

Rescue HE from grave peril

(while cutting some groovy Team Topologies shapes)



with Sorrel Harriet and Clem Pickering

Introductions



Sorrel Harriet, PhD

Research Software Engineer
& Learning Consultant

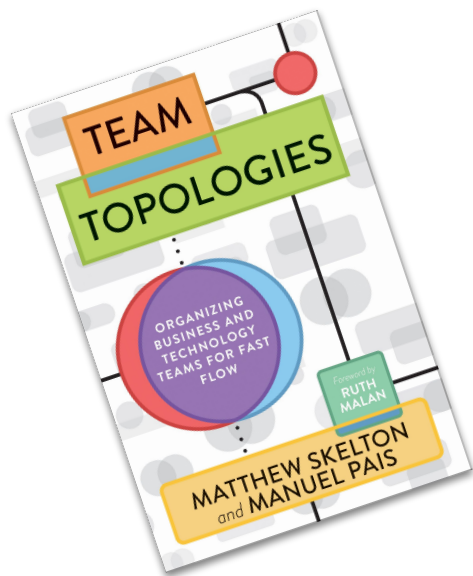
laas.consulting



Clem Pickering

Leadership Coach

clementpickering.com



 conflux

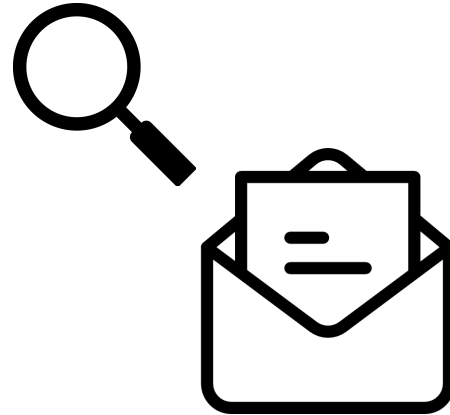
confluxhq.com

Access these slides...



Coming up...

- Invitation to **explore** a real(ish) scenario through a Team Topologies lens
- **Practice** Team Interaction Modelling using Team Topologies shapes



Indicative learning aims

- Gain insight around the **mindset shift** needed to move to a flow based and product centric operating model
- Practice modeling **team interactions** with Team Topologies shapes and terminology
- Reflect on **scenario-based learning** and **storytelling** as a catalyst for change

Agenda

- Storytime
- Reflection on the story
- Introduction to team interaction modelling
- **Break**
- Group exercise: team interaction modelling
- Round the world
- Closing reflection

Duration: **90 mins**

Storytime!

Listen to the story...

Note down any details that resonate with you

You won't need to remember it all!



Disclaimer

The characters, location and organisation depicted in this story are **fictitious!**

While some details are based on my 15+ years experience studying and working across 9 UK Universities, they have been **adapted** and **simplified**.

In a town, far, far away...

St Celestine's University,
Biddlesford



- 160/160 for Student Satisfaction
- 150/160 Research Quality

Objective 1: improve NSS* scores



IMPROVE NSS SCORES

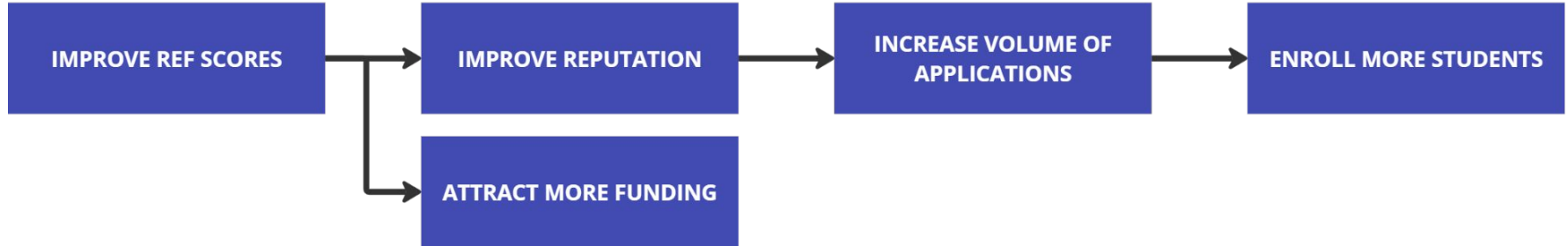
INCREASE RANKING

INCREASE VOLUME OF
APPLICATIONS

ENROLL MORE STUDENTS

*National Student Survey

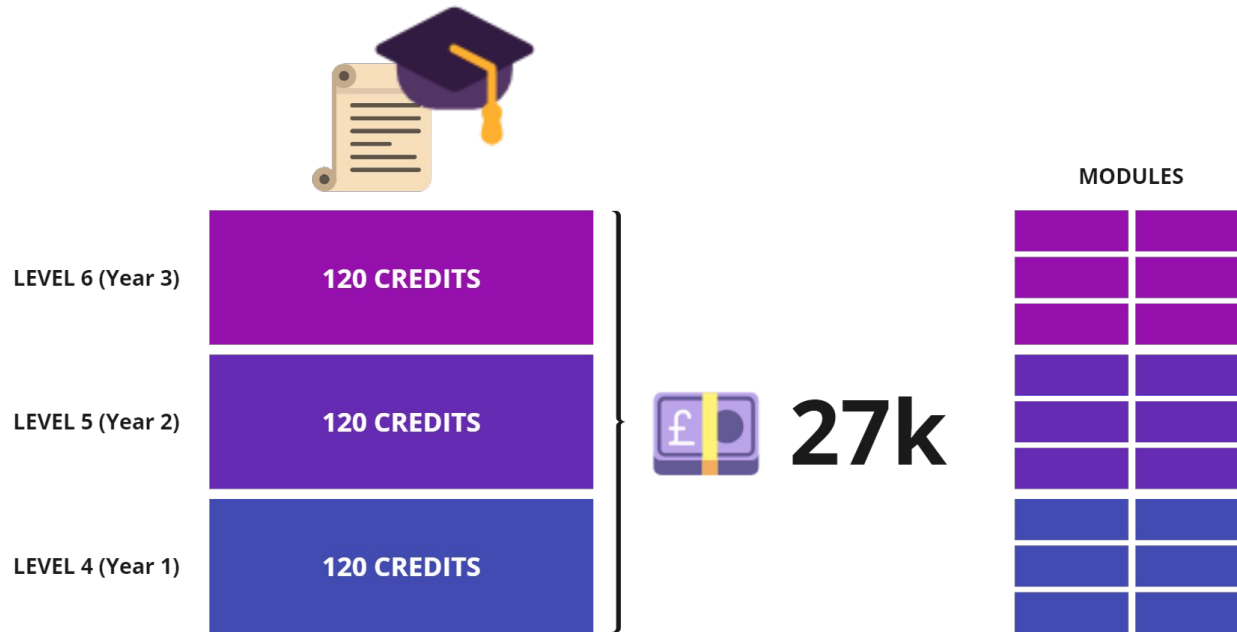
Objective 2: improve REF* score



* [Research Excellence Framework](#)

