

Cloud Readiness Assessment & Transition Planning

Background

Sheffield Hallam University is one of the largest and most popular universities in the UK, with over 30,000 students from more than 100 countries enrolled. It is also regarded as one of the best modern universities in the north of England and has eight subjects ranked in the top 20 in the UK (The Times and Sunday Times University League Table). Sheffield Hallam is also among the best universities in the UK for international student support.

A procurement exercise was run to identify a Microsoft partner to implement a Cloud Readiness Assessment (CRA) designed to develop a business case to support a cloud transition programme and, if that the case was approved, to then assume the role of cloud implementation and migration delivery partner.

The drivers for the cloud transition programme and business case focused on an estates strategy and a change agenda based on utilising cloud-based technologies and hosting techniques to enhance services and student experience.



The Challenge

In completing the Cloud Readiness Assessment and developing a successful case for cloud, the team faced a number of challenges including:

- A large and highly complex infrastructure and application estate
- A high-level of demand for IT projects and BAU requirements thereby limiting the amount of in-house resources available
- Forming a business case justification when the on-premise hosting environment had a low level of residual infrastructure risk.

Why CoreAzure ?

Through our successful track record in executing enterprise-scale migrations, backed by thorough business cases and investment rationale, our ability to showcase a robust depth of expertise and deliver the necessary support played a pivotal role in securing the contract. This encompassed both the Cloud Readiness Assessment and the implementation of extensive Microsoft cloud transition programmes.

Our reputation was also enhanced by:

- Being an accredited Microsoft AMP partner with eligibility for financial support

- Being highly recommended by Microsoft as an Advanced Specialisms and Microsoft Cloud Centre of Excellence partner
- The Higher Education sector has been our primary focus for a number of years - we understand the technology landscape and the workloads used to support teaching and learning activities.

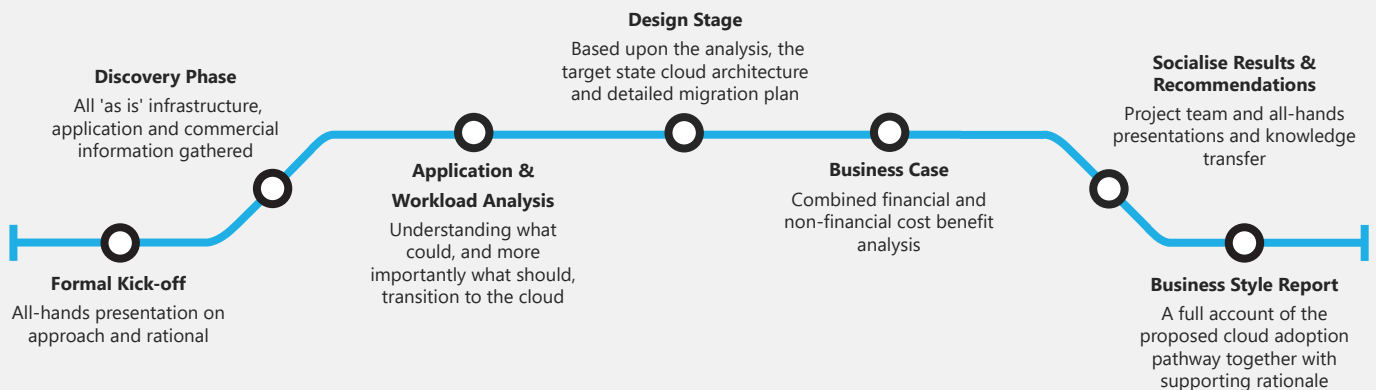
Solution

Our approach, developed over many years of experience and successful CRA's and business case outcomes, was implemented. The CRA scope encompassed three primary areas:

- A unique discovery and assessment of readiness and the pathway to cloud
- An understanding of drivers and constraints for change e.g. compliance frameworks and security standards
- The financial and non-financial case for change.

