

Newcastle University, Newcastle upon Tyne, United Kingdom

Building the Business Case for SAP HANA in Higher Education



Our Proof of Concept had to be built around “pain” points ensuring we demonstrated significant performance improvements, giving us confidence that HANA could deliver real time data to our users and free up time to deliver innovative new processes.

Chris Burns, Business Systems Technical Manager, Newcastle University

Newcastle University and SAP

Newcastle University have been using SAP widely across the organisation for over 16 years, using traditional SAP ERP and a range of other modules to manage the back office systems such as student systems, finance and HR. The hardware was approaching end of life and therefore the team felt it was a good time to evaluate SAP HANA to improve current processes and enable the development of new and innovative processes.

A number of challenges had arisen which drove this desire to upgrade to SAP HANA – for example the overnight window for batch processes was reaching capacity because of the time taken to run reports and manage the data. The knock-on effect meant that people within the university experienced delays as they waited for data to appear. The university also wanted to improve their Confirmation and Clearing process, so that users could see, in real time, which courses were filling up, or which needed more students and feed data to other departments such as Accommodations and Finance.

The University was in a good position to upgrade to HANA, since it ran an annual patching strategy and was well positioned with all the necessary technical requirements. As HANA is a key component of SAP's technical business strategy, the University felt that HANA was the right direction to take.

Improvement in performance

300-400%



Report time less than

1 second

Drivers

- Current SAP Servers are coming to end of life so investment will be required.
- The overnight window for business processes was filling up resulting in unacceptable wait times for reports and data.
- System response times noticeably degraded as a result of increasing volumes of data, particularly student related data.
- System growth and system complexity e.g. back-ups, BW chains, overnight batch job processing, required a comprehensive solution for the long term.
- University has a desire to stay current and leverage the latest SAP offerings such as Fiori applications, Realtime Analytics and in the future S/4 HANA.
- SAP's Oracle Reseller status ceases in 2017, and Oracle license costs are increasing.
- HANA offers real-time information to support decision-making including big data analysis and predictive analysis.
- HANA delivers a simpler unified landscape and database layers, which, in time will reduce support overheads.
- A desire to simplify the existing SAP landscape by consolidating data.

Current Position

- Committed user of SAP solutions, including Business Suite (ERP, CRM & SRM) and NetWeaver (Business Warehouse, NetWeaver Portal & Process Integration).
- Virtualised Linux environments with Oracle Databases under entire SAP landscape.
- Users of itelligence it.education solution.
- Up-to-date release levels/patches: ERP 6.0 EHP 7 / Full Unicode; CRM 7.0 EHP3; SRM 7.0 EHP3; NetWeaver 7.4.



All our processes are much more efficient using HANA

Alan Cecchini, SAP Development Manager,
Newcastle University

Solution

- SAP Business Suite on HANA including ERP, CRM, SRM and SLcM
- SAP BW on HANA

Benefits

- System Operations efficiency from smaller and faster backups due to database compression.
- Removal of time consuming overnight batches leading to "just do it" running of jobs.
- Delivery of a true picture of the student body in real time.
- Proactive & dynamic Programme Management at the heart of Confirmation and Clearing. A real time view of student offers, for example whether programmes have reached their capacity and tracking those with desired targets.
- Improved Responsiveness: Enables staff to give answers to student queries over the phone rather than waiting overnight.
- Remove delays in getting data from SAP to other key systems in our landscape (e.g. student smartcard system).



Company:
Newcastle University

Industry:
Higher Education

Products:
SAP HANA
SAP Business Suite on HANA including ERP, CRM, SRM and SLcM
SAP BW on HANA

Headquarters:
Newcastle upon Tyne,
United Kingdom

Website:
www.ncl.ac.uk

itelligence and Newcastle University

- itelligence are Newcastle University's strategic SAP Partner, providing SAP Application Management Services, Consulting (Technical and Functional), Advisory Services and Software Maintenance.
- Newcastle University are users of the itelligence it.education industry solution for Higher Education.
- The itelligence HANA Team assisted with design and definition, and provided support during the Proof of Concept process.
- itelligence were able to liaise with SAP to organise a quality sign off on the agreed custom ABAP code optimisation approach.

Proof of Concept (PoC)

In order to build a business case proving the benefits of HANA, the team at Newcastle, in conjunction with itelligence, built a Proof of Concept, exporting selected data from their SAP QA systems and installing to a separate HANA server. All key systems were implemented in the PoC to test performance across the board.



The SAP Team at Newcastle are not only highly experienced but they have also completely bought into SAP and itelligence's vision for innovation in Higher Education. It's always a pleasure working with them and the HANA PoC is a personal highlight

Andy Steer, CTO at itelligence UK.

Results so far

Confirmation and Clearing

Pre-HANA it took around 3-4 minutes to run a key report during the Confirmation and Clearing process. With HANA it's consistently 1 second and University staff can answer questions immediately. For example, as soon as courses are full, the website can be updated in real-time and courses removed immediately. With SAP Fiori, we hope to be able to push key SAP information to the user without the need for them to keep refreshing to get the latest status.

Custom Development

Applicant and student data is sent from SAP to other systems typically on an overnight basis. For one of these data feeds, pre-HANA this took around 40 minutes to transfer 600,000 records. With HANA it takes 11 seconds. So now we have the opportunity to re-evaluate the timing and frequency of data feeds, switching to real-time when it could improve the services we deliver.



Such huge improvements in performance mean that for example, many of the processes which underpin our services can be made real time – for example, students can get their smartcards straight away rather than have to wait until an overnight batch process has run

Alan Cecchini, SAP Development Manager, Newcastle University

What advice would Chris and Alan give to other universities who were considering putting together a business case for moving to HANA?



Incremental change is achievable. It's easy to get overwhelmed with the technology and buzzwords from SAP. This can make you suffer from inertia. Get your Unicode conversion done, get yourselves to the requisite patch levels for HANA – do these things before you get HANA because it de-risks the HANA migration and will give you more time to focus on custom ABAP code optimisation. If you can build a business case around your real pain points the return on investment will be significant

Alan Cecchini, SAP Development Manager.

Next year Newcastle University is looking for a real return in the Confirmation and Clearing process. They also want to make more of the Fiori mobile applications so that apps can be delivered to mobile devices. They will be putting their CRM system onto the HANA servers and looking at hooking their HANA estate up with a non-HANA instance, to see what a mixed landscape would look like.



The more we can squeeze out of our Proof of Concept system now, the better prepared we'll be when we go live. We are aiming to go live with Phase 1 in July 2016

Alan Cecchini, SAP Development Manager.



Without itelligence's help, the Proof of Concept wouldn't have been possible.

Chris Burns.

