

Topic:
Training

Web-based training - vendors, VARs and consultants give their views

iCAD is produced by Business Advantage, a B2B research, business development and marketing consulting practice operating in the global IT, Digital and Telecommunication sectors.

Like almost every other product or service in the computer aided technology field, training has become e-deliverable. The potential benefits for users are clear, but what's in it for providers? How should they approach it? How ready are European computer aided technology users to learn on-line? We sought views from a range of US and European based vendors, resellers and consultants.

The Potential

Does web-based training open up new opportunities, or simply encourage users to take the same amount of training but in a different way? CAD Potential has been providing training services for UGS customers for the last twelve years, incorporating 'eLearning' into their package over the last five years. *"Demand for MCAD on-line training has grown in the last few years,"* says Marketing Director Dora Smith, *"but that growth is not directly correlated to a decline in instructor-led training. On-line training, or eLearning, has provided the means for companies to more effectively spend their training dollars. Looking at Internet-based learning overall, IDC have predicted that it will grow annually by 83%."*

The Approach

Suppliers looking to develop web-based training can look at a range of current approaches for ideas. MCAD vendor think3 offers on-line tutorials, e-seminars, real time web training and game-based learning software, in addition to off- and on-site instructor lead training. *"Our on-line education & training tools are currently available to customers & prospects worldwide,"* says Art Ignacio, *think3's Director of Educational Operations. "We provide on-line curricula targeted at a range of skill levels, from students and novice 3-D designers to advanced 3-D designers. For example, we've pioneered video game-based learning, a new approach to education and training that's really targeted at new users of think3's 3-D design software. The Monkey Wrench Conspiracy was our first game-based learning tool. It was a great success worldwide, proving that injecting fun into the learning experience gets users engaged in learning in a much deeper way."*

[CAD Potential](#), Inc. is a privately owned engineering, education and manufacturing company based in Westminster, Colorado, supplying UG and Solid Edge education services/products worldwide. CAD Potential launched i.get.it in 2000, described as *'a complete Internet-based eLearning system with customisation features that help you manage your CAD/CAM training'*.

[think3](#) produces MCAD software for use throughout the product development process. Customers include Adidas-Salomon, Buell Motorcycle Company (a division of Harley Davidson) and Tycos Tool and Die. The newest addition to the company's award-winning line of game-based learning software is Time Mechanic, a *'fast-paced travel adventure game that gives users a fast path for learning the ins and outs of learning think3's flagship product, thinkdesign'*.

Revit has placed the Internet at the heart of its overall delivery model, including training. *"The majority of our training is on-line,"* explains Pete Baxter, EMEA Client Services Manager. *"Obviously with larger customers starting out you may need to put someone on site to guide them in setting up things like their project templates. However, all training is promoted as web-based, and this constitutes the vast majority of what we do. What we are moving towards is classes on the web that you sign up for as you need to. We're running the modules in the UK in a slightly different way to the US to respond to the different needs of the market. There are a number of 60-90 minute modules/classes focusing on different discipline levels and competence areas."*

[The Revit Technology Corporation](#) produces Revit, described as *'the first parametric building modeller developed for the AEC industry'*. Revit is available via subscription after which users have access to all product upgrades, value-added enhancements, distributed learning sessions, customer support and maintenance.



Dora Smith, CAD Potential

CAD Potential stresses the importance of guiding customers towards the right mix and sequence of training options, as Dora Smith explains: ***"When we first got into e-learning we wondered what kind of role it was going to play. Over time as we've seen customers start to adopt it, we see that learning paths are really key to success in any learning medium. CAD Potential consults and mentors customers from the onset to determine learning goals. Learning paths are developed for an individual, team, or entire organization. The learning paths are managed electronically through CAD Potential's i.get.it online infrastructure, and may include training events in multiple media, including eLearning, classroom-based, multimedia, assessment testing and workshops. As the customer follows the learning path, progress is tracked to the learning goals. These paths are reviewed annually much like a business plan."***

User Attitudes

So is the demand for online training growing in Europe? CAD Potential can offer a view from both sides of the Atlantic. *"In the US customers are ready for it on a concept level,"* says Dora Smith. *"They understand that this is the direction they need to go and that it provides many benefits. I would say that overall the US is probably two to four years ahead, but we are seeing European demand increasing, especially when it's offered as a complement to classroom training."*

"I would say that overall, the US is probably two to four years ahead, but we are seeing European demand increasing."

