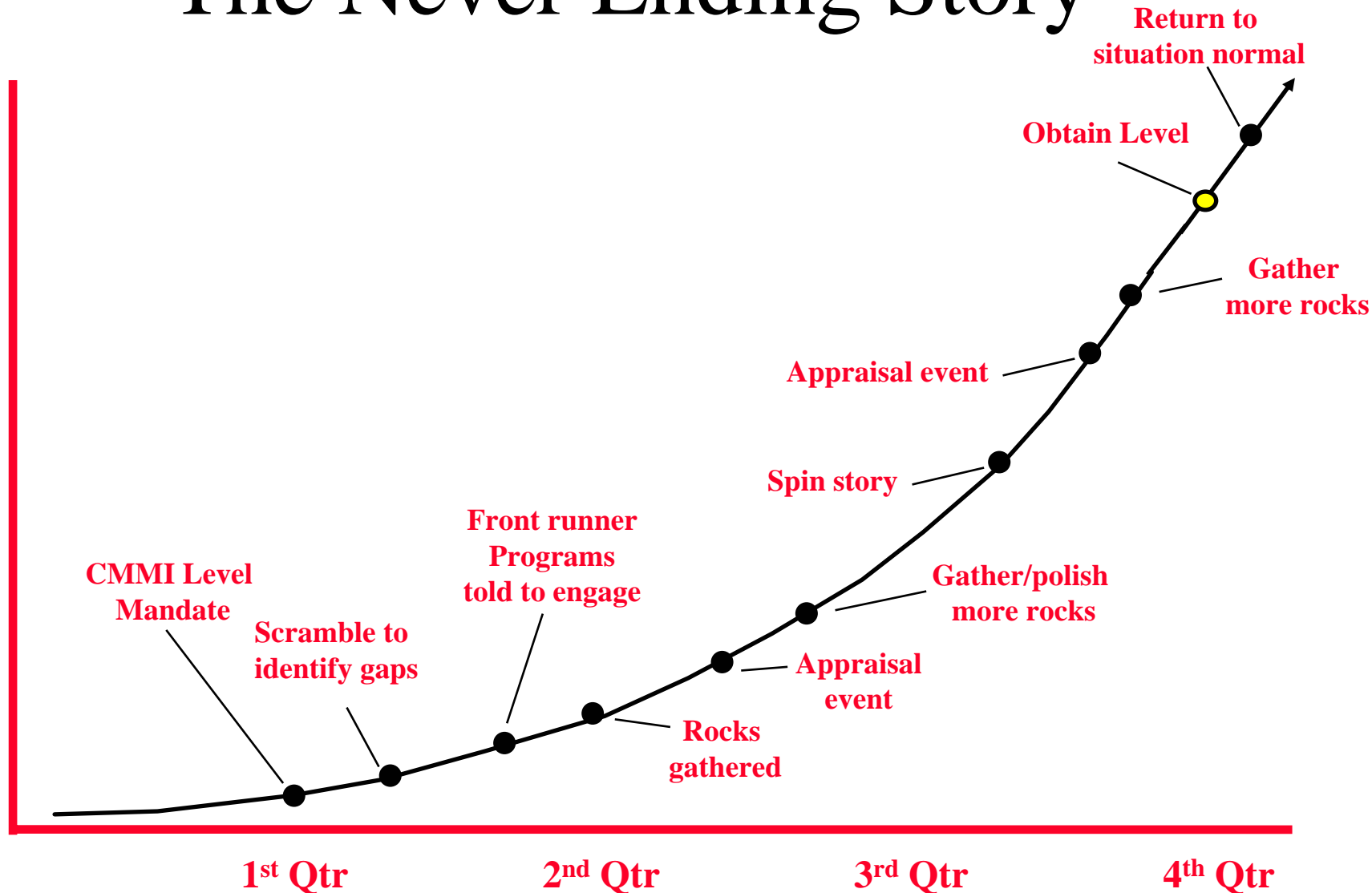


Staying Atop Mt CMMI

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The Never Ending Story



Common story seen over and over again

Breaking the Cycle

- This has been played out over and over
- Some organizations who have been through this before, do put things in place as not to back-slide
 - Reward the programs and people
 - Capital Investments
 - Establish new goal
- But most still back slide, Why?



Sustaining Foundational Pillars

- Sustaining High maturity is dependent on how solid is the lower foundation
 - Management Commitment and Support
 - Resources
 - Program Buy-in
 - People
 - Process
 - Organizational Objectives/Goals
 - Infrastructure

Is Yours a House Built on Sand or Bedrock?

