

## Train Large Numbers of Users Quickly, Consistently, and Cost Effectively

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## Table of Contents

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Train Large Numbers of Users Quickly, Consistently, and Cost-Effectively - <i>The Project Manager's Survival Guide to Systems Training</i> .....	1
Developing a successful end user training programme - Your Goal .....	2
End-User Training: Common pitfalls and traps .....	3
The Domino Effect .....	3
Role based and process based training.....	3
Logistics .....	4
Recommendations – <i>Training Strategy</i> .....	4
Plan ahead for “business as normal” .....	4
On-line self service delivery .....	5
Easily maintained content .....	5
Blended Learning .....	5
Simplify the learning architecture.....	5
Design long-term resilience into your training approach.....	6
Recommendations – <i>Training Development</i> .....	6
1.Get Organised.....	6
2.Select a Tool .....	7
So what should you be looking for in such a tool?.....	7
<b>Efficiency</b> .....	7
<b>Control</b> .....	8
<b>Collaboration</b> .....	8
Recommendations – <i>Training Delivery</i> .....	9
Delivery Timing .....	9
Deployment / Accessibility .....	9
Delivery Front End .....	9
Integrated On-line Help .....	11
Case Studies .....	11
Airbus .....	11
T-Online .....	12
About STT Trainer.....	12

## **Train Large Numbers of Users Quickly, Consistently, and Cost-Effectively - *The Project Manager's Survival Guide to Systems Training***

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You're the project manager or training manager responsible for the implementation of a major software roll-out or upgrade. Hundreds – or even thousands – of users in a wide variety of roles will need to be trained successfully, or your project will fail. Whether your project involves a major ERP brand like SAP or Oracle e-Business Suite, a CRM implementation or a custom application, this document should be useful to you. You can use this document in any of the following ways:

- As a basis for constructing your own training strategy
- To help select appropriate methods and tools to accelerate training development and delivery
- To help you avoid some of the many pitfalls and traps which have befallen so many of those who have trod this path before you.

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## Developing a successful end user training programme - *Your Goal*

*Congratulations!* Or should I say *Commiserations?* The chances are if you are reading this you've got quite a challenge in front of you. You are responsible for your organisation's new system or ERP implementation. You want to deliver the project on-time, on-budget and deliver 100% of the intended benefits. Alternatively, you may be responsible for an upgrade or re-implementation, to achieve additional optimisations and deliver further benefits for the organisation.

You know that effective end user training is going to be essential for the project to succeed. Adoption is everything! Clever technology, optimal design, efficient business processes will count for nothing if users cannot use the new applications.

You need to:

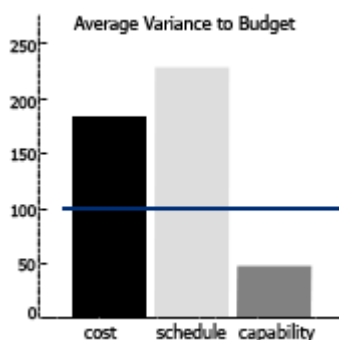
- Communicate new processes and prove that they are understood
- Address new roles and changing responsibilities - new ways of working
- Ensure users are competent with new or modified applications.

Unfortunately these things are not easy. The problems are not new. The often quoted paper "ERP Training Stinks" (CIO Magazine June 2000) provides this insight:

**75% of the training managers say "they would go about their training differently on their next implementation".**

Although not a recent article, the challenges which this paper explored are still as true today as they were then.

According to a survey by the Standish Group, few ERP projects meet their targets on budget.



The variances are astounding. 180% of cost. 230% of schedule. Worst still only 50% of intended capability.

It's widely acknowledged that the most successful SAP projects are those which succeed at engaging the organisation through a rigorous Change Management Programme, rather than treating the implementation as an IT Project.

One of the top 10 reasons why ERP projects fail is: "Believing the journey is complete at go-live" according to Deloitte Consulting. They go on to say, "30% of the SAP project challenge is technology, 70% of the challenge is people and process..."

So developing a successful end user training programme is clearly a critical success factor for your project. Ensuring this lives on as a sustainable solution for high performance is also imperative. Otherwise you can look forward to a forgetting curve starting just as your users complete the learning curve.

So why is delivering successful end user training difficult? And why do the vast majority of training managers feel that they could do it better next time around?

