Opportunistic Transformation at AUT

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‘Opportunistic’ Transformation at AUT

Cliff Ashford – Software Development Director
30 years in IT

15 years in Solution Delivery
15 years in BI/Analytics

26 years in commercial / consultancy
4 years in tertiary sector

2/3 agile / lean / fast
1/3 waterfall / enterprise / slow
I just got our consultant’s report. He’s identified our biggest problem.

I recommend that we build a tracking database.

Would you like to hear what the problem is first?

We can put it on the network.

I hate to dwell on the negative.

We like databases.
What is Digital Transformation?

Transforming:
- Activities ✔
- Processes ✔
- Competencies ✔
- Models ✔

Increased Awareness
Potential Changes

Customer Centric
Agile
Connected
Innovative
Efficient
Streamlined

People Oriented

And... Able to leverage opportunities
What Digital Transformation is NOT!

- Artificial Intelligence
- Off the shelf solutions
- Saving money
- Throwing stuff away
- Documenting existing processes
- A better dashboard
- Public Cloud
What is Digital Transformation?

“Cultural change, supported by technology”

Cliff Ashford, 2017
Digital Transformation Barriers for ‘followers’

- Cultural resistance: To change
  - Leaders: 26%
  - Followers: 37%
  - Laggards: 38%

- Lack of innovative thinking in business
  - Leaders: 23%
  - Followers: 38%
  - Laggards: 39%

- Lack of digital leadership
  - Leaders: 15%
  - Followers: 36%
  - Laggards: 49%

Digital Transformation Barriers for ‘leaders’

- Organisational Silos
  - Leaders: 36%
  - Followers: 34%
  - Laggards: 30%

- Legacy Processes
  - Leaders: 36%
  - Followers: 35%
  - Laggards: 29%

Some of our ‘opportunities’
Opportunity: Solve the ‘Calendar Problem’

1. Teaching institutions especially have many, many different calendars
2. These calendars are accessed by multiple overlapping roles
3. When talking to academics, what they need most in the world is to have a single place to schedule everything.

E.g.:
1. Understand student study load
2. Avoid conference conflicts
3. Arrange faculty committees
4. Share event schedules
5. Schedule organisational change management
Transformation: **Global Calendar**

What we did:

1. Fed a single database from our primary time management systems: MS Exchange, Syllabus Plus, etc.
2. Classified all events with meta-data so they could be filtered
3. Incrementally replaced local point solutions such as Excel with forms
4. Identified owners for key items such as semester dates and gave them bespoke interfaces
5. Revealed the data in different ways depending on use: Personal, Group, Availability, Emergency, etc.
Opportunity: Our Students are time poor

1. When we ask our students for their ideas on what we could do to support them:
   1. More Wi-Fi
   2. More Apps
   3. Tell us what is happening
   4. Make managing study load easier

2. Most students have a smartphone

3. We want to encourage Wi-Fi usage as it helps us understand our students

4. We want to integrate university requirements with student requirements
Transformation: **Student Mobile App**

**What we did:**

1. Agreed with sponsors this should be completely student led

2. Formed student working groups to come up with ideas

3. Using the output of these groups we polled the entire student body to prioritise the 20 functions identified

4. Once we had a top 5 we only then looked at what was feasible in the short term

5. We spun up an Agile development for project native Android and Apple apps: devs, qa, brand, student services, and of course STUDENTS
Opportunity: **Research Teams lacking support**

1. Researchers want to concentrate on their research
2. No funds ring-fenced in research proposals to cover digital support
3. Wildly variable processes for capturing and storing research data
4. Ad hoc approach to data publishing, reuse and long term stewardship
5. Lack of familiarity with selecting vendors or partners
6. Risk of loss of Intellectual Property or breach of privacy rules
Transformation: Adaptive Research Technologies

What we did:

1. Engaged with a few research teams to begin to understand the area
2. Select initial project to engage with for storage, development and consultancy
3. Built a data capture tool, initially for clinical trials: forms, alerts, randomisation, and dashboard
4. Created a consultancy function open to any research project for free
5. Offered bespoke development and testing services to researchers that required them
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Opportunity: Student Multi-System Fatigue

1. Students have to engage with multiple systems, with wildly differing interfaces:
   1. Admissions and enrolment
   2. Learning and teaching
   3. Library
   4. Timetabling
   5. Purchasing
   6. Resource booking

2. Often these are not friendly to use on mobile devices

3. They inhabit a different place than their lecturers

4. UX is based on university rather than student requirements
Transformation: **Student Digital Workspace**

**What we did:**

1. Picked the most appropriate platform for rapid and flexible delivery of a ‘system of engagement’

2. Engaged a group of students to be our customers over the development cycle

3. Agreed the scope, budget and delivery date

4. Built a tight, highly skilled team, including a designer and student testers

5. Engaged a ‘hotline’ to our platform vendor to ensure any issues we handled swiftly
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Transformation: Space Master Visualisation
Transformation: Research Capability Map
Nina the student mentor

Kia ora Cliff, how may I help you today? Just while I’ve got you, I noticed that your attendance may be quite low in 413520 - Insolvency and Receivership. It’s really important that you attend this class regularly. Missing a class should be a rare occurrence; something that happens at most once or twice a semester. If you miss class more than this, it will interfere with your learning and could have a negative affect your performance and your grade.
### Business Value vs Complexity Matrix

**Axes:**
- **Business Value:** High to Low
- **Complexity:** High to Low

**Quadrants:**
1. **Low Business Value, Low Complexity:** Email / Calendar, Identity Management, Finance / Payroll, Project Management, Space Management, Call Logging, Storage, Networks, Lab PCs, Infrastructure, Call Logging.
2. **Low Business Value, High Complexity:** Research Support, Collaboration, L&T Tools, Knowledge Base, Intranet, Dashboards.
3. **High Business Value, High Complexity:** CRM, Timetabling, Web Portals, Student Risk, Mapping, Forecasting.

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**Legend:**
- **Yellow:** Low Business Value, Low Complexity
- **Green:** Low Business Value, High Complexity
- **Red:** High Business Value, High Complexity
- **Blue:** High Business Value, Low Complexity
YOU HAVEN'T HEARD WHAT THE PROBLEM IS YET; HOW CAN YOU RECOMMEND BUILDING A DATABASE TO SOLVE IT??

WE ALWAYS BUILD A DATABASE.

AND WE'LL NEED COFFEE MUGS FOR THE PROJECT TEAM.

THE PROBLEM IS THAT WE HAVE POOR PROCESSES.

THAT COULD BE THE SLOGAN ON OUR MUGS!
Thanks for listening!
Any questions?