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POTENTIAL BENEFITS AND CHALLENGES OF CMMI® IN LAWMAKING

Introduction

- Capability Maturity Model Integration (CMMI®) is a process improvement model developed by Carnegie Mellon University.
- The origins of CMMI® date back to the late 1980's when it was initially developed to provide guidance for developing or improving processes relating to software development.
- The effort has since expanded to serve as a general framework and appraisal tool for any processes aligned to meet business goals (whether or not software is involved).

Introduction (cont'd)

- ◎ Organizations applying CMMI® have been shown to improve performance in categories including cost, schedule, productivity, quality, and customer satisfaction.
- ◎ This paper and presentation will examine the potential benefits and challenges associated with implementing CMMI® for lawmaking bodies.

What is the Capability Maturity Model®?

- Level 1 – Initial
- Level 2 – Repeatable
- Level 3 – Defined
- Level 4 – Managed
- Level 5 - Optimizing

What is the 'I' in CMMI®?

● Integration

- Several different capability models have been developed for different disciplines other than software development
- CMMI® project combined 3 models into an improvement framework

CMMI® Framework

- Basic structure that organizes common elements of models, rules and methods for generating models
- Enables new disciplines to be added to CMMI®
- Supports integration with existing disciplines

How does law making stack up against CMMI® levels?

⦿ Level 1 – Initial

- You perform the process area
- You achieve specific goals

✓ Hammurabi code

- 282 laws; ‘an eye for an eye’ pattern
- Contracts, liability, family law, military service

✓ Magna Carta

- Protected Barons from the King
- Foundation of *habeas corpus*

✓ Early English Parliament

- Typically assembled to raise taxes



How does law making stack up against CMMI® levels?

● Level 2 – Managed

- ✓ You manage your performance
- ✓ Policies indicate processes will be followed
- ✓ Plans are in place for performance
- ✓ Work products are controlled
- ✓ Resources are assigned
- ✓ Training on how to perform processes
- ✓ Organizational activity can be planned and monitored