Product: degree*

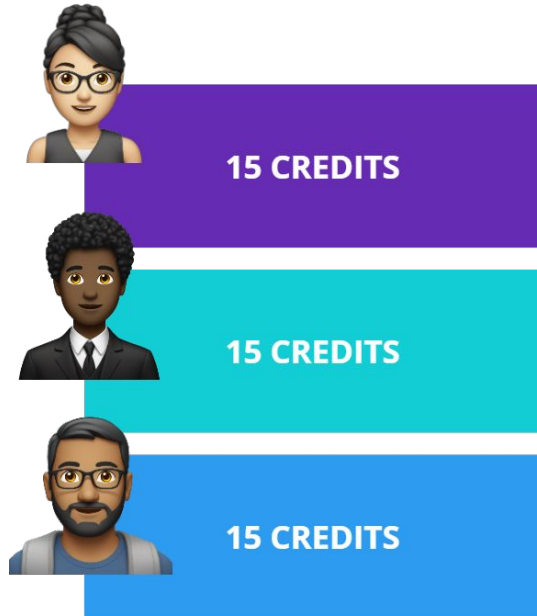
Value: 27k



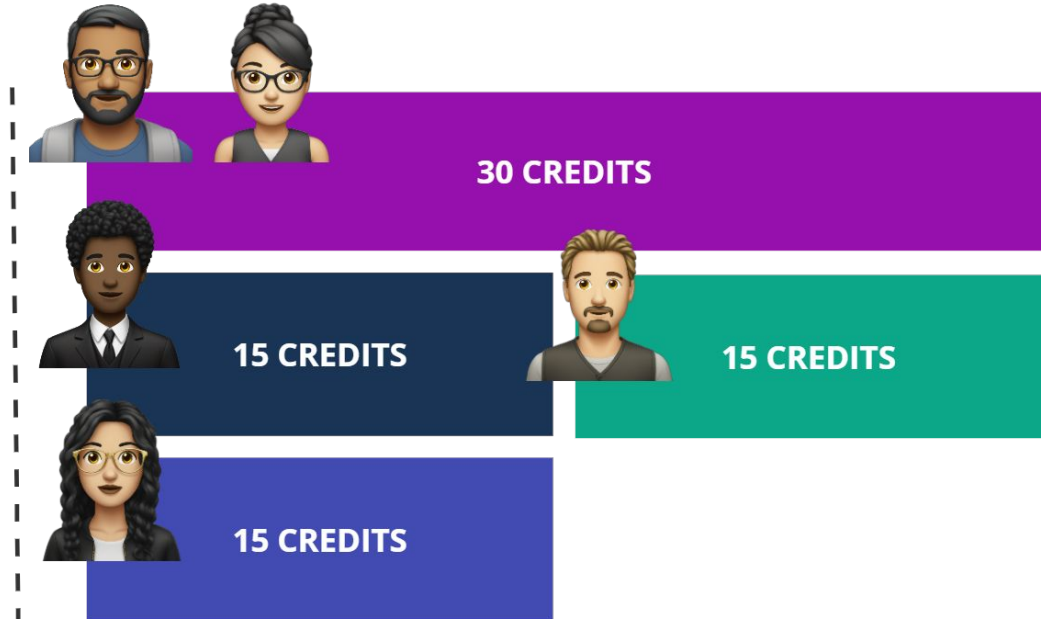
*Correction: opportunity for a degree

Example programme structure

Level 4 Computer Science



SEP - JAN

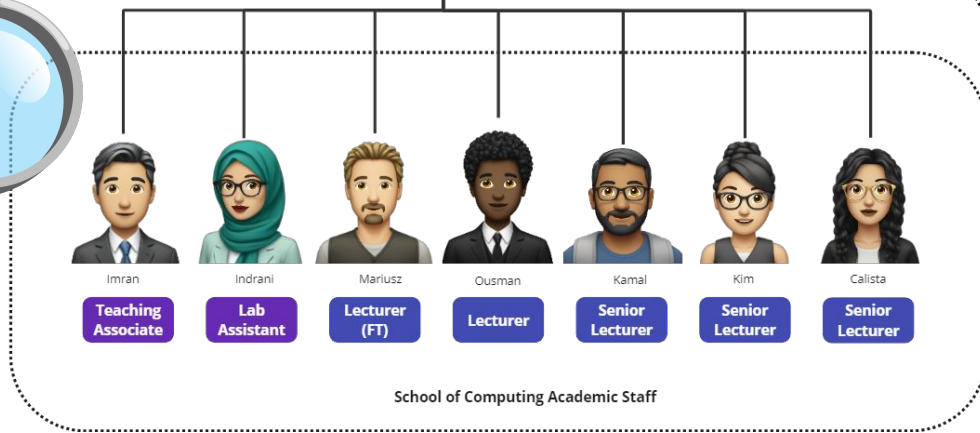
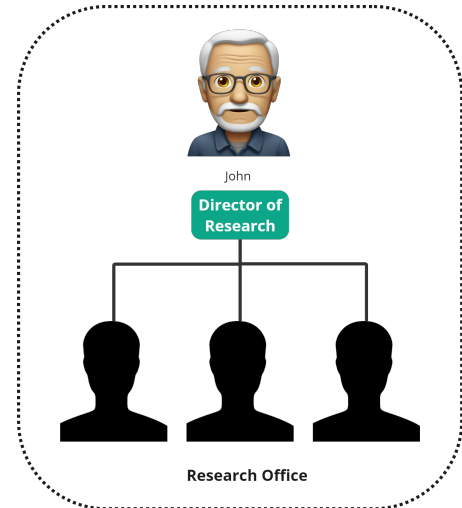
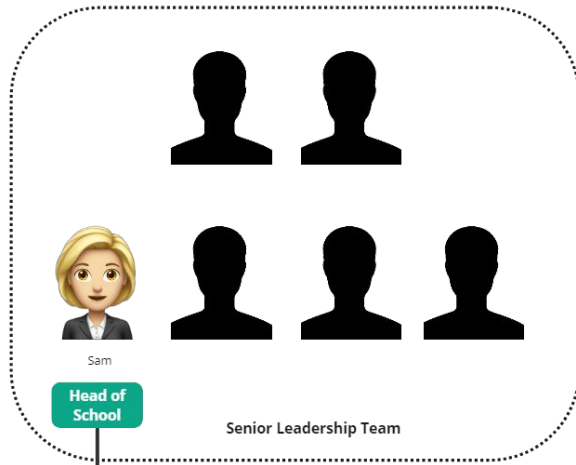
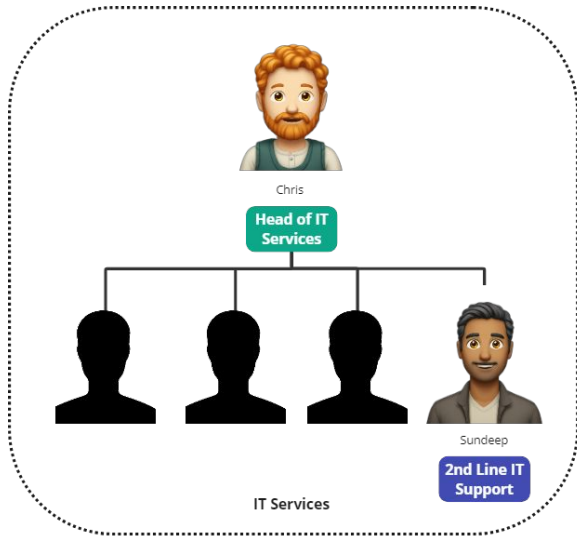