Chris Hill, Director of SOLID Applications Ltd, gives a UK perspective: *"You've got to remember that for a lot of customers, especially at the engineer level, the web is still very much in its infancy. They've only just realised that it's designed for a lot more than some of the things they've been using it for historically, i.e. as a valuable tool to help with their job. And to open this up more as a learning aid is going to take some time to get across to them."*

[SOLID Applications Ltd](#) is based near Birmingham, England, and specialises in the development and support of CAD-based mechanical design and engineering software and hardware solutions. The company became a Solid Edge VAR in 1998, and a UGS Premium Business Partner earlier this year.

The Bandwidth Barrier

As with other web-based ways of working, problems with the speed and cost of Internet connections are raised as a barrier to growth in demand. *"The dilemma is obviously physical access, and the bandwidth abilities of the recipients looking to take the training,"* explains Chris Hill. *"I think there would be some interest at the customers' end, but we're still some way off that. Based simply on what our customers tell me, and through the feedback from our various questionnaires, it's certainly not the type of request that we get on a regular basis. But as soon as broadband becomes available in most areas rather than just a couple, then people will start to get the type of bandwidth that would be usable for this service. I think we're about twelve months away from seeing a rise in demand for web-based training."*

"I think that we're about twelve months away from seeing a rise in demand for web-based training."

The patchy nature of Internet connections in European countries will be a factor in the timetabling of any suppliers intending to roll out web-based training on a multi-country basis. Walter Stachowicz, CEO of Polish Solidworks VAR, CNS Solutions Sp. z o.o., is looking even further ahead: *"I don't think Poland has the capacity to handle on-line training at the moment. It has one of the most expensive Internet connection costs in Europe and at the same time it lacks the bandwidth necessary to accommodate the growing number of users. I think in about 2-3 years the situation will have improved sufficiently for companies to benefit from such services. There is definitely a future for on-line training; we are currently setting up an on-line support programme for our SolidWorks customers, and when the bandwidth becomes sufficient enough for us to properly implement an on-line training strategy, we will be ready."*



Walter Stachowicz
CNS Solutions

Revit however, insists that this issue can be overcome for UK customers. *"The software we use for web-based training is provided by PlaceWare," explains Pete Baxter. "They have now started up a UK server, which means that UK callers can connect to the UK server instead of the US one. We're finding that people with 56K modems are getting good performance, and levels of connectivity have not been an issue. The biggest barrier is that customers tend to have the preconception that because they don't have the highest speed line it won't work for them, but in fact it can. We generally make sure that the Revit user has the right version of Java, and we run a test with them to show them it can work. I think that once people are convinced that they have the infrastructure to support it, and they experience it and it works well for them, then they're very positive. But as with any new technology, of course we have a certain amount of proving to do. We ask them to take 10 minutes to try an on-line based demonstration through which we can introduce the technology."*

[PlaceWare](#) offers a set of hosted services designed to meet a wide range of Web conferencing needs. These include marketing seminars, product launches, press and analyst tours, customer meetings, corporate announcements, eLearning and quarterly IR/earnings calls. Its customers include HP, Sun, Ingram Micro, Autodesk and Cisco.

"The biggest barrier is that customers tend to have the preconception that because they don't have the highest speed line it won't work for them, but in fact it can."

Opportunities & Benefits

On-line learning opens up options for the many companies and individuals who feel they do not have the time to commit to traditional classroom based training, thus creating additional demand for training. *"In today's fast-paced design and manufacturing environments, there is increasing demand for smaller nuggets of information to keep employees productive while learning,"* says Dora Smith.

