

# ***Whatever Happened to Process Capability?***



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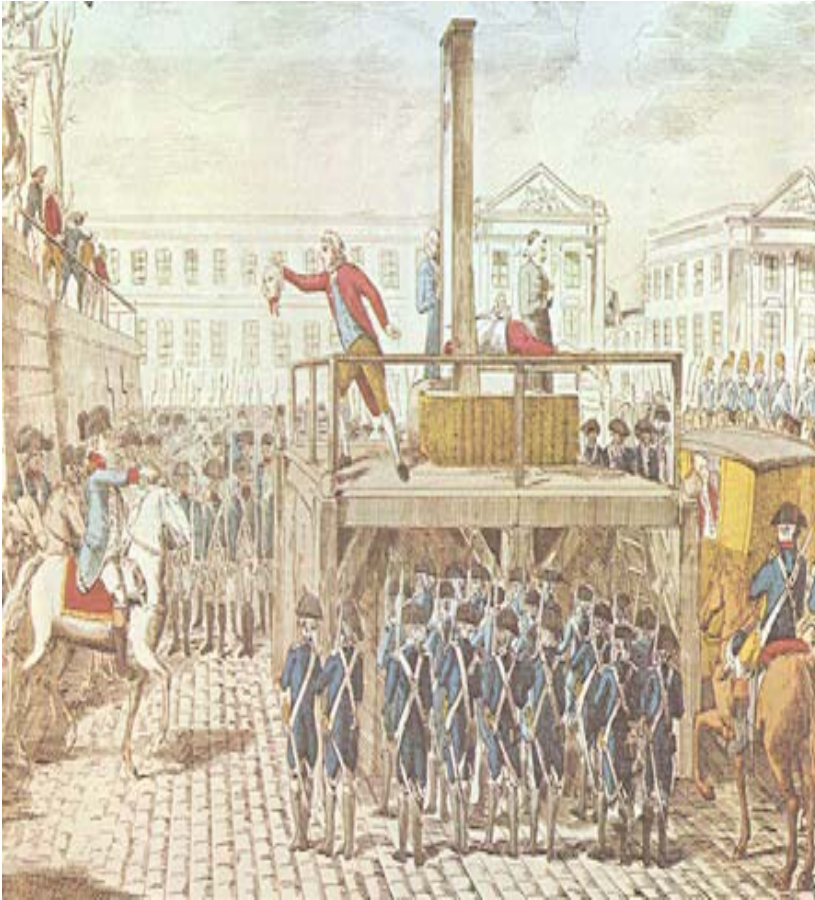
**All models are wrong. Some are useful.**

**Some models are more wrong than others.**

## Process Issue Model

No Defined Processes in Place	Defined Team Program Processes Established						No Accepted Processes Defined	
Rudimentary Processes are Missing	Not Following Accepted Processes		Following Accepted Processes				Emerging Processes	Missing Innovative Processes
	Process Adherence Shortfall Issues		Process Capability Shortfall Issues			Program Team Processes Are Capable		
	Poorly Executed Processes	Constrained Processes	Outmoded Processes	Pro Forma Processes	Non-Integrated Team Processes	Effective Processes		

## **Process Adherence Shortfall Issues**



### ***Constrained Processes***

***“... should the system fail in operational test, will we be able to tell why?”***

- Not fully implemented***
- Deliberately reduced***

### ***Poorly Executed Processes***

***“It takes a long time to make a bad decision.”***

- Ineffective***
- Poorly implemented***

## **Process Capability Shortfall Issues**

### ***Outmoded Processes***

- ***No longer supported:***
  - ***Process model***
  - ***Standard***
  - ***Practice***
- ***Ineffective process***
  - ***Poor technique, method***
  - ***Process won't scale***



***Ada, Mil Std 2167, DoD 5000, etc.***

## **Process Capability Shortfall Issues**

### ***Pro Forma Processes***

- ***Tick in the box approaches***
  - ***For appearance sake***
  - ***“There’s no there there...”***
  - ***Minimum approach***
- ***Often mandated***
- ***Don’t impact decision making***



***Especially true for risk management  
and measurement***

## **Process Capability Shortfall Issues**

### ***Non-Integrated Team Processes***

- ***Uncoordinated team processes***
- ***Incompatible team processes***
- ***Closed team processes***
- ***Spread of authority, control & responsibility***



***Interoperability exacerbates problems***

## **Emerging/Innovative Process Issues**

### ***New/improved processes required***

- ***Program team wide processes***
- ***Many “basic” processes outstripped***
- ***Rapid technology insertion***
- ***Systems interoperability management***

### ***What will acquisition/development need to look like in 2010 – 2025?***

- ***Evolutionary/Spiral Development Program Management?***
- ***Capability Based Acquisition?***
- ***Some new acquisition process?***



***Future Warrior***




## **Findings**



- ***Resolved the basic process problem***
- ***Still belief process adherence = capability***
- ***Limited process adaptation***
- ***Process adherence degradation***
- ***Multiple process shortfalls in many programs***
  - ***2:5 Adherence vs. Capability***
  - ***2:1 Technical vs. Management***
- ***Program team process clashes/conflicts***
- ***Process gaps appear with regularity***
  - ***~ 20% “gap” in Program team processes***

***Process capability shortfalls likely will grow***

## **Conclusions**

- 
- ***A need to focus on process capability***
    - ❖ ***Educate programs on adherence vs. capability***
    - ❖ ***Adapt organizational processes to specific needs***
    - ❖ ***Evaluate program process capability***
  - ***A need to establish innovative process practice***
    - ❖ ***Capabilities not platforms the new driver***
    - ❖ ***Program team capability perspective***
    - ❖ ***Affects acquisition, development, sustainment***
    - ❖ ***E.g., Rapid process insertion/removal (horses for courses)***

***Program Team Success =  
[ Context (Process Adherence + Process Capability) ]***

***Context = (cost + schedule + technical performance) \* (% realism of stakeholders)***

## **What's Next**



- ***Gather more data***
- ***Increased focus on process capability***
- ***Investigation of specific process areas***
  - ***Characterize new process areas***
- ***Better understand how process affects project success/failure***

## ***Your Challenge For 2004***

### ***How do you measure:***

- ▶ ***Team Process Capability?***
- ▶ ***Program Team Process Capability?***
- ▶ ***Program Team Process Capability in a Network Centric World?***



***How much does time weigh?***

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