CASE STUDY

University of Oxford



THE WORLD'S TOP UNIVERSITY
MANAGES ITS ADMISSIONS PEAK



WHEN YOU HAVE JUST BEEN RECOGNISED AS THE TOP UNIVERSITY IN THE WORLD, YOU NEED TO DO ALL YOU CAN TO PROTECT THAT POSITION. THE TIMES HIGHER EDUCATION WORLD UNIVERSITY RANKINGS 2016/17 PLACED THE UNIVERSITY OF OXFORD IN THE NUMBER ONE POSITION – THE FIRST TIME THAT A UK INSTITUTION HAS WON THIS ACCOLADE.

As one of the world's top universities, the volume of students applying for postgraduate study at the University of Oxford has always been very high, with a large number of applications pouring through the admissions website just before the January admissions deadline.

This time around the University was relying on a new system to manage applications, so there was understandable apprehension about how well it could handle peak demand. Anxious to avoid frustrating the applicants - due to long response times or website failure - the University called on a trusted supplier, Capacitas, to prove the expected peak demand could be met.

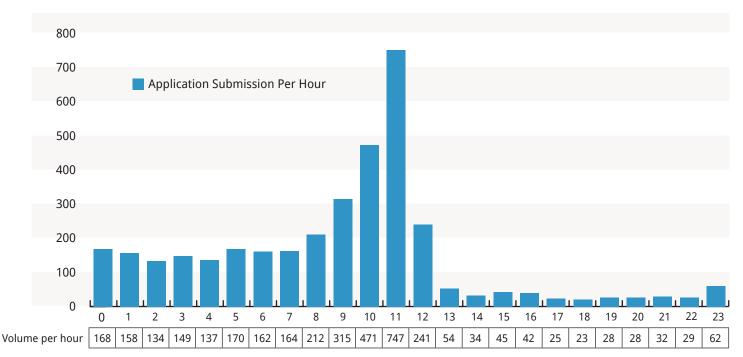
In October, Capacitas undertook a structured risk assessment of the system architecture and software. A key risk was the uncertainty around the demand profile on the peak day. Capacitas addressed this risk by examining the University's historical data to model and extrapolate future demand volumes. Several demand scenarios were then modelled to size the IT infrastructure needed to service the demand. As the January admissions deadline approached, Capacitas recommended increasing server memory and CPU processing power.

On the final day of application submissions, demand was even higher than the University had expected. Members of the in-house IT team monitored events and found that the system worked exactly as the Capacitas model had predicted. Over 3,500 applications were processed by the system, with a peak of 750 in one hour.

PRIOR TO THE RISK ANALYSIS AND MODELLING OF THE ADMISSIONS DEADLINE, CAPACITAS HAD UNDERTAKEN A SIGNIFICANT AMOUNT OF PERFORMANCE TESTING, COVERING A SIX TO EIGHT-MONTH PERIOD, RESULTING IN FIVE CRITICAL RISKS BEING IDENTIFIED THAT REQUIRED SOFTWARE AND CONFIGURATION FIXES.

FINAL DAY OF APPLICATION SUBMISSIONS

DEMAND WAS EVEN HIGHER THAN THE UNIVERSITY HAD EXPECTED. THE SYSTEM WORKED EXACTLY AS THE CAPACITAS MODEL HAD PREDICTED.



Pleased with this successful, preventative approach, Nigel Emm, IT Services Head of Testing at the University of Oxford commented,

"CAPACITAS HAVE A PROVEN
SYSTEMATIC APPROACH TO
PERFORMANCE AND CAPACITY
MANAGEMENT, THEY UNDERSTAND THE
UNIVERSITY AND I KNEW I COULD BE
CONFIDENT THAT THE PERFORMANCE
RISKS IDENTIFIED WOULD BE MITIGATED
PRIOR TO THE POSTGRADUATE
ADMISSIONS DEADLINE"

Nigel Emm, IT Services Head "CAPACITAS PROVIDED US WITH
THE INFORMATION WE NEEDED TO
ENSURE THAT OUR SERVICES OPERATED
EFFECTIVELY DURING OUR BUSIEST
DEADLINE."

David White, Director of Student Systems