



# CASE STUDY

## CDSM



## Background

CDSM has produced an innovative learning platform for the Welsh Government's HWB Project; a digital service for anyone involved in Wales' education system. Currently deliverable to 500,000 teachers and learners, HWB is the most successful digital facility offered by the Welsh Government.

A solution to the disconnect between teachers and learners created by the more traditional academic LMS format, CDSM's education technology has gained superlative praise from both clients and community members; giving Wales an unrivalled place for teachers to collaborate with their peers.

The HWB system integrates with the most contemporary open-source web technologies that help teachers manage their lessons and learners.

A significant example of this is the integration of Learning Locker® - the Learning Record Store (LRS) from HT2 Labs (now part of Learning Pool) - which allows teachers to see real-time data on their class, cohort or year group.

In addition to reducing the costs associated with manual admin, this real-time data enables performance trends to be measured accurately and spotted quickly, so that intervention programmes can be created early.



# Challenge

CDSM were faced with solving issues presented by the traditional LMS format. In HWB's pre-xAPI configuration, learning content was generally distributed in a 'top-down' fashion and only top-level information was being fed back to the administrators; quantitative data such as test scores, course completions and resources viewed.

The data capture model for these activities did not provide suitable depth to continually optimize the platform based on learner behaviour. Modern learning occurs on many different touchpoints than what the traditional LMS is able to measure.

Enter xAPI.

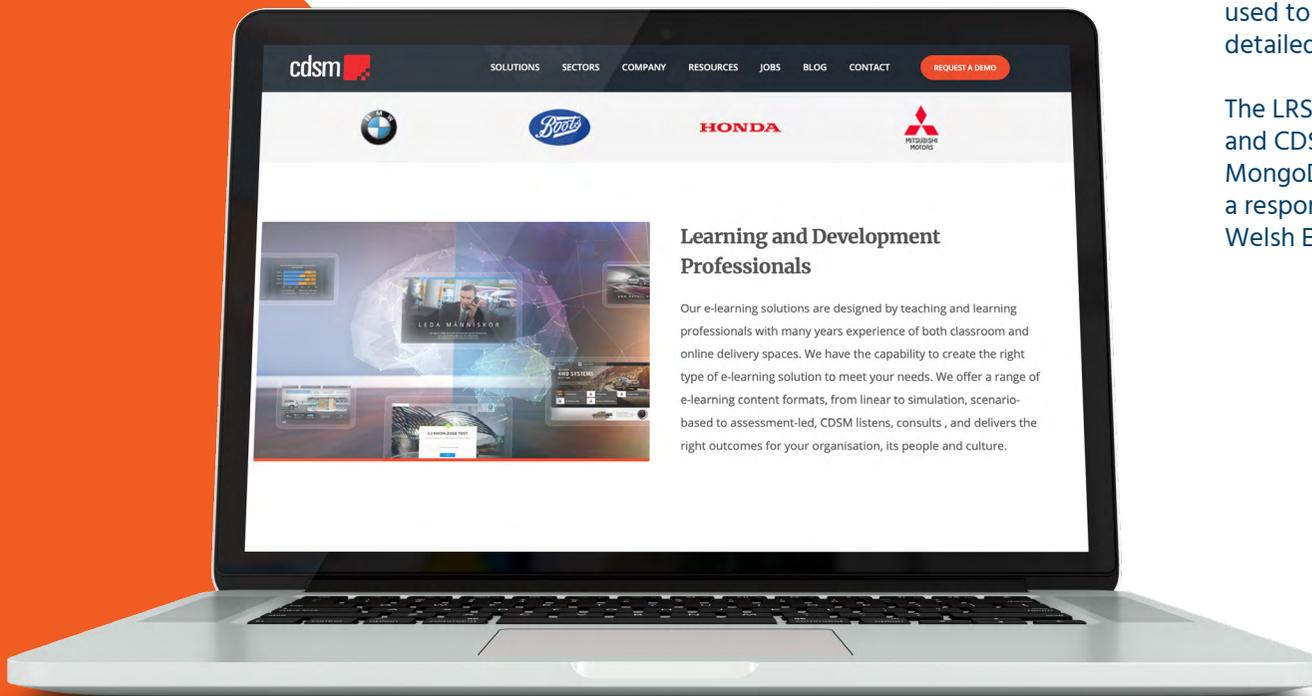
# Solution

Learning Locker® was implemented to more precisely track and measure the student data being produced by the HWB's system.

Every pedagogically significant event that happens in the HWB national learning platform now stores an xAPI statement in the LRS. Everything from completing formal assignments, commenting on discussion threads to joining events and reviewing resources creates a detailed statement.

These statements drive critical interface between the student and teachers, like mark-books and student records, and are also used to inform the long term strategy of the project through detailed data analytics.

The LRS is self-hosted on the Amazon Cloud infrastructure and CDSM have spent a significant amount of time tuning the MongoDB cluster and auto-scaling features on AWS to ensure a responsive service under the constantly shifting load of the Welsh Education System.



## Results

The HWB Project has changed the educational landscape in Wales and has laid a foundation for future generations of teachers and learners to learn, collaborate and succeed together.

The reporting tools in Learning Locker®, along with other business analytics software, helped inform the policy teams in Welsh government when they're looking for data and trends that haven't yet been anticipated in the reporting or administrative tools in the learning platform.

This data is also invaluable to the development team when designing and prioritising the future roadmap of the software.

The ultimate strategic outcome for the Welsh Government is to raise standards and attainment in all phases of education in Wales. To achieve this, WG has funded and implemented a plan that chooses to exploit contemporary digital learning technologies.

The use of xAPI & LL has become an essential component in realising this vision. The success of the project has been measured through activity and usage of the system, as well as engagement and performance improvement of the learning community across Wales.



This modern, innovative online digital technology has set a new benchmark, enabling teachers to see real-time data on their class, cohort or year group.

Steve Finch,  
Head of Marketing at CDSM





# learningpool