## End-User Training: Common pitfalls and traps

### The Domino Effect



A paradox of end user training projects is – “That you can’t start soon enough – and – you can’t start soon enough”. In other words you’d like to start training your end users as early as possible. But you can’t. For a start, if you train people too early they will forget. Secondly, being able to deliver relevant training has many dependencies.

#### PLAN A:



In addition, however well planned, IT projects never seem to run entirely on schedule. So while “**Plan A**” envisioned ample time to develop and deliver training, if milestones are missed earlier in the project – and go-live doesn’t get pushed back –its “good old training” which has to compromise.

#### PLAN B:



Your challenge, “**Plan B**” - to develop and deliver just as much training, but in approximately half the time.

So it’s no wonder that many IT Training managers complain of the domino effect. Even projects which included a well defined plan for training development and execution can be severely compromised, due to slippage in the earlier project phases.

### Role based and process based training

A common failing of end user training is that the focus is very much on “How to operate the system” rather than addressing the process side, such as – “What? Why? When? Who? Educating people in the context of the process and changes to their roles and responsibilities may be just as important as knowing how to operate the screens of the new system.

It’s curious that even though much work in the early stage of a systems implementation project involves “process workshops”, by the time instructors get into classrooms with end users there is typically little communicatable material available to help the instructors get the process concepts across.

Small wonder therefore that feedback from training managers after phase one of their roll-out training is often; **“We need to do a better job around training the processes”**; and **“We need a greater emphasis on the nature of changed roles and new ways of working”**.

## Logistics

The sheer scale of many systems and ERP roll-outs is an obvious cause of difficulty for training managers. Hundreds if not thousands of users will need training. Multiple countries. Multiple sites. Shift workers. Capabilities of the business. No organisation has dozens of effective end user trainers just sitting on the bench waiting for such a challenge! And most organisations do not have appropriate IT training facilities which can scale-up for the eight weeks or so of end user training in the month or two before go-live.

To train 1000 employees for three days in class sizes of 12 (twice the recommended class size for effective IT training by the way), over a period of eight weeks before go-live, you would need at least:

Classroom Days	250
Trainer Days	250
Concurrent Classrooms (approx)	7
Training PCs (approx)	90

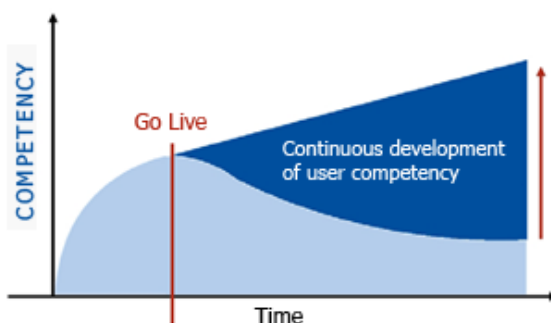
You can adjust all of these figures up on the basis that different roles require different courses, there will be scheduling inefficiencies, students will not attend when they should - all putting more pressure on training.

In addition to the above you need trainer preparation time, training materials preparation time, data preparation time, data refresh, printing resources for handouts and exercise sheets, administration for training scheduling, administration for the training system's server, PC support for classroom infrastructure (PC's, Network etc). You need to guarantee 100% up time for the training system and classrooms as any disruption to training delivery will completely ruin the schedule.

Not surprisingly therefore, organisations are increasingly turning towards some form of technology based training to run alongside classroom training. The benefits of this "blended" approach (*traditional instructor led training blended with e-learning*) should be obvious, compared to the logistical challenges described above. Say for example you halved the amount of time users spend in classrooms and required users to continue their learning by completing self study e-learning tutorials. The logistical challenges are suddenly halved: Four classrooms instead of seven; 125 classroom training days instead of 250; Four weeks for delivery instead of eight; A self service practice environment which allows users to practice what they were shown in class in the weeks before go-live, rather than having an average of four weeks to forget what they have learned.

## Recommendations – Training Strategy

### Plan ahead for "business as normal"



Don't regard training as just a project activity. Plan ahead for the continuity phase.

Beyond go-live, the profile of required training will completely change. There is no longer a need for mass training. Now you need ad-hoc new starter training, refresher training for seldom used

features, optimisation training in response to problems and configuration / procedure changes. Moment of need help is required rather than scheduled, formal tuition.

