PROJECT one

TRANSFORMING ASTRAZENECA'S APPLICATION LANDSCAPE

The roadmap to rationalise 65% of the application estate

Application rationalisation programmes are nothing new – Gartner give sound advice that these are multi-year programmes that should focus only on the key applications.

While many follow this advice and declare success after addressing the "top 20%" of their application estates – a classic use of the Pareto principle - global pharmaceutical giant AstraZeneca (AZ) was not content to stop there, recognizing the need for simplification across its application estate.

As with many organisations, AZ had been running an expanding application estate for a number of years. This estate was costing millions of dollars to maintain and adding complexity and inflexibility when change was required.

In support of the organisation's 'Return to Growth' business strategy, AZ's IT department took on the challenge of simplifying and rationalizing applications and the associated IT infrastructure: in the process reducing IT costs and increasing its agility and responsiveness to the needs of the core business processes of discovering, manufacturing and selling drugs worldwide.

The team successfully reviewed and categorized the organisation's entire business application estate (totaling over 3,000 separate applications) and is now running a structured service retirement programme to remove those identified as targets for rationalization.

How have they done this?

The first step in deciding what you want to get rid of is to identify what you have.

THE CHALLENGE

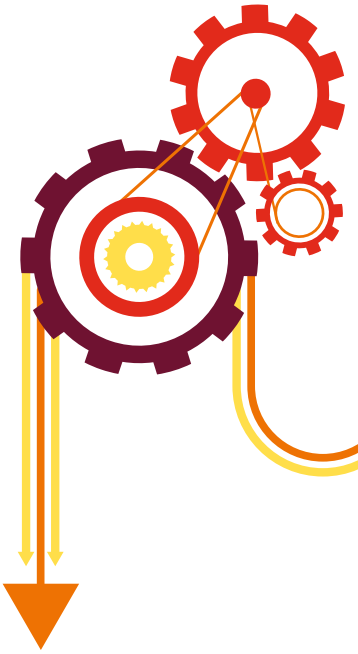
From the outset in late 2013 the task looked huge.

A legacy of merger and acquisition activity within the business, and significant outsourcing in the IT department had led to a poor understanding of the overall application estate where configuration management data was distributed across multiple systems (including, of course, local spreadsheets!). There wasn't even a common understanding of what was meant by an application; this being important, in a world where middleware, tools and utilities can be seen as applications by the technology team, but not by the business.

Ownership of the estate was fragmented: split between central and distributed models (and in some cases not at all!) and while it was possible to assemble raw data about today's application landscape, there was very little strategic information about how the landscape would look in the future. Compounding the situation, the understanding of the total cost of ownership was limited – even at a high level.

In short, there was a perception that there were way too many applications, costing the organization far too much to run, without a clear fact base to back up either assertion.

A UNIFIED UNDERSTANDING OF SPECIFIC BUSINESS TERMS IS ESSENTIAL



"WE DELIBERATELY SET OURSELVES ULTRA AGGRESSIVE GOALS: WE NEEDED A STEP-CHANGE AND WE'VE GOT IT. BY THE END OF 2015, REDUCING OUR ESTATE BY 25% AND ACHIEVING SAVINGS OF OVER $15M."

Chris Day - VP IT Strategy and Performance

HOW WE DID IT

A matrix team was mobilized, drawing together IT architects, business capability managers and service delivery experts aligned to each of AZ's business areas facilitated by a centralized programme team. The team had clear responsibilities and relationships across all areas of the business, providing the foundation of ownership crucial to the success of the programme.

Multiple lists of applications were aligned into one master view to create a baseline inventory, leveraging AZ's recent investment in ServiceNow - a single centralized IT service and operations management system. The team systematically reviewed the baseline inventory, looking to establish three things for each application:

- **An agreed owner**
- **The strategy for the application**
- **The alignment to the AZ business capability framework**

Application strategies were defined in 3 simple categories: Invest – for applications with an expected life-span of 5 years or more; Maintain – for applications expected to be in use for the next 2 to 5 years; Divest – applications at the end of their lifecycle, candidates for decommissioning over the next 2 years.

The key to simplification would be to maximize the pool of 'Divest' applications, and a target-led approach was used to drive this with the programme team challenged to identify a 65% reduction from start to finish (end-2018). Further, the alignment of each application to AZ's business capability framework enabled identification of potential 'hot-spots' – concentrations of large numbers of applications supporting individual functions, revealing opportunities for consolidation or migration to one of the company's foundational cloud-based platforms.

In parallel with validating and enriching the inventory, the programme also set about establishing a robust, repeatable solution for completing application decommissioning. AZ IT's leadership team recognized that efficiently handling the end of an applications lifecycle, in a way that would stand up to the exacting Legal and Regulatory Compliance requirements which characterize the Pharmaceutical industry, is a necessary capability often-overlooked by IT departments. By building this capability as a cost-effective Service (leveraging its network of offshore delivery centres), which future change projects will call upon, AZ IT is safeguarding against falling into the same state again in the future.

OUTCOME

AZ's Application Rationalisation programme is now in full flow.

Clear ownership has been established for the vast majority of applications (at the start of the process, more than 1,100 were "homeless or orphaned", this number has since been reduced to less than 100), with the completeness of application strategy and business capability alignments being even greater.

The offshore-based Service Retirement capability is established and working through the current backlog of 700 divest applications, following a standardized process to assess and archive required data, before terminating support and licensing contracts and finally passing the details of the underpinning infrastructure components to colleagues who will finish the job by removing redundant hardware.

Having already decommissioned 200 applications this year, the team is on track to achieve its target of a 40% reduction in application numbers and reducing the total cost of running AZ's IT estate by over $20m by end-2016.

WHAT'S NEXT?

With the foundations established, the key next steps can be stated in two simple ways: finishing the clean-up, and putting in place measures to stay in control.

Finishing the clean-up not only means driving through the remaining backlog of application and infrastructure decommissioning, it also means challenging the business and IT teams to find the next 'wave' of divest applications. Specifically, in-depth application strategy reviews are planned which will look in detail at those applications in the 'Maintain' population and will drive for increased consolidation in particular through cross-business-area synergies.

Maintaining control of the application landscape requires embedding the right behaviours within the organization. Changes to project governance arrangements will be introduced to ensure that future change proposals have fully considered the opportunity to leverage existing platforms, and are clear on their obligations to remove any applications they render unnecessary. Part of this challenge is to improve awareness of the existing application inventory, and a variety of communications and reporting changes are envisioned to help address this.

AZ IT's ambition is to build a world-class IT function which focuses on continuous improvement. Successful delivery of the Application Rationalisation programme, and the steps above will help achieve that aim.