

A Well-trained User is a User for Life

In April 2015 a brief published by "Bersin by Deloitte" reported that "...organizations which perform well on business outcomes have a talent strategy." It went on "...of those organizations rated least effective at business outcomes, between 70 percent and 80 percent lack a talent strategy." Naturally the 'Learning Strategy' is an essential ingredient of any successful talent strategy.

It should therefore come as no surprise that KnowledgeSmart subscribers may fall into the top 20% of all similar organisations as they are able to identify skills gaps, target training investment, and report measurable productivity gains with a clarity that is otherwise out of reach.

"We couldn't have achieved such marked levels of increased productivity without a total solution for skills analysis and improvement."

Peter Taylor, Engineering Systems Manager, Tata Steel Projects, Manchester, UK.

While an organisation's talent is a strategic priority, skills improvement is a functional requirement for improving team productivity and data quality when collaborating on AEC and BIM projects.

Using KnowledgeSmart to demonstrate BIM-readiness

At US CAD – a BIM and manufacturing industry consultant and one of the largest Autodesk Authorized Platinum Reseller Partners in the USA – the transparency afforded by KnowledgeSmart's Revit skills assessment results is clear.

"As firms are fighting hard to win new projects, many say they are "BIM ready" but few can truly prove they are "BIM Ready" without skills assessment results as proof to validate their claims. Including 'BIM' on your resume is no longer a reliable indicator of competence; you have to back up your claims with hard facts."

Jeff Rachel, Vice President, US CAD, Las Vegas, USA.

The US CAD team leads by example, using KnowledgeSmart skills analysis services to assess their own staff and to support their business case when pitching to supply professional services and training.

Thinking Outside of the Box

North American firm Stantec – a multi-discipline AE firm with 15,000 employees – has turned training on its head since adopting KnowledgeSmart. Gone are the days of training staff to use software without first assessing their abilities; the process was too long winded and too expensive and in many instances quite unnecessary when a user already had strong CAD and BIM software abilities.



"We have named our strategy for learning and development 'Flipping the Classroom' because the process for skills improvement and assessment has been reversed. Today, a user's BIM skills are assessed using KnowledgeSmart before they register for any training courses. We then use the results to analyse and recommend specific training modules to help the user fill in their knowledge gaps as identified by their KnowledgeSmart score."

Jim Marchese, Corporate BIM Education Leader, Stantec, Philadelphia, USA.

As a bonus, Stantec leadership now enjoys better reporting insight into CAD and BIM productivity and skills; using the KnowledgeSmart skills gap analysis to provide insight and a business case for continued training investment.

Using KnowledgeSmart Scores to Build a Business Case for Training

A2K Technologies is one of the largest Autodesk channel partners globally with offices throughout Australia, New Zealand and China. A2K is also a KnowledgeSmart advocate:

"Training decisions are easier to make when informed by needs. The days of filling classrooms with people to sit through a multi-day training course are numbered. Using skills assessment services from KnowledgeSmart we are now able to tailor our training courses to their skill level. Saving valuable time and budget for additional activities."

Sean Twomey, ANZ Consulting Manager, A2K Technologies, Sydney, Australia.

Some firms are using their KnowledgeSmart assessment scores to build a business case for securing training investment. By first demonstrating a need to train, the training investment is easier to secure. Better still, post training assessments are a proof point for skills improvement and demonstrate measurable return on investment (ROI).

Plugging Skills Gaps via Bite-sized Training

As new software is released and adopted, upgrade training is required to maximise the benefit realised. However, many teams cannot spare large chunks of time away from their desk when a project is active.

"Big-Gulp training isn't easy to fund or organise: It takes people away from project work for too long in one sitting, and it is disruptive to production workflows. For Stantec as a large geographically distributed enterprise we find that 'self-paced' modular training makes more sense. By first testing our staff to benchmark their skills we can very efficiently prescribe a learning development path which limits time away from the project and maximises the new skills learned."