Consequently even if the principal delivery method before go-live is classroom based training, there is a very strong case which should be made to actually develop the hands-on training exercises using on-line simulation training tools. Likely to be cheaper, (at worst cost neutral), in terms of speed and cost of development compared to paper based, traditional classroom materials, the great benefit of this approach is that you have already designed the continuity materials without the need for any additional effort or expenditure.

### **On-line self service delivery**

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Reduce the burden on resources associated with instructor led training (ILT). To do this don't eliminate ILT, instead target it more accurately. Short, sharp, classroom based sessions communicate reasons and benefits for change. Hands-on exercises can be shortened so long as users are encouraged (perhaps forced) to continue their learning from their own desks or at open learning centre facilities. This approach relies on the availability of high quality self service simulation lessons which enable users to practice again and again how to complete their required transactions. During classroom training users are shown exactly how to use the self service training simulations. They leave class confident in the knowledge that:

- They know how to use the self service training simulations
- They can practice what they've covered in class
- They can access more advanced topics to extend their learning.

### **Easily maintained content**

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IT systems are constantly subject to configuration changes and optimisations. Inevitably during a project phase some things will be changed even before go-live and you may have to re-jig some of the training lessons. Being reliant on a 3rd party e-learning authoring consultancy is not where you want to be. The cost of ownership could be horrendous. Responsiveness to urgent changes and corrections would be lacking. You need to be able to take charge of the content development process in-house. Rapidity for content update and redeployment of this content to learners will be a critical success factor. Look for efficient design capabilities, such as single capture > single edit > multiple outputs. In other words, when systems change and you have to update training and support content, you do not want to have to repetitively update all manner of content files – (demos, training, assessments, on-line help, documents, etc). You will want a solution which does everything for you with one effort. Recapture changed screens, adapt instructions and then republish all the required outputs seamlessly in one go.

### **Blended Learning**

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Use the right delivery tools and methods for the right purpose. It is very unlikely that one training approach or one training tool will be the panacea to all ills.

### **Simplify the learning architecture**

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The provision of hands-on training using a copy of the productive environment is not a trivial undertaking. There is a high cost associated with maintaining a SAP training client, a training instance of the Oracle eBusiness Suite, or any other application.

Over time the configuration of any system will be subject to regular updates, patches or optimisations. Such changes have to be carefully controlled as they are moved from the development environment, through the QA / Test environment to the productive environment. A failure to upkeep the training environment with all such configuration changes would result

in users being trained on the wrong functionality. In some circumstances this could be damaging to the business and could cause compliance problems.

A significant advantage of simulation lessons in this context is that they remove many of the stress points mentioned above. Less reliance on live training clients, no need for data refresh, no need for paper-based training materials, less reliance on a trainer's memory and less stress for the trainer as the script is built in to the lesson. So long as the lessons are maintained (should the configuration of the system change) then the content is available 24x7 across the intranet. So refresher training and remediation would probably occur in the workplace or open learning centre, rather than having to drag users back into classrooms.

## **Design long-term resilience into your training approach**

A traditional ILT approach has been proven time and time again to lack resilience.



You can develop the very best instructor led training materials but your ability to deliver these is balanced precariously on three legs: Trainers, Classrooms, System. As you'll know, a three legged stool is very stable, and always level. It is though, rather less stable once one of the legs falls off!

Consider therefore the vulnerability of the three legs in this analogy. Who are your trainers? Typically a mix of external consultants and project team members. Consultants leave (thank goodness). Project teams have a habit of being disbanded and internal trainers go back to their line of business functions.

The training system is often vulnerable beyond go-live. Faced with the low utilisation but high cost of hardware and administration described above, it is not unusual to find that 12 months after go-live the server has been repurposed for a new project testing a business intelligence application or such like.

So how does a simulation training approach address these vulnerabilities?



Notice how the three legs have gone. Intranet content is available 24x7 which can be accessed for moment of need refresher training and help.

Simulations can still be used to support instructor led training (ILT). But importantly training needn't be confined to the classroom. So even if you are no longer able to support ILT, training doesn't stop.

## **Recommendations – Training Development**

### **1. Get Organised**

The structure and alignment of your training project team is unlikely to vary considerably whether you go in the direction of simulations and on-line / blended delivery or not. A few highlights:

- You need a strong leader to pull the training team together and ensure they get integrated into the overall project team.

