

# Project Management and Software Development

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# Our product

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## **datavoir**<sup>TM</sup>

- Processes, stores and allows data mining on operators' **call data** (OSS/BSS)
- Unix, Oracle and C# .net technologies used
- 15 developers took 1 year through full SDLC
- Deployed and running at a major SA operator
- Currently processing up to **9 billion** call records per month
- Stores **32Tb** of data

# How did we do it?

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1. Avoid the common mistakes
2. Tailor and focus the process according to the project requirements



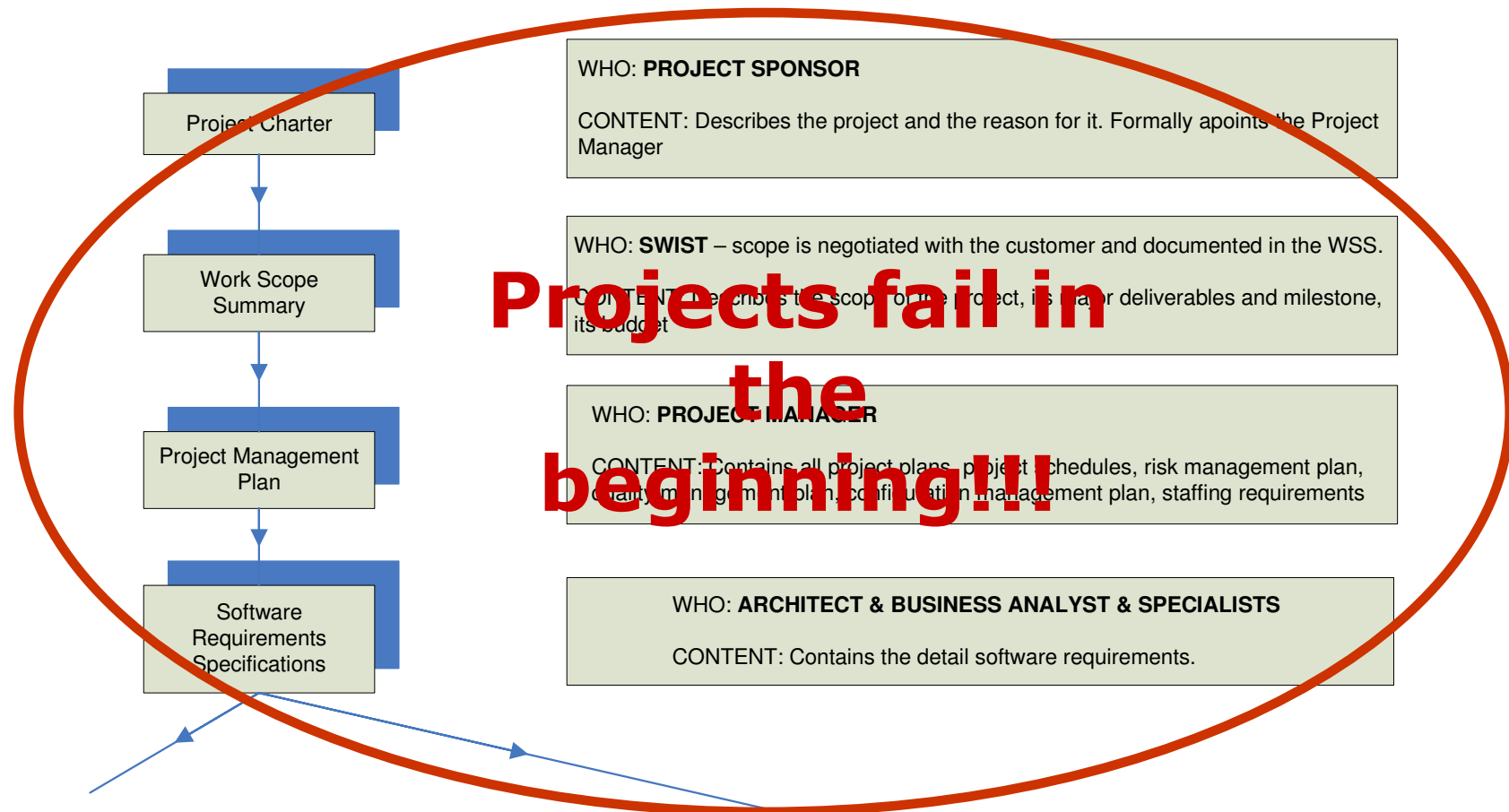
People-related mistakes	Process-related mistakes	Product-related mistakes	Technology-related mistakes
1. Undermined motivation ✓	14. Overly optimistic schedules ✓	28. Requirements gold-plating ✓	33. Silver-bullet syndrome ✓
2. Weak personnel ✓	15. Insufficient risk management ✓	29. Feature creep ✓	34. Overestimated savings from new tools or methods ✓
3. Uncontrolled problem employees ✓	16. Contractor failure ✓	30. Developer gold-plating ✓	35. Switching tools in the middle of a project ✓
4. Heroics ✓	17. Insufficient planning ✓	31. Push-me, pull-me negotiation ✓	36. Lack of automated source-code-control
5. Adding people to a late project ✓	18. Abandonment of planning under pressure ✓	32. Research-oriented development ✓	
6. Noisy, crowded offices ✓	19. Wasted time during fuzzy front end ✓		
7. Friction between developers and customers ✓	20. Shortchanged upstream activities ✓		
8. Unrealistic expectations ✓	21. Inadequate design ✓		
9. Lack of effective project sponsorship ✓	22. Shortchanged quality assurance ✓		
10. Lack of stakeholder buy-in ✓	23. Insufficient management controls ✓		
11. Lack of user input ✓	24. Premature or overly frequent convergence ✓		
12. Politics placed over substance ✓	25. Omitting necessary tasks from estimates ✓		
13. Wishful thinking ✓	26. Planning to catch up later ✓		
	27. Code like hell programming ✓		