JAN - JUN

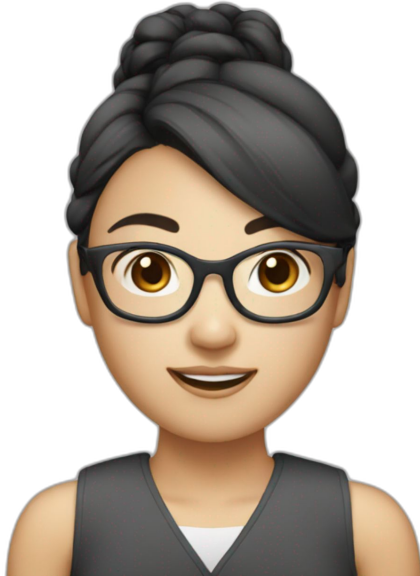
Quality control

- Formal **review process** for new module specifications
- **External examiners** check assessments are fair
- **Feedback** is collected at the end of each module
- Formal **complaints process** available to students





Kim, 35



- Senior Lecturer
- PhD in Bioinformatics

Goals

- Progress into reader role

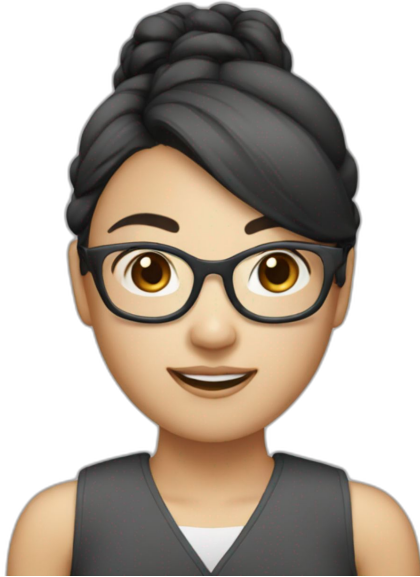
Challenges

- Making time for research
- Work-life balance

Fears

- Losing her research hours

Kim, 35

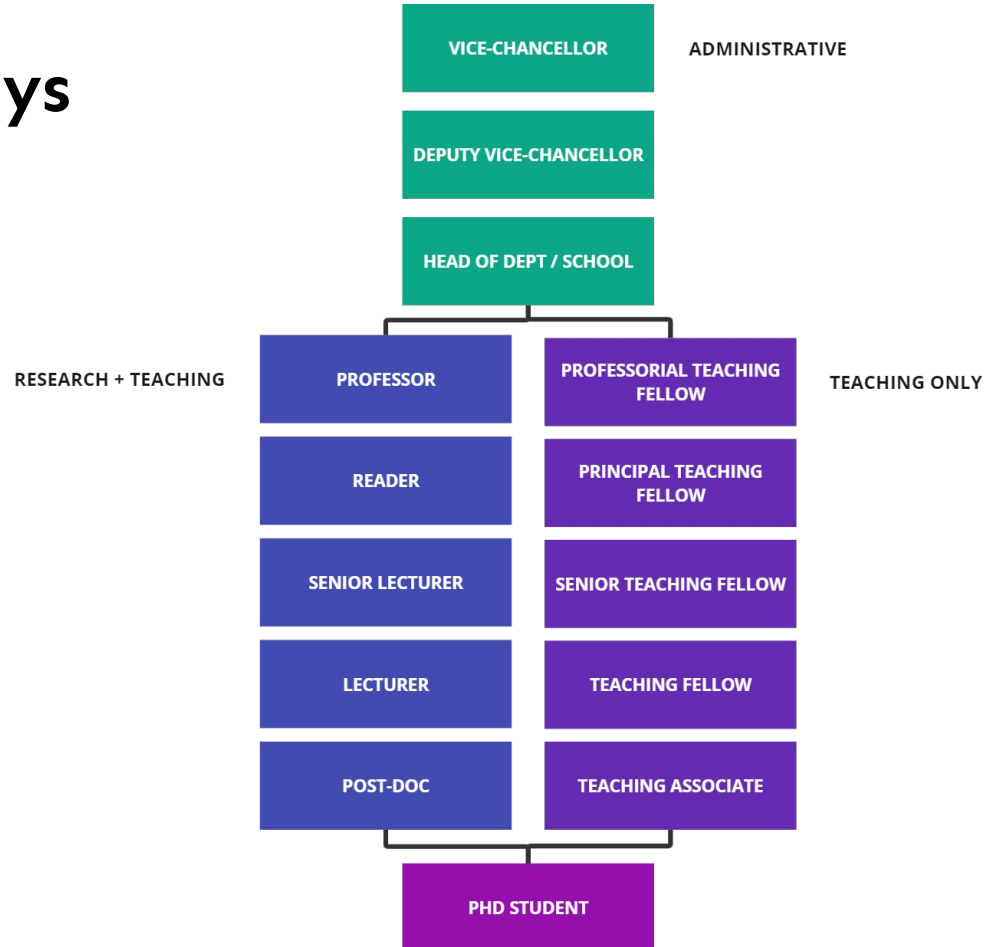
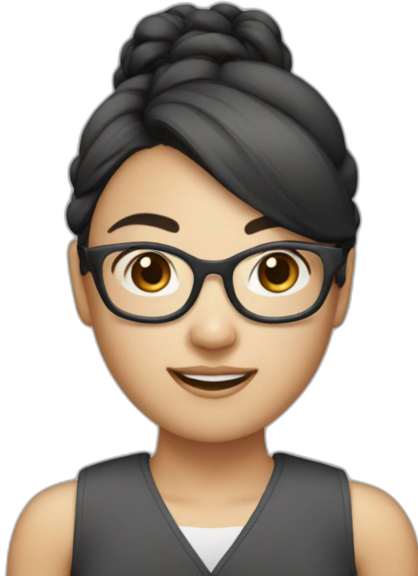


