NEW MODEL FOR COLLABORATIVE MEDICAL RESEARCH REQUIRES STRATEGIC TECHNOLOGY APPROACH

Case Study

THE CLIENT CHALLENGE

The basic concept was simple: Bring together the combined expertise and funding of six leading medical research institutions to build the largest medical research centre in Europe. The new facility would create a step change in the way that medical research is conducted and subsequently translated through to clinical translation - putting multidisciplinary collaboration at the heart of the new institute’s reason for being. The building’s infrastructure would need to accommodate everything from advanced collaborative working environments to high-performance computing clusters and data storage requirements needed in a leading-edge research facility. And the technology vision would have to be designed and implemented in a way that would make the ambitious new facility as ‘future-proof’ as possible, able to accommodate technology advances over its 60-year life. A competitive bidding process selected North Highland to define the information technology (IT) strategy and design that would lift the new facility from concept to reality.

That’s where North Highland came in.

THE SOLUTION

Most information technology challenges come with existing issues that must be worked around or worked through. In this case, the challenge was to abandon traditional ways of approaching technology to create a solution designed to work when the facility opens in 2015 and into the future. So, the process of managing the founder institutes’ move into the new facility – including systems, data and applications migration – was complex.
Scientific discovery is transitioning from wet science (petri dishes and test tubes) to dry science (computer simulations and modelling). As it does so, the growth in computing power and storage required expands even more quickly. Applying this knowledge helped us determine when today’s petabytes of data are likely to become tomorrow’s exabytes of data – and what data processing technology will be necessary to keep up.

We encouraged the scientific and IT teams to make intelligent assumptions about the future without “over-predicting.” Recognising that change would be inevitable, we developed budgets and strategies that would be flexible enough to account for that change. We also examined best practices of medical and scientific facilities throughout the world to deliver the most accurate benchmarks for IT headcount and budget.

For instance, the design of the £500m, state-of-the-art facility includes collaboration spaces on each floor where scientists can get together, grab a coffee and cross-fertilise ideas. On-the-fly interaction and notation is enabled via large video screens that can incorporate data from multiple teams. To help researchers derive benefits from their close working proximity, the North Highland team is enhancing those spaces to make that collaboration as easy and seamless as possible.

THE VALUE

Although North Highland is in the implementation phase of this four-year project, our approach is already delivering results, including:

- Completed detailed information technology and audio visual design plans and procured those packages approximately 10% below budget
- Established IT strategy and delivered five-year Capex and Opex financial plans
- Benchmarked the organisation against leading research facilities to determine IT headcount and budget
- Gathered requirements for new corporate systems required to support HR, Finance and Administrative functions
- Initiated recruitment of the IT team and vendor selection and engagement
- Created a transition plan to migrate people, systems and processes from their existing institutes into the new facility.

Although there are still two years to go before the facility opens, this forward-thinking approach to technology and infrastructure development has participating organisations already thinking ahead to new ways of accelerating research results to produce scientific breakthroughs.
North Highland is a global management consulting firm that delivers unique value, relevant big ideas and strategic business capabilities to clients around the world. The firm solves complex business problems for clients in multiple industries through an integrated approach and offers specialty services via its Data and Analytics, Managed Services, and Sparks Grove divisions. North Highland is an employee-owned firm that has been named as a “Best Firm to Work For” every year since 2007 by Consulting Magazine. The firm is a member of Cordence Worldwide (www.cordenceworldwide.com), a global management consulting alliance. For more information, visit northhighland.com and connect with us on LinkedIn, Twitter and Facebook.