- Keeping training at arm's length from the internal project team is a recipe for failure. You know your business and your users and their roles best. Don't rely too heavily on external consultants. Be extremely wary of off-site development or off-shoring.
- Organise to people's strengths. See below suggestions for collaboration between subject matter experts and training specialists.
- Don't underestimate the learning curve for content developers. Whatever simulation or documentation accelerator tool you employ, all users involved in its use will need detailed training. Ensure you provide an experienced consultant in the midst of the team who can act as the product specialist. He / she will help you steer a safe path, avoiding traps which have been encountered many times before.

## 2. Select a Tool

If you've read this far, hopefully the business case for moving towards a blended training approach for end user training has become quite compelling. One of the most common ways of moving a proportion of your end user training on-line is to invest in a Simulation Training Tool. As **Gartner** says, **"Application simulation is an easy and inexpensive way to customise content to teach staff to use a new software application."**

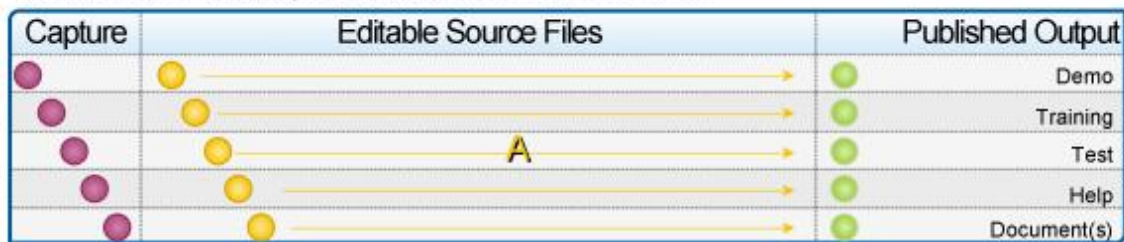
### So what should you be looking for in such a tool?

#### Efficiency:

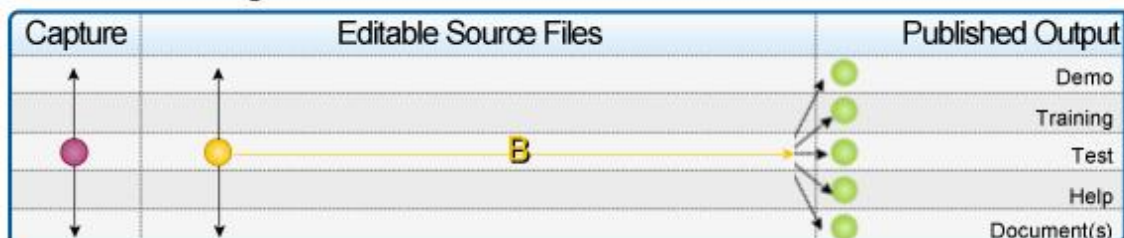
If you're interested in a variety of content types, make sure you select a development tool which maximises efficiency. Say for example you want demonstrations, training tutorials, tests, on-line help and documentation. Some simulation tools can produce all of these from a single source file. Others cannot – as each output will involve a separate source file which is individually edited.

The following diagram illustrates the duplication of effort and corresponding high cost of maintenance, which is exacerbated when systems change or corrections need to be made, together with the opportunity offered by a simulation tool with a single source file.

#### Inefficient - Multiple Editable Source Files



#### Efficient - Single Editable Source Files



The first scenario – multiple editable source files – provides much duplication. Each intended output has a separate editable source file. In practice each editable source file may be a copy of the one above. Nevertheless, once the system changes or a required correction is found, you'll be updating five source files to recreate the five required outputs.

The second scenario provides a genuine single Capture, single Edit and batch publishing of the five desired outputs. When systems change you'll only need to edit a single source file. The capturing of new screens and tasks will be completed in a few minutes rather than hours.

#### Control:

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**Project:** A typical user training project may involve 500, 1000 or more discrete simulation lessons to cover the full range of transactions. These will be created by trainers and subject matter experts working across the whole project team. That overall team will be broken down into business streams. Keeping track of the progress of training development could easily become a nightmare. Who's responsible for what? What's on hold? What's awaiting review? What's awaiting approval? What's ready to deploy to the end-users?

Beware of trying to manage such a training development project on a spreadsheet? I've seen this literally end in tears. "Why won't the trainers update my lesson tracker spreadsheet!" the training manager wailed. The answer – it's a single-user spreadsheet. While someone has it open on their PC, none of the other trainers can update it. Small wonder therefore that it's never accurate or up-to-date.

