

Hidden Software Costs - How To Spot Them

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Your Take Away

- Not intended to cover all risks – just the ones you may not usually consider
- Increase cost estimate accuracy
- Protect profit margin
- How to point project mgrs. to the areas that they are under estimating and some possible mitigations



Metrics Indicating Effects of Hidden Cost

- Schedule slips
- Software defects
- Out of sequence maintenance releases
- Growth of backlog items
- Length of time items remain in backlog
- Developer turn over
- Extended work hours are authorized



The “Voldemort” Of Software Mgt

- The reality of software management that will not be spoken
- Delivery schedules override security

Contract/SOW

- Hidden costs are transferred to project when its underbid
- Hidden costs are incurred when Project Mgt unable/unwilling to limit customer induced scope creep



Hidden Cost of Productivity Killers

- Project Mgt centric (scrooge)style of management
- Let them eat cake
- Developers are treated as expendables
- Lower morale = reduced productivity
- Good developers will leave (because they can) – brain drain



The “Process” Has Taken Over

- To some, the process has become their product
- Adds a lot of overhead – creates the appearance of progress but has little effect on actual productivity
- This is an example of a “Project Mgt” centric style of running a contract

Hidden Cost of Liability Transfer

- Legal liability of corporate officers has put them on notice
- Solution: liability transfer via costly software scanning software
- Integration and user learning curves are hugely under estimated
- Adding insult to injury, these products have high false positives and developers turn the checks off to code checked in



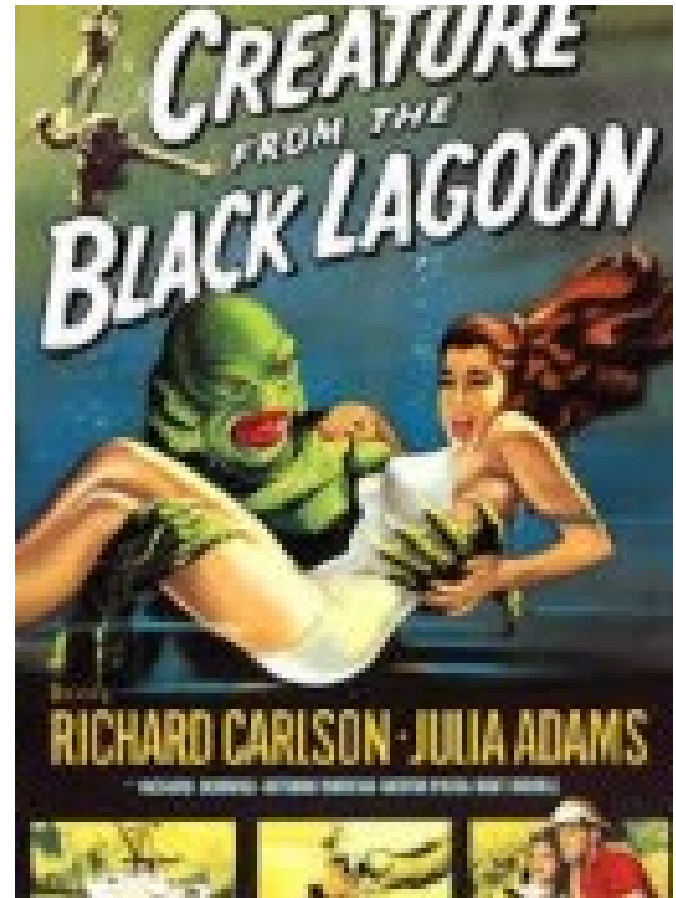
Not So Agile

- Like any great idea some things get lost in translation
- The agile process needs to go on diet
- Sprint Retrospectives - Really?
- Changes in Project Mgt/Technical leads usually come with re-alignment of software development priorities and philosophies such as what “agile” means



Vicious Cycles

- When testing software – many projects test to pass, not test to fail
- Leaving many undiscovered software bugs to be discovered in production
- When they are discovered it creates panic, re-allocating labor resources and unscheduled maintenance releases
- This also creates a vicious cycle of reactionary software management – more cost



Classified Projects

- Standing up and working under DoD rules of developing classified applications probably increase cost of a project by 25%+
- \$\$\$\$\$\$\$



Onboarding

- It's on the WIKI – right



Onboarding (cont'd)

- Sr/Existing developers don't document well if at all
- If they do – only they understand it
- It's not kept up to date
- Onboarding new developer frequently takes more time and resources than it should



Common Desktop Environment

- Sounds good, rarely delivers as promised
- Hidden cost of inefficiencies of re-install's, onboarding etc..

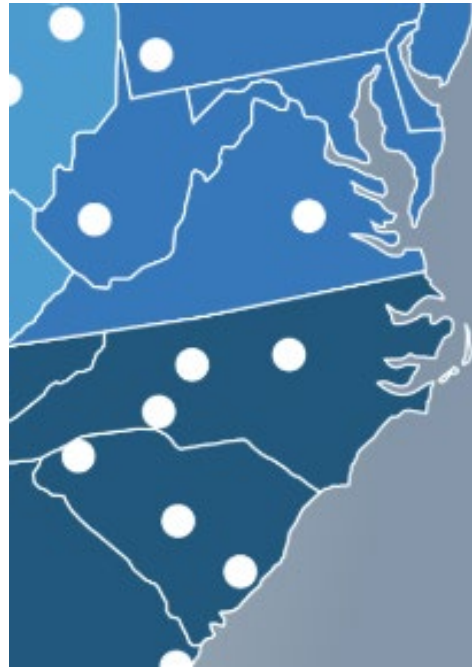
Encryption

- Encryption is a component on any software development project
- Some need more/have special needs
- This is often overlooked in pricing contracts
- Encryption is not “canned” and the skillset isn’t cheap
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Hidden Cost of Different Locations

- Culture differences
- Especially when one team is the prime and the other is a sub
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Hidden Cost of Purity

- The insidious and “un-accounted for” cost of pursuing code purity and the continuing search for unicorns.



Cost Impact of Project Culture

- Pace of productivity
- Varies by regional
- Varies by Company/project
- How do you quantify it? Examine past performance of the Proj Mgr/Dev Team
- What are you looking for? Schedule slips, increases in cost, maint release
- All Signs of un-accounted cost