The business of enabling companies to make the most of the range of available learning options has become an opportunity in itself. *"We see the opportunity for continued growth, but in different ways than we've traditionally known. We see an increased need for services. Today's on-line training contracts are part of larger corporate-wide agreements where organizations are trying to manage knowledge at multiple locations and multiple disciplines. As large organizations seek to partner with a training company for long-term learning path development, on-line learning development, etc., they need professional support services on site to ensure success. This is a whole new line of business for many training organizations. But it provides a much closer relationship with the customer, which leads to more long-term growth. We explain it in terms of a personal trainer approach. Customers need experts to help determine the right mix of learning media to achieve the desired goal."*

The ability to provide services to clients in distant markets is another obvious benefit of on-line provision. *"That's the interesting thing for us about e-learning," says Dora Smith. "Initially we were just targeting customers in the US. But with the Internet, interest came in from other countries. These were companies that*

".....with the Internet, interest came in from other countries. These were companies that we'd never spoken to before."

we'd never spoken to before; we didn't do our traditional type of selling to get into these customer accounts. We now have customers currently learning on-line through the i.get.it portal in the UK, Finland, Sweden, Switzerland and Germany."

Revit and think3 both offer their software via subscription, with training offered free. Pete Baxter argues that even without a training revenue base the on-line approach offers benefits to Revit as well as its customers. *"It means we can react much more quickly to requests. For example if a customer has a project they want to prepare for quickly, then we can set up a project out of hours in the evening. We can get people into the Revit culture much more quickly this way."*

"Another opportunity is that we can reduce the delivery time of new training because of the way we can start to disseminate information about new releases of software. Revit has a very aggressive development cycle, with 3-4 releases of software a year. If we're producing courseware that relates to new software releases, that is a massive overhead to produce updated documentation. With on-line training, we can start delivering training relevant to new software on the day that the software goes out. We don't have to push the release schedule back for 3 weeks while we get the training material produced and published first."

"It's important to us that our customers are getting real value from us, including the quality of the training. By offering training direct we reduce the opportunity for pseudo consultants to spring up and offer uncertified training. So it's a sensible business model for us as well as being good for the customer."

VAR Conflict?

The development of the technology to deliver on-line training may be seen as a mixed blessing by some VARs. An opportunity to offer extra options to their customers, or another chance for vendors to cut them out of the equation? Lisa Washinton, Director of Corporate Communications at think3, does not see this as an issue. *"Taking the UK as an example, our VAR is very happy with the direction and the tools that we have. Philosophically, they don't perceive this as anything but value added for them because it will result in having*



Art Ignacio, think3

more satisfied customers. And the kind of consulting service they can offer on top of that will just make the relationship that much better." Art Ignacio adds: "We'd never be in danger of providing too much training. We want to get to a point where we have complementary relationships with VARs. There might for example be certain topic areas that we are unable to get to immediately, and if a VAR could produce content in that complementary area, it would be a win for both sides."

Specialised, tailored training is an avenue that VARs will feel should remain their prerogative. "We do a lot of personal productivity planning," explains Chris Hill. "A typical recipient might be an engineer who's spent 6 months working with Solid Edge, and has gone through his/her fundamentals and advanced training, and is probably within a groove of working that he or she believes is acceptable. The idea of personal productivity courses is to firstly measure the degree of working effectiveness, and then use our findings to improve on the features most used and the individual workflows. So a lot of the course is to help the individual but equally the work group to become more productive."

Future Plans

For VARs and others not yet providing online training, it's a question of closely monitoring customer needs to ensure that the opportunity of providing them with this service doesn't become a threat if a rival gets in there before them.

Chris Hill comments: ***"Like any of these things, training and how it is undertaken becomes a part of our general culture. The way that the engineer likes to deal with it is very much in a face to face interactive way. All the things that we do over the Internet for the support of our customers don't remove the need for our engineers to go out and face them. And I think because of that, training will continue in that same sort of way for some time to come. We'll make our decisions about our future after we've researched what the market wants."***

"All the things that we do over the Internet for the support of our customers don't remove the need for our engineers to go out and face them."