David Spehar, Corporate BIM Lead, Stantec, Stantec, Cleveland, USA.



By combining one of the many online self-paced learning environments with KnowledgeSmart, subscribers will increase their learning efficiency and reduce their training costs to spend more time delivering projects.

Training can be a Team Sport – But Not Always

At RTKL – a multi-discipline design practice with global presence – training is regarded as a group activity, often delivered via online technology to enable a very open and flexible forum for discussion.

"Such group sessions can be very hard to manage effectively as there is invariably a delta between the stronger and weaker users which can leave some feeling overwhelmed while others may feel bored as the training lacks pace."

Andrew Victory, Associate, RTKL, London, UK.

For RTKL however this is no longer an issue. Using KnowledgeSmart's online skills assessments, RTKL first assesses each user's skills before grouping users by ability for training. And as HR owns the training budget – allocating it as needs demand – KnowledgeSmart helps to make the budget go as far as possible by benefitting the neediest for maximum training ROI.

Playing the Long-Game and Trusting KnowledgeSmart Scores

HOK – a global design, architecture, engineering and planning firm with a network of 24 offices on three continents – is now in its 4th year with KnowledgeSmart and has taken its time to build up a depth of knowledge through annual skills assessments.

"The whole team is now able to trust the KnowledgeSmart assessments and results to clearly connect skills improvement to training investment. We have learned lots of back-end lessons using KnowledgeSmart, most notably, we have realised how and where we can improve productivity and profitability for the whole company."

David Ivey, Building Smart Manager, HOK, Chicago, USA.

Today annual skills assessment results indicate areas which require improvement and bite-size training courses are arranged through the "HOK University" – a global learning initiative setup for all HOK staff to improve skills in all work-related areas including CAD and BIM software.

Training Content Providers use KnowledgeSmart Score to Improve their Own Offerings

White Frog offers strategic educational planning when adopting BIM technology and workflows and works with AEC firms to select, refine, and apply standards and protocols for BIM use prior to adoption. Generally all training programs embrace AEC Standards and where necessary include other international standards such as those from the USA including LEED, AIA, etc.



"We offer the opposite of 'BAG' training (Basic, Advanced, Good Luck!). We start by assessing all existing Revit users with KnowledgeSmart before they embark on a rolling Revit learning program. We also use KnowledgeSmart to inform our own developments. By reviewing test results from our customers we can sometimes identify areas of our own training materials and processes that need to be improved. For instance if some questions never get a strong score it may be because there are improvements required to our service delivery and training course creation. So we use those test results to improve our own offerings."

Paul Woddy, Technical Director, White Frog, Shrewsbury, UK.

Before adopting KnowledgeSmart, White Frog reviewed other skills testing solutions but found them all wanting in one way or another. Some offered no randomisation of questions while others were missing robust analysis and insight tools. For the BIM experts at White Frog, KnowledgeSmart was the only complete solution.

Using KnowledgeSmart Services to Maximise the Value of Software and Training Subscriptions

Tata Steel Projects (TSP) – a multi-disciplinary engineering consultancy working on rail, nuclear, security, energy, power and construction – is a mixed Bentley and Autodesk shop that has an Open Access agreement with Bentley for software procurement. TSP tested the skills of every single user in their organisation via KnowledgeSmart and then analysed the results to identify skills gaps/trends and build custom learning paths to streamline access to rich learning resources in Bentley LEARN including online videos, tutorials, virtual classroom, etc.

"One year later, after completing targeted training, our retest scores are 30-40% higher; providing substantial return on investment (ROI). We couldn't have achieved these levels of improvement without a total solution for skills analysis and improvement."

Peter Taylor, Engineering Systems Manager, Tata Steel Projects, Manchester, UK.

KnowledgeSmart is now central to TSP's talent strategy. All future assessments will be administered by HR and tied in with annual appraisals for continued skills improvement.