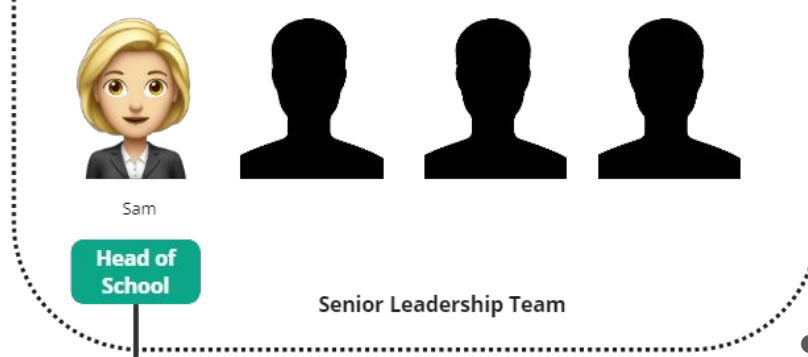
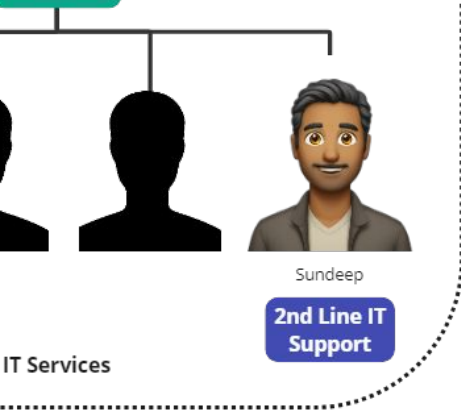
“

*People seem to think academics get really long holidays. In reality, we're **struggling** to ringfence time for research in non-teaching weeks. The University is constantly introducing new policies and processes that encroach on my research time. I end up trying to squeeze it in when I can, which means more **context switching** and fatigue.*

”