Those already offering on-line training are building on their experiences to improve their services. "On the content side, there's a huge demand in the US for on-line authoring," says Dora Smith. "Not only do they want a huge selection of courses to choose from, they want to be able to change and customise them, and maybe even write their own courses. We don't see that same demand from Europe yet; our customers there really want things more out of the box because they're just starting to get into on-line learning. But that need will develop. The key lesson we've learned in this market space in the last few years is that you have to develop flexibility into the functionality. Most companies need to be able to host eLearning in different ways, to customize its content, and to make adjustments as they grow. For example, those without Internet access need training delivered in an Intranet-ready form."

"The MCAD industry has seen a huge increase in PDM since this time last year", continues Dora. "In the US the focus is really on the data management side of the industry. PDM integrates into every department of an organisation, so it will be the focus of new training technology and services in the next couple of years."

"PDM will be the focus of new training technology and services in the next couple of years."

Newcomers to this area will also have to bear in mind that it takes time to put together an on-line learning programme to meet a broad range of needs. *"Our focus is on building out a curriculum over time," says Art Ignacio, "getting to a point where we have enough material to be able to prescribe a path through a series of training courses that would take into account that person's application, industry and goals, etc. This approach will provide an interesting, complementary relationship with our customer support organisations so that, for example, they could provide individuals with a recommended course of action for training based on the kinds of questions and problems the person was running into."*

Training providers planning to develop on-line options should also build in time for piloting by selected customers, a process also made easier by this type of provision. *"While our focus has predominantly been on architecture," says Pete Baxter, "we have structural coming on line very soon, and service engineering. So we'll develop modular training solutions for those markets as well. We've already got early adopters in the structural market who are helping to define the functionality and understand how their industry works that might be different to the architectural market, so we're providing customised learning solutions for those industries as well. Of course as new technologies, tools and plug-ins come on line to help us further enhance our services, we'll look at them to see how they can offer added value to our customers."*

The Death of The Classroom?

So what of the comforts of having a tutor and fellow learners in the same room, to learn, laugh and network with? *"There'll be times when having a real human being there will be the best way to go," suggests Art Ignacio. "The real issue is to find out what kinds of things those are. It's a media issue, because when people speak about a classroom today, they mean a live person presenting, being able to ask questions and get that interaction. As the media and technologies get better, that becomes easier to accomplish across the Internet. The kinds of things that benefit from live classroom interaction are personnel and management, which are more people based. The trick is to choose the media that's appropriate for the job."*

Pete Baxter is in no doubt that web-based training will become the norm. *"It will be customer driven. The pressure on all companies is to become more productive, and the downside of this is that it becomes increasingly difficult for people to take the downtime to implement new technology. We're finding now that people are too busy to take two days out for on site training."*

"I think that customers who've experienced it will start to demand similar services from their other vendors."

By offering our modularised and highly customised training option it's more feasible to take it up. I think that customers who've experienced it will start to demand similar services from their other vendors."

Conclusion

The key messages we have drawn from our discussions are:

- Offering on-line training can stimulate demand that is additional to that of more traditional forms of learning
- The European VARs we spoke to feel that while there are no signs of demand for on-line training at present, this will change when broadband becomes widely available
- Many users are likely to be simply unaware that on-line training could work for them; demonstrations are a very simple and effective way to counter this
- Opportunities are growing in consultancy to large organisations on how to draw maximum benefit from the increasing range of training options
- European VARs need to be aware of the activities of other providers offering on-line training that are reaching into their market
- There is a 'first mover' advantage in offering on-line training at an early stage to enable the targeting of new markets with a tried and tested product as soon as demand arises

Training providers considering developing on-line services need to stay closely in touch with their customers' views on web-based training, and their current/future situation regarding Internet access/connectivity.

If you want to find out more about the levels of awareness of your products and services in universities/colleges around the world, or if you are interested in what impact newly employed graduates have on the decision-making process in small and medium sized firms, Business Advantage's multi-lingual research team can provide the solution. Visit our [market research services](#) page for more information, or call David Eaton on +44(0)1689 873636