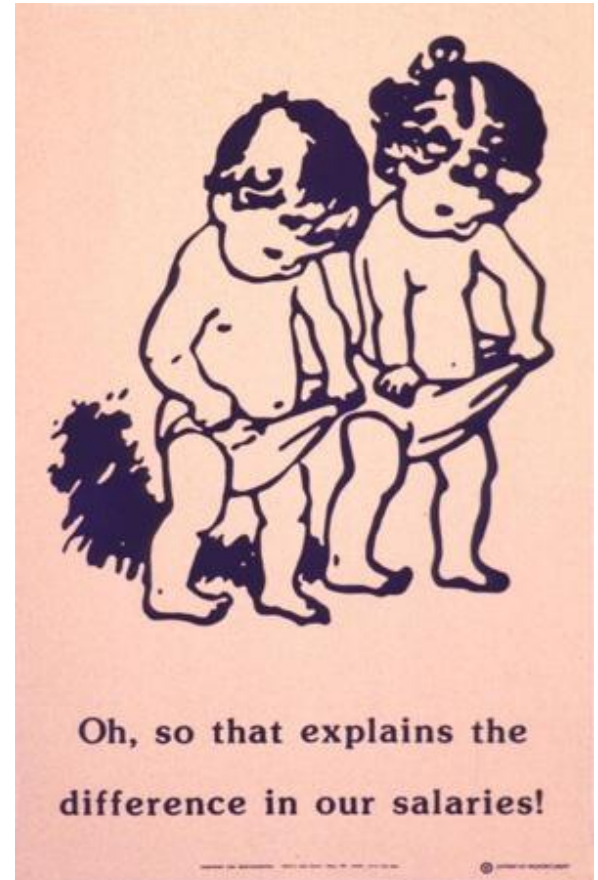
And, does it matter?

Abuses…

- **Exclusion from decision making**
  - Hiding the big picture

- **Inconsistency in rewards/punishment**
  - "Pet", focus on individuals
  - Responsible for issues not under their control

- **Poor use of extrinsic motivators**
  - Examples?

- **Micro management**

- **Focus on tasks, the "how" instead of results**

- **Evaluations without criteria**

Myth: Leading is easy…..

- **Obstacles**
  - Conflict resolution
  - Annoying tasks

- **Promote culture**
  - Honesty, fairness, helping "team"

- **Facilitate communication flows**
  - Don't play/allow "I've got a secret"

- **Manage ambiguity**

- **Patience**
  - When to intervene?

Mentor, don't boss!!!

- **Manage by goals, not quotas**
  - Leadership/guidance not oversight/control
- **Recognize technical competency**
  - Use it effectively
  - Accentuate the positive, but don't BS
- **Foster work environment**
  - Physical, annoyances
- **Physical environment**
- **Promote interdependencies where appropriate**

Myth 1: Leadership = Management

- **Management:**
    - Project planning
    - Tracking and oversight
    - Organizational
    - Maintenance
    - Status quo

Leadership:
- Vision
- Inspiration
- Motivation
- Character
- *Influence*

From Webster's…..

- Leader
  - "Person that leads"

- Leads
  - "To direct on a course or in a direction"

- Leadership
  - "Capacity to lead"

- Manager
  - "One that manages"

- Management
  - "Judicious us of means to accomplish an end"

Myth 2: Leaders are born

- Leadership can't be learned?
  - There are natural leaders but...

- Honest assessment of what you do know
  - Seek expertise where needed
  - Mentors – don't go it alone

- Learn from mistakes
  - Long term *vs* short term vision!

Myth 3: Only smart people can be leaders

- "Project management is a people intensive activity, and for this reason competent practitioners often make poor team leaders"
  - -- Roger Pressman

- How many university professors are leaders?
  - How many presidents or CEO's have Phd.'s? ☺

Myth 4: Must lead from the front

- Can you lead from inside?
  - Who is the true leader of any group?
  - Who has the influence?

- Position doesn't mean in charge, or respected
  - Pointy hair boss

- All good leaders are also good followers
  - Team concept

- No one begins as a leader

Myth 5: Entrepreneurs are good leaders

- Is it really the case?

- Not critical in entrepreneurs
  - Charisma
  - Personality

Myth 6: Leadership is based on position

- **You must be assigned to leadership positions?**
  - With position do followers follow?

- **Lead from the inside**
  - "Critical" members of your team

CHOPPING DOWN ALL OF THE TREES GIVES YOU A CLEAR VIEW OF THE DEVASTATION CAUSED BY CHOPPING DOWN ALL OF THE TREES.

Open Discussion

Your Time!

Thanks for your participation!

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