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Including IT service management in the Computing curriculum: a caricature approach.

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Including ITSM in the Curriculum

A caricature approach

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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?*
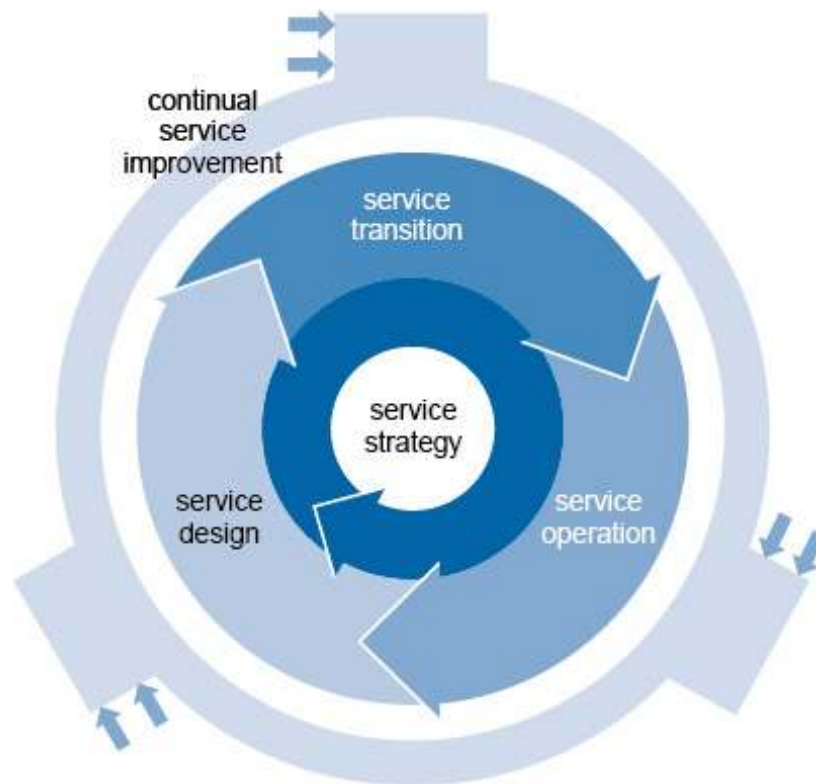
ITIL

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"
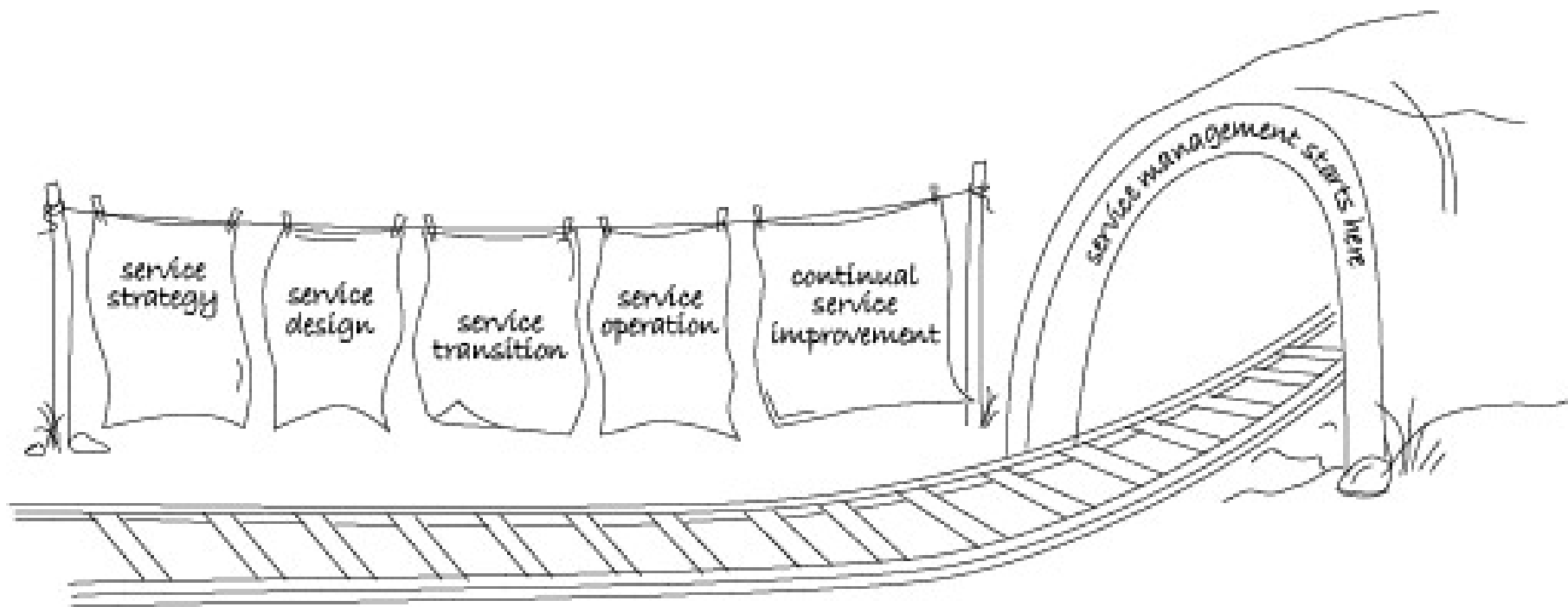
The ITIL service lifecycle

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

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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'sas 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?