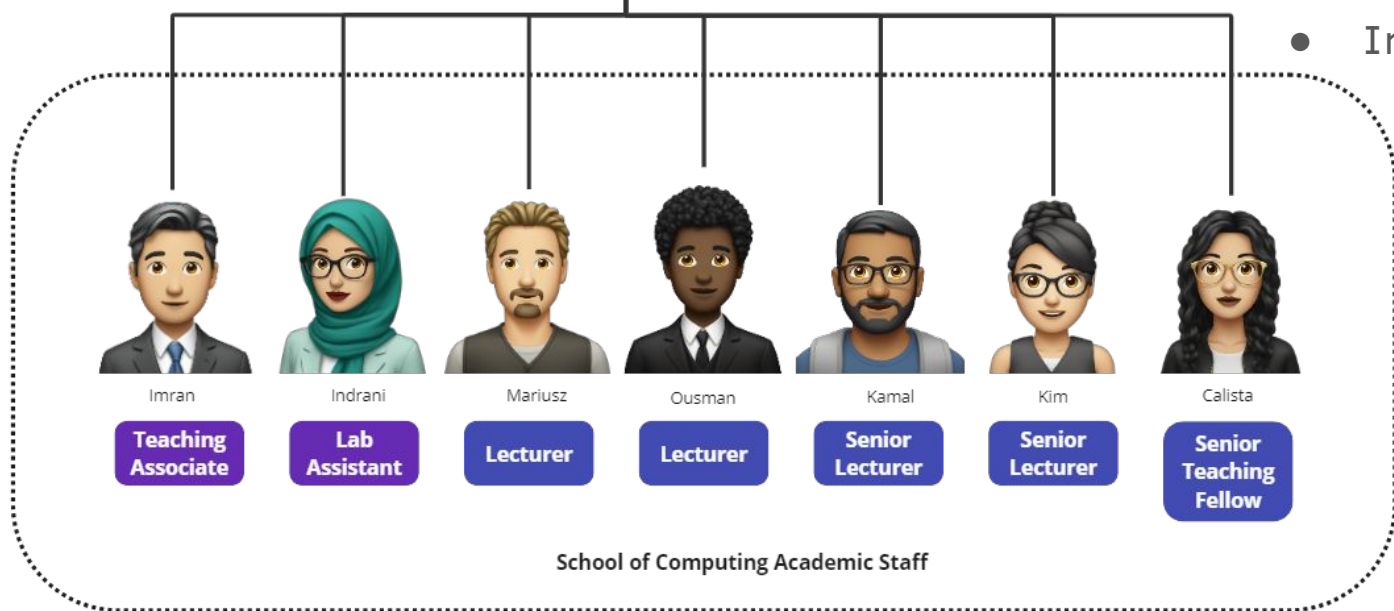
Promotion pathways

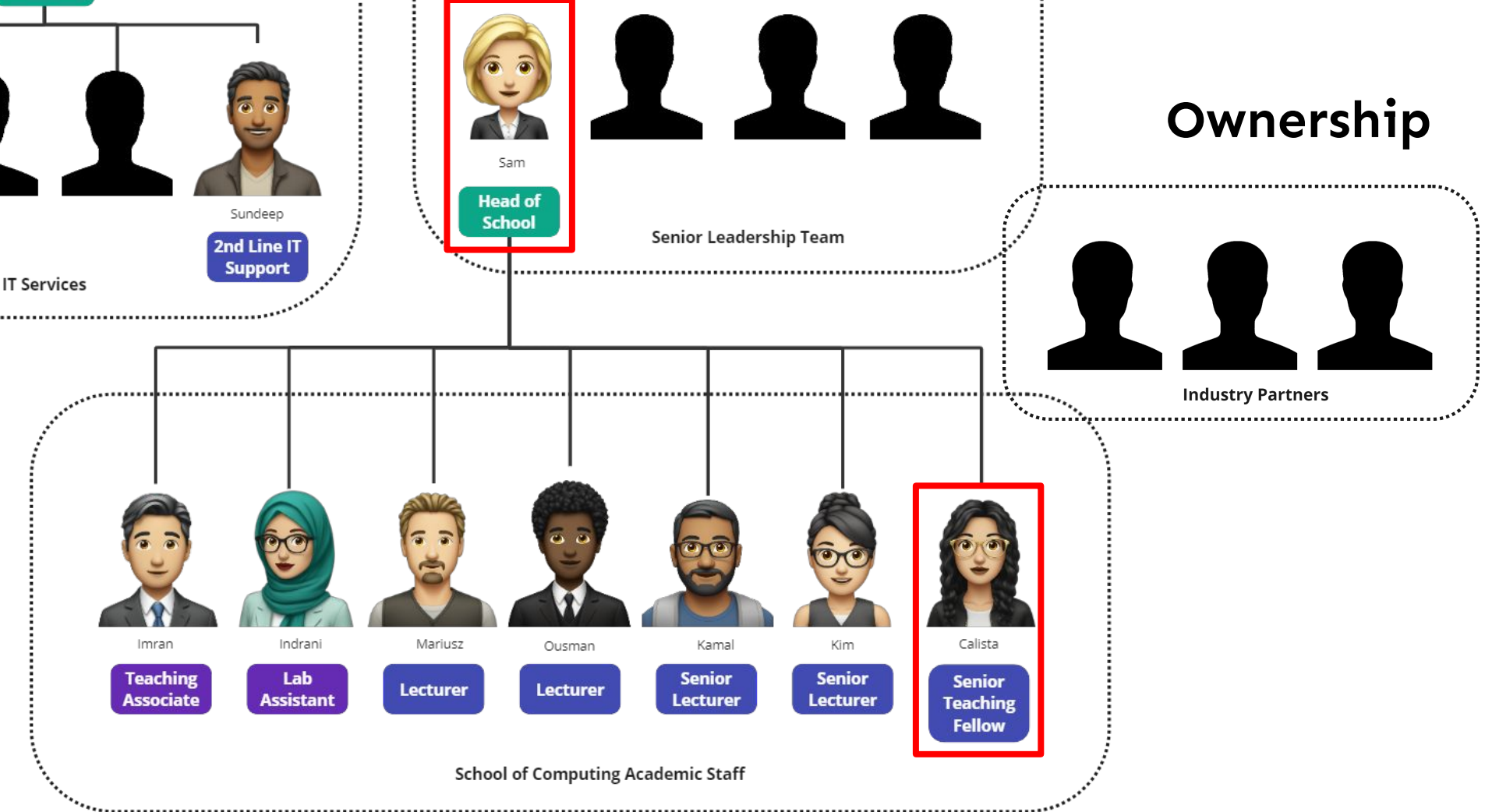




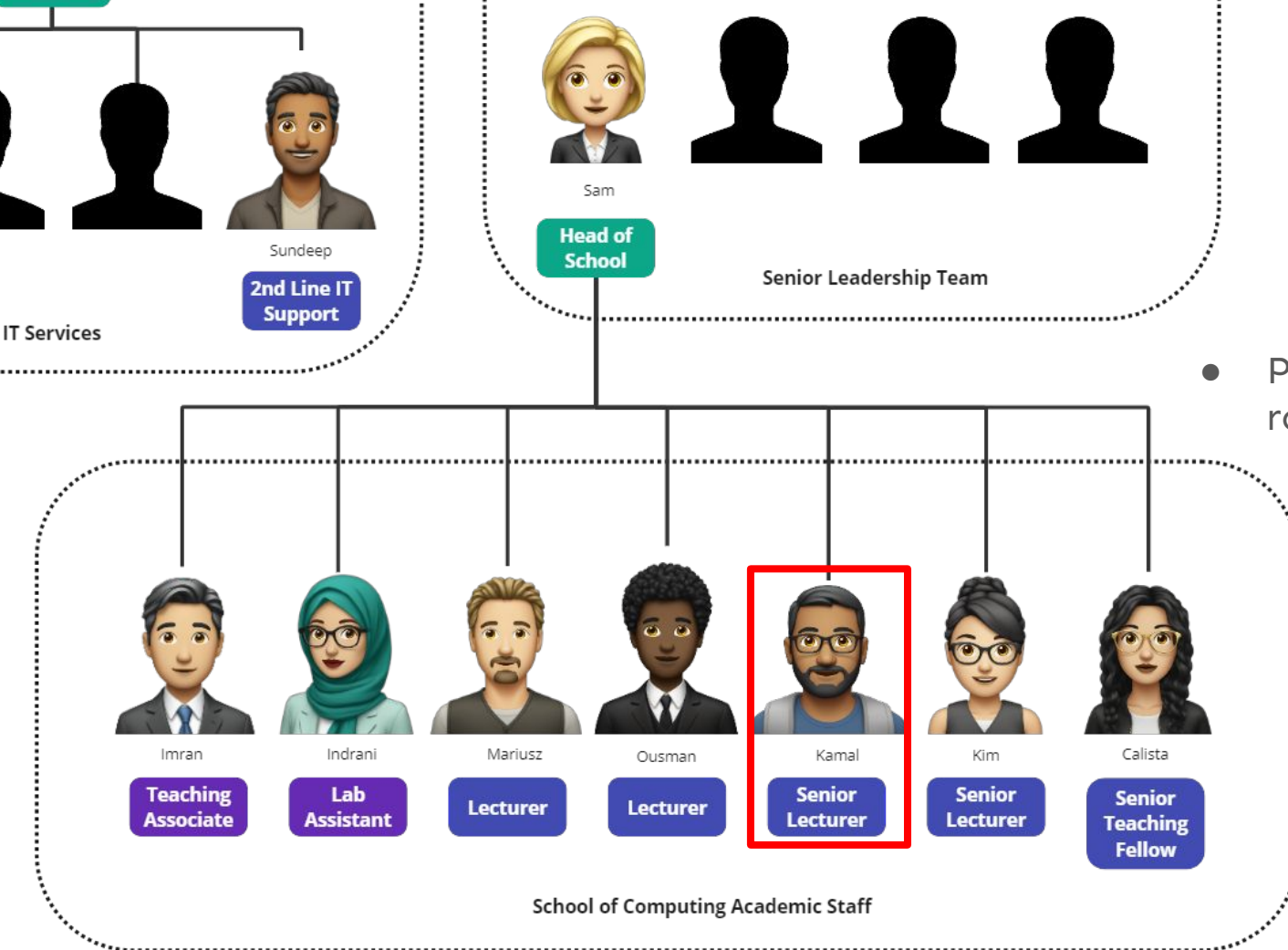
Interactions

- Teaching staff tend to operate independently
- Infrequent interactions



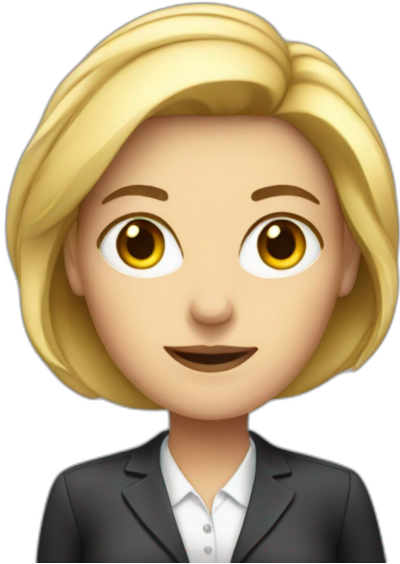


Ownership



- Programme leadership role is administrative

Sam, 42



- Head of School
- Marketing background

Goals

- Establish a reputation as a bold and effective academic leader

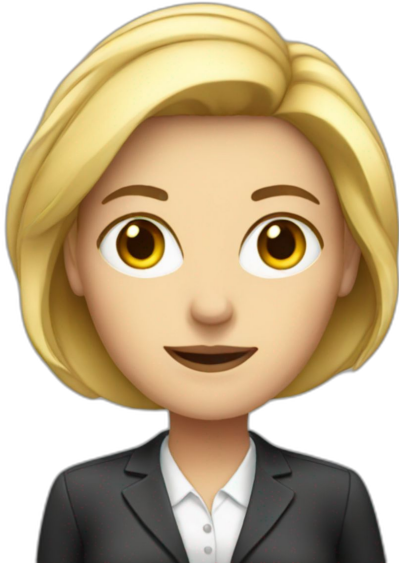
Challenges

- Dealing with difficult staff members
- Professional insecurities

Fears

- Failing to deliver

Sam, 42



“

*I get a lot of **pushback** from teaching staff who don't seem to understand the many financial challenges we're facing.*

I may not have a PhD but I understand how businesses work.