Spreading the Support Across Pillars

- Success starts with Management Support and Resources
- As the other pillars are established, take hold, and become part of the culture, they become less critical

**If the infrastructure is sound,
sustainment is possible**

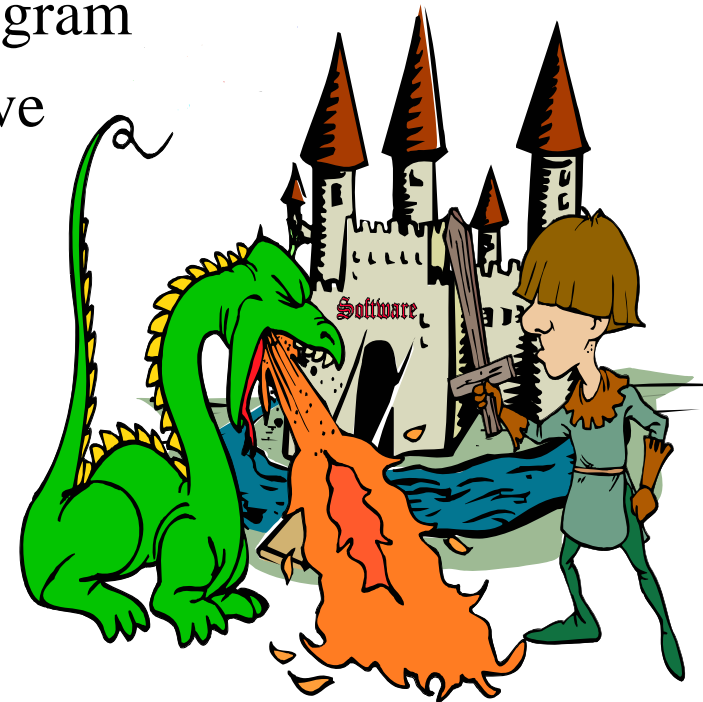
Foundation Attackers

- High Maturity is not a perpetual machine. It takes effort to sustain the gains or the foundation will erode and the structure will collapse
 - Lack of continued sponsorship
 - Organizational changes
 - Got the Level - attention is elsewhere (acquisitions, crisis of the day)
 - Competition for Resources
 - Funding directed to other initiatives
 - Program's were never bought in, it was a mandate
 - Program schedule more important than process improvement promises
 - No career path for people, process not seen as important
 - Staff turn over - Shift in personnel and teams' makeup
 - Process is too cumbersome, one size fits all, no proven ROI
 - Process for process sake
 - The Number was the Goal
 - Deploy narrow and high not wide
 - Lack of accountability

Complacency and Atrophy Take Over

How to Mitigate the Attackers

- Be aware they exist
- Understand the journey, not destination
- Plan and allocate for future years
- Get the pillars built, deployed, and improve
- Treat Process Improvement like a program
- Plan, Monitor, Verify, Report, Improve
 - Resources, training, stakeholders, risks



Proven Insurance

- Must begin with a strong foundation
- Management must be committed, active, INVOLVED sponsor providing adequate resources
- Must be a career path to attract and retain people with right skills
 - Availability is not a skill
- The number cannot be the goal
- Can't rest on your laurels – an organization is always moving – it may be forward or back
- Process that works for the particular business and objectives
 - Not one that was “bought”
 - Must show benefit or ROI
 - Process for process sake
- Programs understand why they would want to do this
 - Not just - your bonus depends on it
 - Balance short term schedule success with long term improvement promises
- Make sure there is a goal of maintaining current maturity
 - Goal posts mark the end zone, Without them in sight we may not realize we are getting farther away instead of closer.
 - On-going periodic reviews and surveillance audits
- Establish and maintain dedicated teams (measurement, EPG, Quality Improvement)

Use the Infrastructure to Fight Off Attackers

Observations That Appear to Work

- Use an evolutionary approach providing pre-planned increments of capability
- Upgrade the related support infrastructure
- Continue involvement in external activities which are shaping CMMI
- Mature existing processes instead of creating new processes
- Allow programs to mature as well as the organization
 - Programs include what is important to them
 - Programs allowed to innovate and the organization replicates
- Cover the entire lifecycle: Concept, Development, I&T, Manufacturing, Product Shelf Life

Must Add Value to Programs, i.e., The Business

Top 10 Excuses NOT to Sustain High Maturity

1. I'm too busy, it's chaotic around here.
2. We've got it under control.
3. I'll lose my creativity.
4. We'll just buy a tool!
5. We'll work smarter.
- 6. Not important to my boss.**
7. My organization is different.
8. We're going to reorganize.
9. We have too much "real" work to do.
10. We don't do process.

Problems Encountered

- **Some levels of management were uncomfortable with the true capability**
- **Aggregating on-going programs with completed programs**
- **Rationale Subgroup assumptions were incorrect**
- **Treating all measures as normally distributed**
- **Statistically controlling an indicator (SPI, CPI) rather than a subprocess (design defect removal rate)**
- **“Process Dodgers”**
- **Statistical “Purists”**

Process Physics – Some Things Just Take Time



Questions



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