Source: "Rapid Development", McConnell

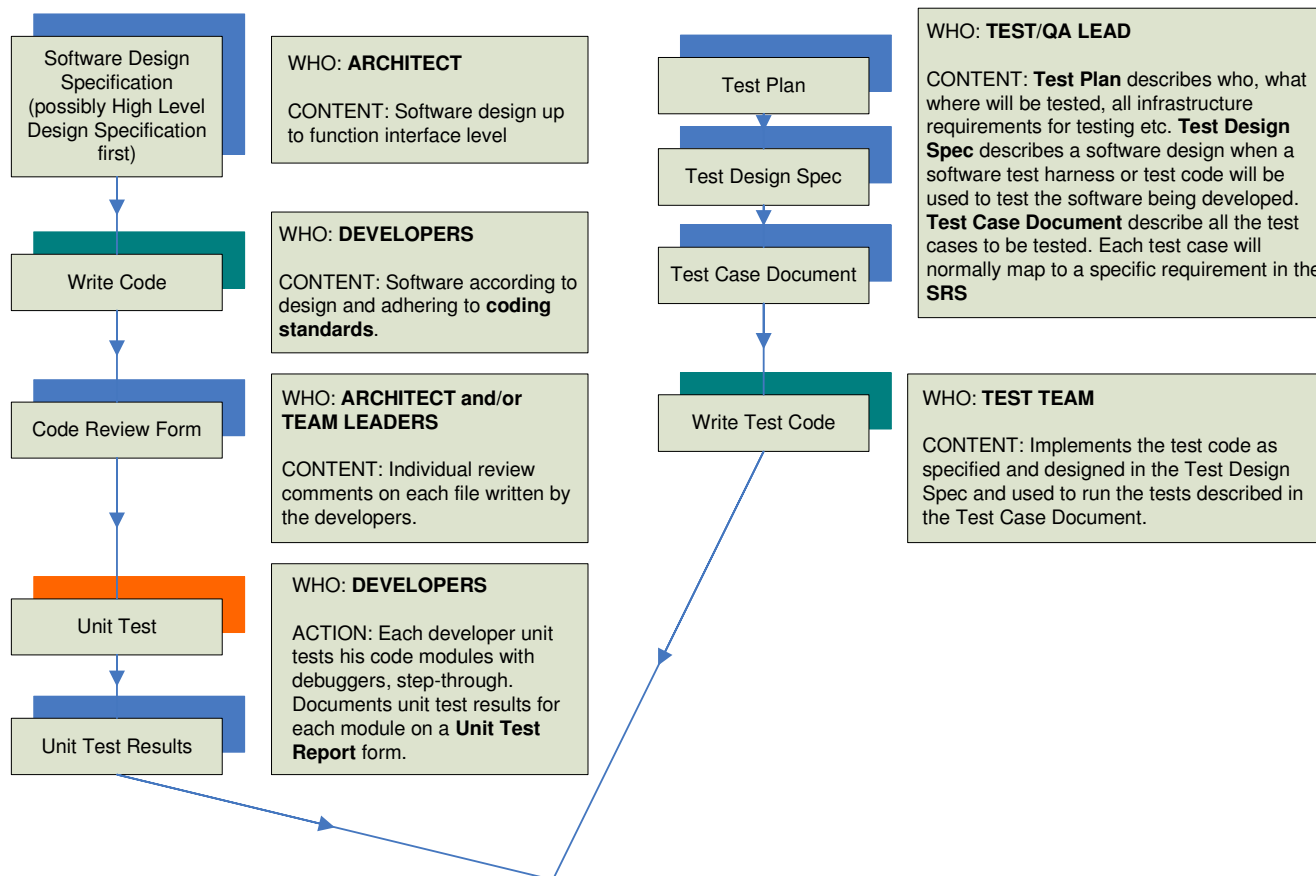
**Project Manager's  
direct  
responsibility**