*I just wish they would **trust** us.*

”

Chris and Sundeeep



- Head of IT Services
- Responsible for all of the IT infrastructure at the University

“

We can't afford to make mistakes

”



- 2nd Line IT Support
- Learning to code in his free time
- Dreams of transitioning into software development

John, 60



John, Director of Research

Conflict!



Chris, Head of IT Services

Main responsibilities

- Support researchers to identify and apply for research funding
- Foster best practices in research
- Manage REF submission

Challenge

- Research increasingly software and data dependent
- Researchers are not software engineers
- Poor practices harm research quality

Jamie, 38



- Former Senior Lecturer

Goals

- Live a healthy, balanced lifestyle
- Do work I enjoy
- Be paid fairly

“

Since leaving Academia I've never looked back. I clock off at 5pm every day and head to the gym - paid for with my monthly wellbeing allowance! I save loads on food bills since the work fridges are stuffed with snacks and fruit!

”

Ousman, 30



- Lecturer
- PhD in Information Systems

Goals

- Progress to Senior Lecturer

Challenges

- Feeling ignored and undervalued
- Denied opportunities for progression

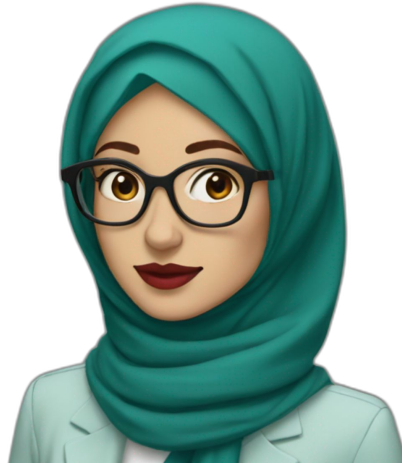
Fears

- Losing his job if he speaks out

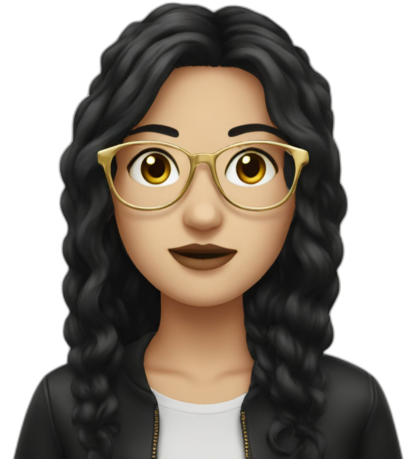
Mariusz, Indrani and Calista



- Lecturer (fixed term contract)
- Stress-related leave



- Lab assistant (hourly paid)
- PhD student



- Senior Teaching Fellow

Operational concerns

1. Overpromising and under delivering
2. Culture of individualism
3. Staff cognitive overload



Overpromising and under delivering

“

*Our **groundbreaking** Applied Computing Programme is developed in partnership with industry experts.*

*It offers **state of the art** facilities paired with the **highest quality** teaching from specialists in the field.*

”

What prospective applicants hear at an Open Day



Overpromising and under delivering



“

*I took this job to help fund my PhD studies.
The students are very **disengaged**.
I'm paid for a set number of hours which I'll easily
exceed if I'm not careful.*

”

Imran, Sessional lecturer

“

*Some of our lectures are simply awful. The
lecturers just read from powerpoint. Students
get bored and mess around. It's really
annoying for those of us who want to learn.*

”

Disgruntled Level 4 Applied Computing Student



Overpromising and under delivering

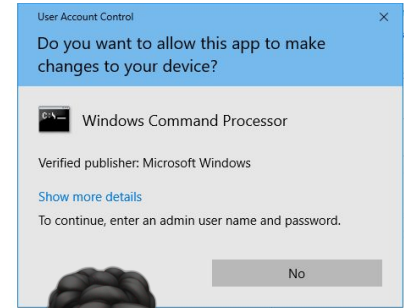
“

We're delighted to announce the launch of our new Cybersecurity and Games Development undergraduate programmes!

Students will gain hands-on experience with cutting edge technologies, guided by experts in the field.

”

University prospectus



“

We have a really hard time recruiting staff and the systems we use are very restrictive

”

Senior Lecturer

Profit before people

“

Tim really loves computers - in fact, he spends more time with his computer than he does with any of us! (lolz)

”

Tim's Mum



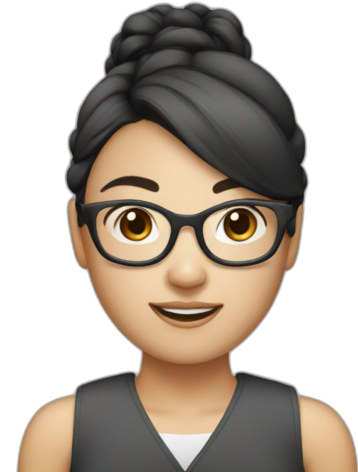
Tim

“

Just because he spends all day playing Fortnite doesn't mean he has an aptitude for computing!!

”

Frustrated Computer Science Lecturer



Shrinkflation

“

Our core skills modules ensure all students are well-equipped for the modern workplace

”

University prospectus

“

I came here excited to learn coding, yet half my time seems to be spent manipulating excel spreadsheets and powerpoint presentations with a bunch of phys ed students

”

Disgruntled Level 4 Applied Computing Student



Culture of individualism

“ *I took over a module from another lecturer who left. Although they did leave some materials behind, I’d still prefer to recreate my own.*

Downside is, some of last year’s students are retaking the assessment, which means I’ll have 2 different courseworks to mark.

”

Computer science lecturer



Culture of individualism

“

I've tried getting the programme team together for occasional team meetings, but half of them don't attend.

I don't blame them. Teamwork isn't rewarded here. Buddying up with leadership and being popular with students will get you much further.

