Including ITSM in the Curriculum

A caricature approach
David Bowers, David Morse
School of Computing & Communications, The Open University

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Abstract

• We should be teaching IT Service Management (ITSM) as part of computing
• ITSM is incredibly boring (especially ITIL)
• A caricature approach helps.
Motivation
Why on earth…?

- It’s just industrial training, no “academic” content
- It’s just rote-learning
- It’s just for quality geeks / help-desk types
- ITIL is just a money-making scam for Axelos*
- ITIL is so last decade … everything is Agile (Devops) now …
- Why on earth would we want to teach something that hasn’t changed since 2011?
Well, actually,…

- ITIL foundation was (2011-12) the most frequently mentioned certification in job adverts
- Underpins about a quarter of the BCS Breadth of Knowledge test
- It’s all about delivering value to customers
- It’s an essential complement to (project-focussed) Software engineering
- It’s about a whole load of real-world professional issues
Well, actually,…

- ITIL foundation was (2011-12) the most frequently mentioned certification in job adverts
  - *Employability*
- Underpins about a quarter of the BCS Breadth of Knowledge test
  - *Employability / professional issues (LSEPI)*
- It’s all about delivering value to customers
  - *Commercial aspects, trade-offs etc.*
- It’s an essential complement to (project-focussed) Software engineering
  - *i.e., what happens between projects… (LSEPI)*
- It’s about a whole load of real-world professional issues
  - *LSEPI*
One might even argue...

- That it should be an integral part of SW Engineering
  - Lifetime operation rather than project delivery
  - An awful lot of NF requirements...
- But it doesn’t fit
  - Focus on discrete deliverables
  - Sw engineers are focussed on development, not delivery
- And it’s not formal enough
  - No UML, Z, process algebras,…
We know that a lot of SW projects fail

- Often because some service management aspects ignored
  - T5 baggage handling – no proper transition plan
  - BA data centre – whatever happened to continuity planning?
  - Universal Credit
    - (although certain ex-ministers claim it hasn’t failed yet)
  - RBS software updates

- Gives a clue about how to approach it
  - *How might things go wrong if we ignore Service Management?*
Background

• Developed by Cabinet office as library of best practice
• Initial focus on operations
• By the time of V3 (2007, 2011) had adopted a “Service Lifecycle” as an organising principle
• IP sold off to joint CO/publisher commercial venture – Axelos
  • Who, of course, aim to maximise the return on the IP
• Due to be “refreshed” in 2018

• Authors attempted to make it “respectable”
The ITIL service lifecycle

5 “stages”
29 processes
Countless 2, 3 and 4-letter acronyms

Foundation syllabus focusses on “what” and “what’s it called”

For HE, need focus of “why”, “so what”
ITIL – Adopt and Adapt

Not, “start here and don’t even draw breath until you’ve finished…”
And there’s the “Agile” debate

• A bit of an unholy alliance
• Those who are frustrated by over-bureaucratic implementation
• Those who don’t understand that ITIL is *deliberately* agnostic about SW Dev methodologies
  • It’s not actually overlooked – just not … specified

• So Devops (and various other “alternatives”) have sprung to life

• But ITIL still a good “reference” shopping list of concerns that need to be addressed.
Aren’t there just books?

- Well .... Yes ... but....!
- ITIL Foundation training (and supporting books) likened to a “religious experience”, with the exam being a catechism test.
- Most common comment from students – “so many acronyms!”
- Rabbit hole (or even warren!) of jargon
- I think I hold the record for having got to page 12 (of a book written for the BCS by ... “educators”) before falling asleep…!
- Only a minor paraphrase:
  - In the beginning was The Service, and The Service was ITIL, and ITIL was the Service, and without ITIL was not anything served....
What are we trying to achieve?
By the end of the course...

- Have a general appreciation of the importance of SM
- Understand that services are persistent
- Grasp some fundamental principles of SM
  - Services are about delivering outcomes to customers,
    - Not vanity projects for the latest SW technology
  - Services shouldn’t be withdrawn until their replacements are working
  - People (including “users”!) are quite important to the success of services
Enter Ben (and Georgina and Alex…)

- Although all three characters have computing “diplomas”, Ben’s main interest is running his farm as a nature reserve.
- His booking system used to be a diary, pencil, and loads of post-it notes…
- … and he relied on physical posters for publicity.
- Because he Knows what he is Doing with Computers, he decides to replace the booking system with an email system, and the posters with a website.
  - So he throws away the post-it notes and diary…
  - … and stops printing posters…
  - … and then discovers that nobody knows how to book, or even that his farm exists!
The scenario develops...

- Working through the stages of the lifecycle.
- Ben is assisted by Georgina (who is full of common sense) and Alex (who is an IT contractor).
- Vignettes to illustrate key points
  - Like not withdrawing services before replacement is working
  - For change management, not replacing Windows with Linux (on his pc), without checking that everything will still work...
  - For supplier management, choosing between a “jumped-up townie nerd” and Alex, who is also sensible and sympathetic
  - In strategy management, getting across the “future value of money”
  - In service design, remembering to think about availability, capacity and service levels at the design stage
  - In service improvement, not just deleting old (unanswered) emails to meet a response time KPI
Why not a real case-study

• It would be far too complicated
  • Wouldn’t be able to see the wood for the trees
• Anything from the ItSM community likely to focus on detail rather than general issues
• And people don’t want to advertise their failures!
Assessment

- Examination
- Short questions about the way things fit together
  - Moved away from “memory test” of the jargon – more qualitative
- Longer questions
  - Descriptive / discursive for a scenario
  - Diagnostic for a caricature scenario
    - “what seems to have been overlooked? … why was it important? … what’s gone wrong?”
- Hard work for students
  - But that’s as much about OU culture as the approach
Does it work?
From the perspective of the teachers …

• Universally complimented by those having to teach this material

• Industrial Assessor:
  • “The uncomplicated and slightly tongue in cheek style of the author does much to engage the learners interest, aided by the back story of the scenarios.”

• Forum moderator / critical reader:
  • “I like Ben – he helps bring ITIL to life, and injects a little humour”

• Author of update
  • It’s become surprising easy to write another short episode to illustrate any concept that was wanting previously
And the students?

- More equivocal
- Most negative comments about the number of acronyms in ITIL
- Several positive comments about having gained certification, understood their work environment better, even having helped introduce SM into their workplace
- Nearly all were critical of the reference book (although some did like having something they could just “learn”…)
- Some felt the approach was a bit verbose

- Probably the wrong question…
What should it be compared with?

- The books – generally dreadful – wrong focus for HE
  - An exception – Claire Agutter’s *ITIL Lifecycle Essentials* (2013) IT governance publishing
  - Still a “what are the nuts and bolts called” approach, but a lot better than the “official” Axelos offerings
- The intense “cramming” courses on offer commercially?
- Even “manager’s awareness” books are far too heavy on the nuts-and-bolts jargon
- The “what went wrong” diagnostics seem to be more associated with later stages of ITIL training
  - Particularly the “managing across the lifecycle” – which is the final certification
How has it helped

• An important aspect of IT management
• A dearth of resources that look at “why?” or “so what?”
• An opportunity to bring some of the more obscure aspects of Service Management to life
  • Without getting bogged down in detail
• Helping students to recognise what can go wrong if SM is overlooked or poorly managed
ITIL vignettes

- Supporting material for dry topic
- Don’t take it too “seriously”
- Would it be of value to share the material in the community?
Thank you for listening

Any comments or questions?