**Personally  
experienced all  
these before**

# Development Process

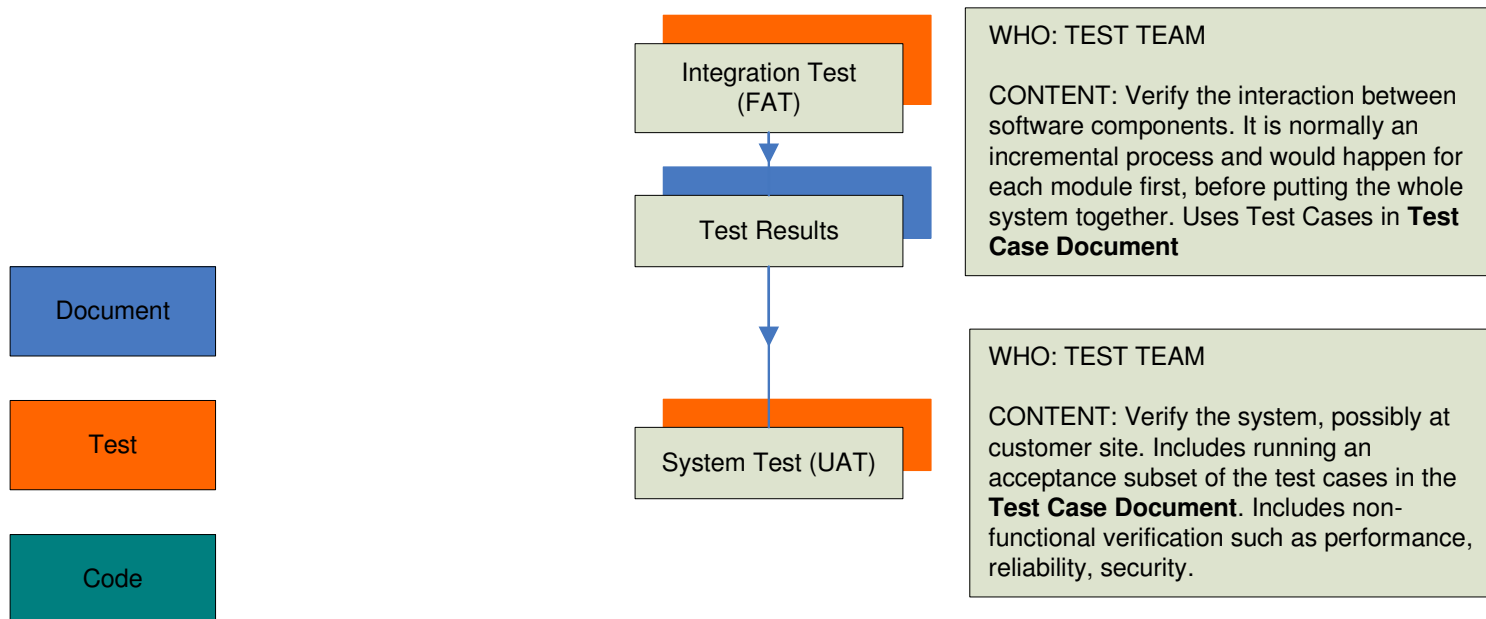


# Dev process cont.

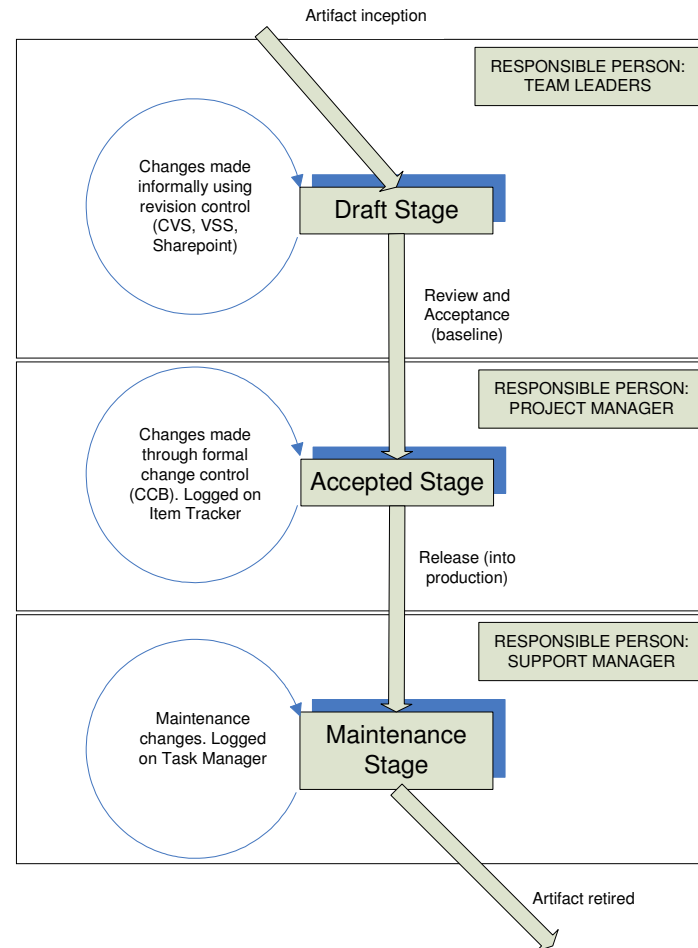


# Dev process cont.

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# Change Management



# Conclusion

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- Lack of Project Management competency will kill software projects
- Project leaders plays THE key role in implementing operational effectiveness
  - Senior management are looking outwards and rarely are operationally focused – especially in SMEs
  - Junior employees don't have enough power yet and haven't made enough of the mistakes!!

**It's up to us!**

# Resources

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- *"The Challenges of Complex IT Projects"* Royal Academy of Engineering, British Computer Society
- *"Rapid Development"*, Steve McConnell
- [www.construx.com](http://www.construx.com) – Steve McConnell's site
- My BLOG: [www.pwnel.net](http://www.pwnel.net)