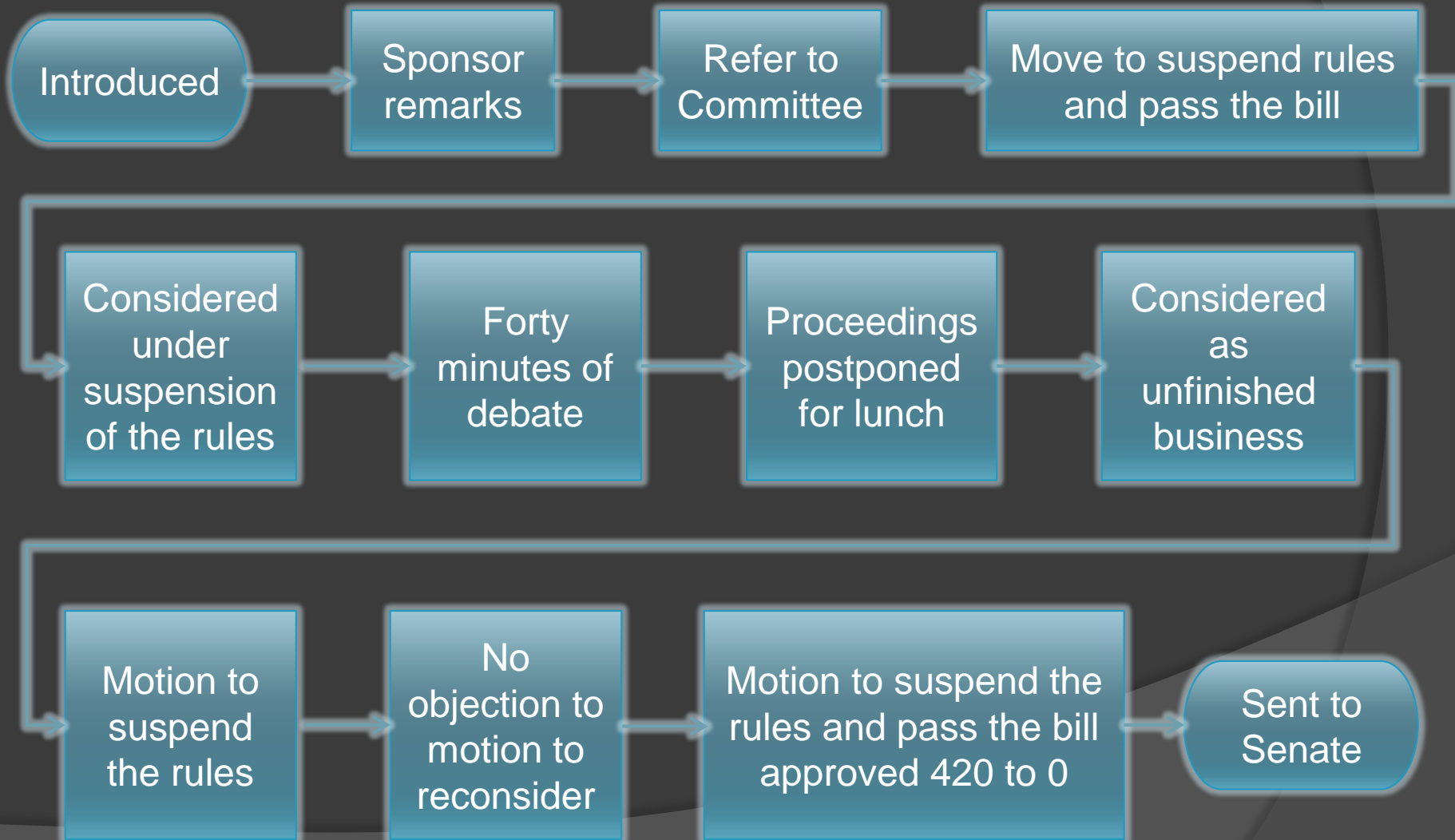
Example:

No Social Security for Nazis Act

- Sponsored by Sam Johnson (R) Texas
 - Introduced 11/19/2014
 - House Ways & Means Committee
 - Became Law 12/18/2014



Is House Process at Level 2?



Does our example meet CMMI® Level 3 - Defined?

- ❑ Standard processes cover multiple activities and can be tailored to meet specific needs
- ❑ Set of standard processes are improved over time
- ❑ Defined processes are consistent across the organization
- ❑ Described in more detail and performed more rigorously than a managed process
- ❑ Improvement information easier to understand, analyze and use

Would Quantitative Management = Improved law making?

- ❑ Controlled using statistical quantitative techniques
- ❑ Quantitative objectives for quality and process performance
- ❑ Managed throughout life of the process
- ❑ People performing the process are directly involved in quantitative management
- ❑ Causes of variation are identified and addressed

Can law making be Optimized?

- ❑ Processes can change and adapt to meet relevant current and projected objectives
- ❑ Continuous improvements through incremental and innovative improvements
- ❑ Improvements to address variations are quantitatively analyzed for cost & impact versus contribution
- ❑ Changes are systematically managed and deployed

Potential Benefits

- ❑ Resources are assigned
 - ❑ Adequate funding, people & tools
 - ❑ Responsibility and authority for laws
 - ❑ Involve relevant stakeholders
- ❑ Training on how to perform processes
- ❑ Corrective actions to improve laws
- ❑ Objective & quantitative evaluation of laws
- ❑ Systematically managed change

Challenges to CMMI®

- Is it flexible enough to support the legal discipline?
- Many organizations find that Levels 4 & 5 may be feasible but not economical
- How much process is enough?
- Lobbyists, special interest groups

Conclusion

- Current law making processes in the US could be assessed at CMMI® Level 2, possibly Level 3
- Would there be benefits to improving? Absolutely
- Would there be challenges? Definitely
- Can we get there? Only if there is the political will to do so

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