Some Light in the Cloud - Azure at Cambridge Enterprise

TechLink Community

26 May 2021

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Cambridge Enterprise Limited - context

- Since 1970, 2006 incorporated as a wholly owned subsidiary of the University
- Holds the registerable IP assets on behalf of the University.
- None of the services are mandatory.
- West Cambridge since 2010
- Satellite office at CUH
- Operating cost £5.5m
- 85 staff (69 FTE)
Cambridge Enterprise

Consultancy Services
- Consultancy contract transactions
- Consultancy to spin-outs

Research Tools
- Non-exclusive licensing transactions
- Non-exclusive licensing of inventions

Consultancy to spin-outs

Technology Transfer Services
- Technology development, patent prosecution, exclusive licensing transactions

Finance, HR, IT, Business Support Services
- Operations, Marketing & Communications

Seed Fund Services
- Business creation, equity investment for spin-outs & start-ups

Spin-out formation

Research Tool consultancy
Cambridge Enterprise Services include:

- **Consultancy Services:** a support service to enable staff and research groups to provide expert advice and solve problems for external organisations worldwide.
  
  [Services: fee arrangement, contract negotiation, fee collection and distribution are provided through a subsidiary Cambridge University Technical Services Limited.]

- **Research tools:** Non-exclusive licensing of software, antibodies, proteins, DNA/RNA and model organisms.

- **Technology Licencing:** Identification of research outputs with commercial potential; IP evaluation, registration & maintenance; proof of concept development funding; IP out-licensing to a commercialisation partner.

- **Seed Funds Venture Services:** Business creation: business planning, mentoring, management identification, seed funding (£1m per spin-out), access to follow-on funding; introduction to national & international investors networks.
  
  [£30m seed fund held by the University is managed by Cambridge Enterprise Ltd]

- **AHSS:** dedicated service supporting innovation and developing new commercialisation routes (Social Enterprises & Social Ventures Fund)

- **International outreach:** providing practitioner led training to HEI’s new to the KE sector.
Cambridge Enterprise Funding & Returns (2006/7-2019/20)

University Investment

- £8.6m
- £10.3m
- £2.5m
- £1.4m
- £4.1m
- £581k

Total £27.5m

Returns to the University

- £63m
- £18m
- £10m
- £25m
- £32m
- £25m

Total £177m
2016 University Survey & Faculty Customer Journey Review

- Only working with 25% of faculty & researchers;
- Word of Mouth – most effective marketing tool
- Returning inventors have a significantly better experience
- Lack of transparency - inventors and creators unaware progress
- TT staff spend significant time educating inventors & providing data
- Peripheral agreements (e.g. CDA’s) too resource intensive

Five Year Strategy

- Efficiency - reach more with the same resource
- Marketing - CRM (Data Protection compliance), better digital marketing capability
- Self-service tools
  - on-line training and educational material
  - develop self–service CDA process
  - Academic Portal with access to automated ‘real-time’ project data

CDA = NDA = Confidentiality agreement
IT infrastructure issues 2016

• Data storage capacity – nearing limits
• Poor off-site connectivity (CUH, SBC, etc.) and data availability from on-premise servers
• Mobile device access issues
• Majority desktop workstations
• Minimal access to video conferencing
• No CRM and limited digital marketing capability
• Ageing project management database with no API
• Reporting – only simple KPIs reported monthly, slow and resource intensive

CUH – Cambridge University Hospitals; SBC – Stevenage Bio-Catalyst; KPI – Key Performance Indicators
New Integrated Platform
• Connectivity
• System Integration
• Shared data
• Business Workflows
• Activity Tracking
• Real-time reporting

Synchronised Data

Legacy project data
Finance data

Communication
• Video conf (Skype)

Marketing
• CRM & Campaign Tool (ClickDimensions)

Agreements
• Digital Signature (DocuSign)

Future
• Academic Portal

Multi Platform

MS/AWS Secure Cloud Service

Website

3rd Party Data In

Planned reconfiguration to Cloud Based System
Timeline

2017
Replacement of desktops by laptops

2018
Legacy project management data migration (Azure instance)
Company iPhone upgrade

2019
Exchange Move to cloud
Move to Azure
Design & Build Go-live

2020
Server room decommissioned

2021
Academic Portal Go-live

Academic Portal
Move to Azure
Move to cloud
Legacy project management data migration (Azure instance)
Company iPhone upgrade
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Timeline

Replacement of desktops by laptops

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Academic Portal Go-live
Cloud Based System we have

- Connectivity
- Digital signature
- Office suite applications

- Project management
- Marketing & CRM

Finance Data

Website

Academic Portal
Resistance to change

- Fear can be real, detractors may need management, some staff may leave
- Identify early adopters and influencers to achieve the tipping point
- Engagement through consultation, communicating the benefits and training are vital
- Transition is difficult and can be stressful for staff and IT teams alike
- Constant change requires a cultural adaptation which can be slow
- Flexibility and readiness to review decisions and reformulate plans are key

Dynamics 365

- Data hygiene – clean before migration
- Business process – clarify and simplify (95% of processes is probably sufficient), Change requests are expensive
- Vendor selection & management is critical
  - Internal SME – manage the contractors and keep them honest
  - UAT – Agile can mean a lack of QC, requires considerable -internal resource
  - Training provided is often inadequate show and tell
- Design, build implementation - £480k
Outcomes

- IT team resource increased 70% (+2 FTE)
- Operational cost (excluding staff) £150k p.a.
- Licensing is fluid and needs continual monitoring
- Data storage needs constant review (storing data in applications is expensive)
- System updates are frequent (weekly)
- Capital expenditure avoidance (£100k's to refresh infrastructure)
- Positive environmental impact (no onsite servers, UPS or Air Con; space released for other uses)
- Seamless transition to remote working
"It ought to be remembered that there is nothing more difficult to take in hand, more perilous to conduct, or more uncertain in its success, than to take the lead in the introduction of a new order of things. Because the innovator has for enemies all those who have done well under the old conditions, and lukewarm defenders in those who may do well under the new. This coolness arises partly from fear of the opponents, who have the laws on their side, and partly from the incredulity of men, who do not readily believe in new things until they have had a long experience of them."

Niccolo Machiavelli

Thank You