”

Programme leader, computer science



Cognitive overload



Teaching and assessment



Research



Executive function
(admin, workload
management)



Interpersonal
(personal tutoring,
safeguarding)

Cognitive overload

“ *We’re committed to broadening participation in higher education and will consider applications from those who don’t meet all the admission criteria* ”

University website

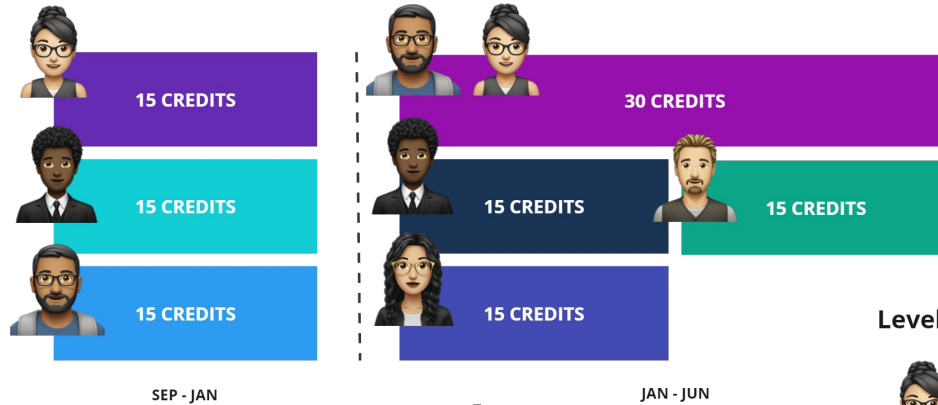
“ *We don’t have the skills or resources to cope with the influx of students with special emotional and educational needs. I fear for my most vulnerable students. I feel like we’re exploiting them.* ”

Concerned Lecturer

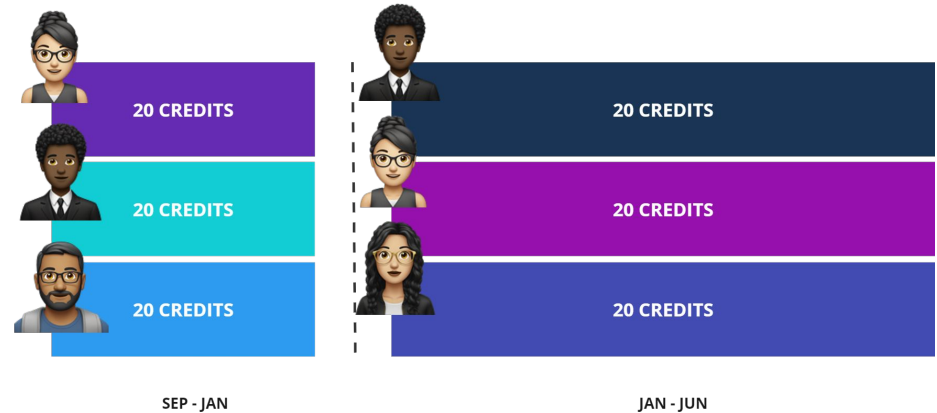


Shrinkflation

Level 4 Computer Science (current model)



Level 4 Computer Science (20 credit model)



The end?

Reflect independently...

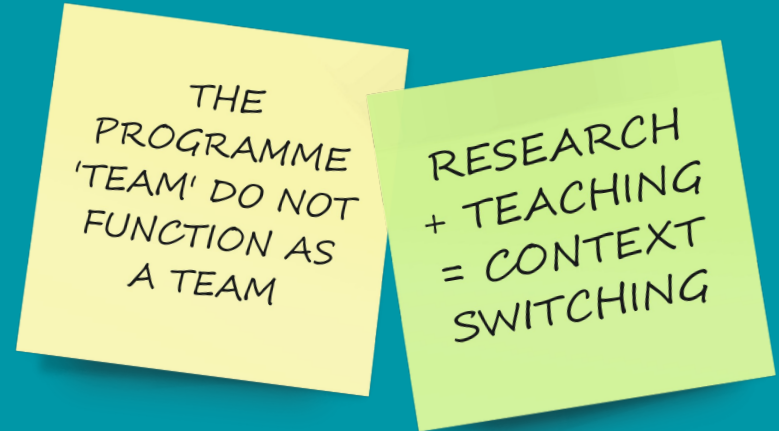
- *What are your initial reactions to what you have heard?*
- *How motivated do you feel to solve this problem?*
- *What have you noticed?*

1 point per post-it

Fill the post-it

Use capitals for legibility

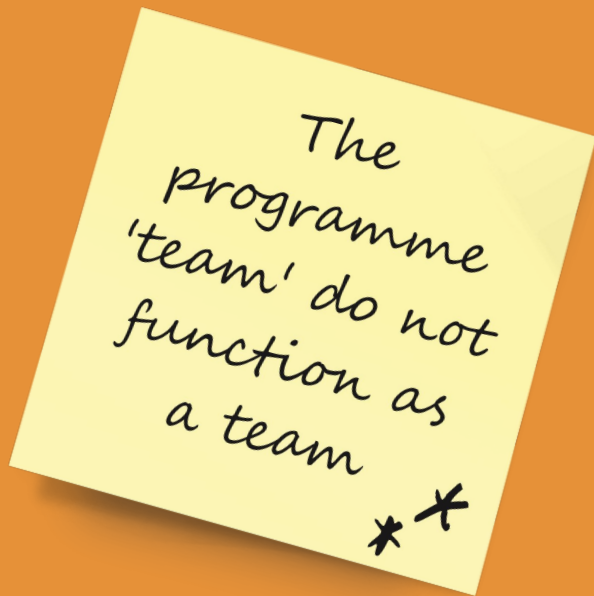
4 mins



Reflect together... (3-5 people)

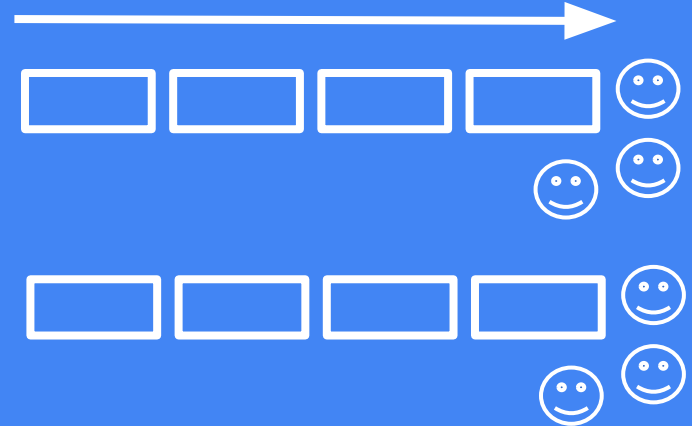
- Lay out your post-its on the Reactions sheet
- Star any post-its that resonate
- Take turns to pick a single post-it to share

5 mins



What if...

- We applied a **product-delivery lens** to this scenario?
- One where teams are organised around **value streams** rather than functional silos?



Value stream examples

- Delivering a degree course
- Executing research
- Providing training to researchers who develop software
- Providing IT infrastructure to lecturers

Looking through the product lens...



Focus on the
customer/service
user and their
journey



Optimize the **whole**
process or system,
not just parts of it



Create a sense of
shared purpose and
identity around a
product or service

Further reading

Mik Kersten (2018) [Project to Product](#). IT Revolution

What outcomes might we see?