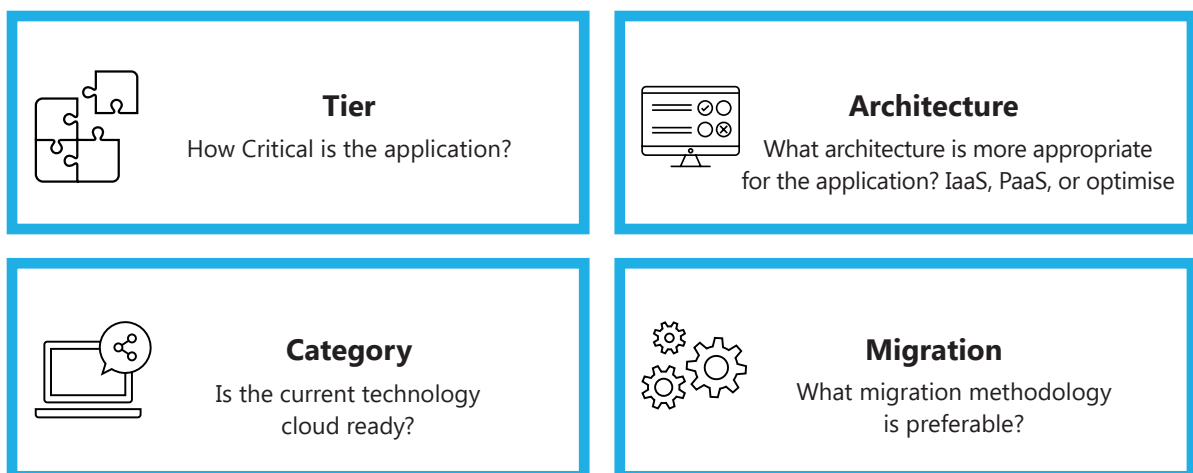
The Sheffield team understood the limitations of a 'lift and shift' cloud transition strategy, and that failing to tackle over-provisioning within the on-premise estate and by not adopting a transformational based approach, would inevitably lead to higher than necessary Azure consumption costs.

The Journey to Cloud



Methodology

CoreAzure use a tried and tested methodological approach named TCAM (Application Tier, Category, Architecture, and Migration) to systematically assess which applications can be effectively migrated to the Cloud, determining associated tasks required for the migration process. This methodology also guides decisions in cases where migration may not be commercially or technologically viable. TCAM structures this assessment from the following perspectives:



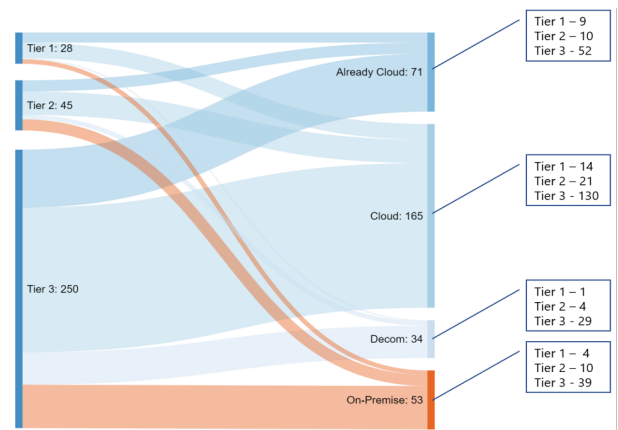
Once we had determined the pathways for all in scope applications and workloads (see below), the joint team focused on establishing the target state architecture and detailed migration plan used to calculate the transition costs within the business case. The design was based upon:

- Establishing the pre-requisites required to migrate the workloads
- Standard Patterns (e.g. App hosting)
- Automated deployment (Infrastructure as code)
- The re-use of standard higher education specific design templates
- Gaining environment accreditation.

Business Case Development

In developing the business case the team synchronised the reducing on-premise IT spend with the anticipated Azure cloud hosting costs to form a 5, 7, and 10 financial profile. This information was supplemented with a range of non-financial benefits including:

- Enhanced levels of scalable access regardless of device type and location
- Greater autonomy for end-users (students, faculty, and staff)
- The potential for innovation and collaboration
- The development of a common data model (CDM)
- The flexibility to choose the best hosting for each of Sheffield Hallam's applications
- A step change in financial transparency.



Results

12 months on, based on the analysis and associated business case our recommendations were as follows:

- 165 applications would be migrated to the Azure platform and a further 34 to be decommissioned
- A fully resilient and secure hybrid cloud architecture based upon a single Azure cloud tenancy and where SaaS and PaaS would be the preferred way of providing services in the cloud
- A combined on-premise and cloud-based storage strategy
- The implementation would take 24-months to complete and based upon an Agile approach
- CoreAzure would initiate and complete a series of all-hands meetings designed to fully brief the key project stakeholders including the IT team, researchers, and a selection of application owners.

The Cloud Readiness Assessment and associated business case was subsequently approved by the university executive.

"We needed the confidence of knowing that the approach CoreAzure used had built successful business cases in other UK universities. The team used their experience and patience to guide us and our stakeholders through this complex decision-making process"

Dave Thornley, Head of Digital Architecture



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