- **Better customer experience** (better quality product/service)
- **Happier staff** (manageable cognitive load)
- **Increased collaboration** (healthier interactions, shared purpose)
- **Improved communication** (greater alignment, knowledge sharing)
- **Culture change** (e.g. systems thinking, continuous improvement)

Further reading

Mik Kersten (2018) [Project to Product](#). IT Revolution



Where do we start?



Team Interaction Modelling

- Use the shapes and terminology from Team Topologies to facilitate a conversation
- Identify and document existing team structures and communication channels
- Describe how we might reorganise teams and their interactions to deliver a better flow of value
- Ask, *“How might we do this differently?”*

Source

teamtopologies.com/key-concepts-content/team-interaction-modeling-with-team-topologies

Team Topologies Shapes

Fundamental Team Types

Stream-aligned team

Enabling
team

Complicated
Subsystem
team

Platform team

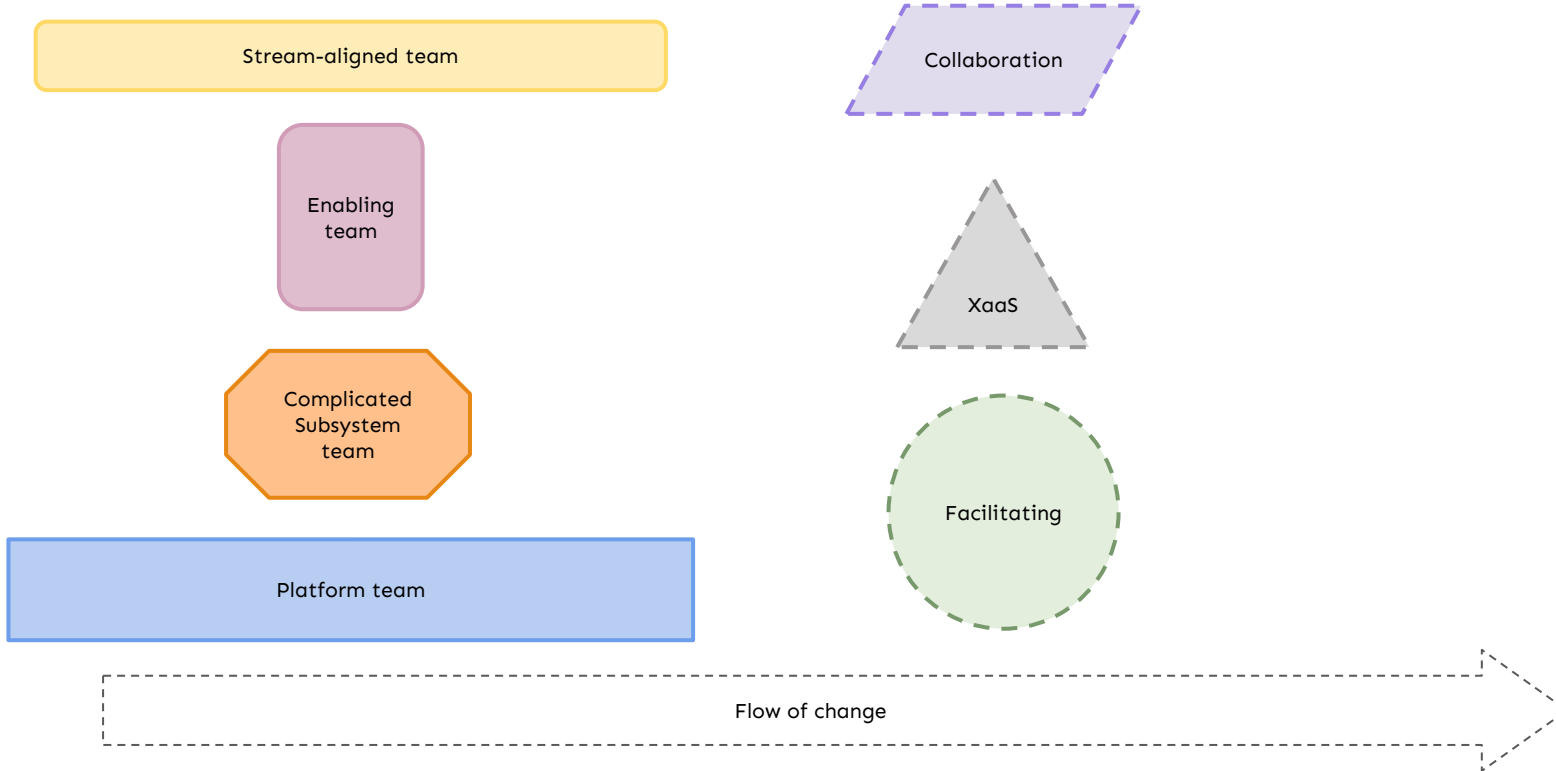
Team Interaction Modes

Collaboration

XaaS

Facilitating

Flow of change



Group exercise

Using the pre-cut shapes provided, explore one or more options for re-organising St Celestines around value streams

- Refer to the handouts as necessary
- Use the blu-tak to attach the shapes to paper
- Add labels where appropriate

15 mins

Tips

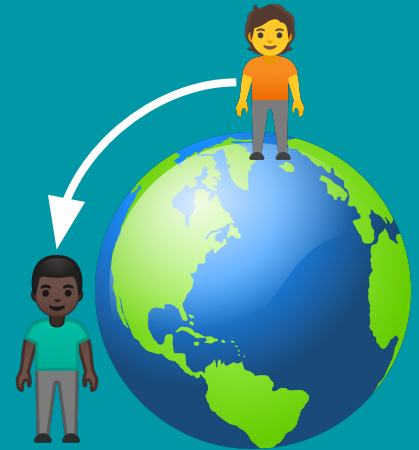
- Implied flow of change left to right
- There is no right/wrong answer
- Don't be afraid to be radical
- Structures can be fractal (i.e. you might find stream-aligned teams within a platform team)
- To identify candidate platforms, ask *"can this be implemented as an independent, self-service product/service?"*

Round the world

Send 2 people from your group to another group

- Explain to the incoming people what your group did
- Have them tell you how their group did it
- *What was different/similar about your approaches?*
- *What did each group struggle with?*

10 mins



Reflect independently...



What are you taking with you from this workshop?

Some areas you could focus your reflection on...

- Scenario-based learning for practicing a new technique / stimulating a conversation about change
- TIM as a technique for exploring organizational design



4 mins



Thank you for taking part!



Useful links

- Rich Allen, [Team Interaction Modelling with Team Topologies](#)
- [Team Topologies shapes](#) (free downloadable pdf)
- [Team Shape Templates](#) (other formats, tips for use)
- [Summary of theoretical basis for scenario-based and reflective learning](#) (p266)