**Content:** Another aspect of control is instructional standards. When you've got ten or more developers of training, you're inevitably going to get quite a variance of quality and approach in the design of these lessons. A standards document is typically used to provide the trainers guidance on design, fonts, language, etc. However it's going to be hard work to police this if each author is working totally independently using a single-user simulation tool.

Some vendors provide a workgroup development environment which helps you exercise control over both the project and content aspects mentioned above. One collaborative development environment with content assignment, workflow, status management and centralised style and language rules will significantly counteract the "herding cats" syndrome.

#### Collaboration:

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Successful, rapid content development is a team effort. External consultants working too independently or remote content developers are unlikely to be as productive as your own team members; if we properly align people's responsibilities, according to their strengths. Subject Matter Experts (SMEs) will know the system best. They know what test data is available in the system which we can use in the transaction. They know the points they'd want emphasised in the training. Trainers have an eye for instructional design. They keep the explanations grounded and simple for the less expert users. The Approver of the content (this might once again be the SME) has to have final say that the content can be deployed.

Designing an appropriate workflow and approval process will help eliminate wasted effort and bottlenecks during content development, as shown in the diagram below.

Role	1. Capture	2. Basic Edit	3. Functional Sign-Off	4. Training Instructional Input	5. QA	6. Final Approval	7. Deployment
SME	✓		✓		✓		
Trainer	✓	✓		✓			✓
Approver						✓	

**In conclusion**, look for a collaborative development environment integrated into the simulation development toolset. Content assignment, workflow, status management, bulk publishing and deployment capabilities will eliminate many manual procedures and inefficiencies, helping you to keep the development project on track.

## Recommendations – Training Delivery

### Delivery Timing

At the start of this article I described the domino effect. Clearly you are not going to be in a position to deliver the majority of required training until very shortly before go-live. The window of opportunity for delivering training is typically a period of six to eight weeks before go-live. Ignoring the readiness issues implied by the domino effect, you will not in any case want to be training people how to use the new system in detail any earlier. They'll just have too long to forget what they learn.

Nevertheless, I believe that people's thinking regarding this training conundrum is rather constrained. They are so used to encountering training as an event. Therefore they automatically expect to have to deliver all the training in one session. Therefore no training will start until the entire end-to-end training course is developed and ready to deliver.

If on the other hand you start to see training as more pervasive, something which is on-tap throughout the life cycle of the system, then our thinking about delivery timing may become a lot more flexible.

### Deployment / Accessibility

If you are going to deploy simulation lessons to your users, you need to determine the technical landscape required to make this happen. Most simulation tool vendors claim to offer zero footprint content. Check this carefully. Zero footprint (running in a browser) where absolutely no desktop software or plug-ins or active-x installers and such like are required on the end users' PCs will save you software deployment and change control costs. It's therefore highly desirable.

### Delivery Front End

As mentioned above, for full flexibility, all content should be capable of on-line delivery, even the content which will during the run-up to go-live be mostly delivered in classes. So if the content is going to be accessible on-line, where should it be put? How will users access the content on a self service basis?

There are two main possibilities for the delivery front end; a Learning Management System (LMS), or an intranet. An LMS is basically a training scheduling and delivery system. Most leading LMS's have a capability for managing traditional ILT and on-line delivery. You assign users to attend (or partake in) specified courses.

- **LMS:**

The first consideration in your decision making here is whether or not your organisation already has a functioning LMS which is capable of the task. If not, then undertaking a LMS implementation project in parallel with your system implementation is probably out of scope. Outsourcing the requirement to a hosted LMS is almost certainly a bad idea at this time.

**LMS Risk / Benefit Summary:**

Risk	Benefit
Manual procedures needed to load content - potential bottleneck.	Reporting. Who's attended? Scores?
Administration - potential bottleneck.	Personalised learning paths.
Assignment of courses to users can become repetitive. This requirement can be triggered just because a content item is updated and reloaded.	When users log-in to the LMS they should be shown a personalised training plan. This makes it easy for them to find the training they need to do and monitor their own progress.
Bandwidth performance.	Depending on the maturity of the LMS within the organisation – this may provide a proven and familiar learning methodology for the users.
Many organisations have started LMS projects quite modestly. Low numbers of users and comparatively simple content. Stepping up to a large training challenge is likely to stress the LMS infrastructure in ways that have not been tested before. Complex bandwidth, hungry simulations and hundreds of users. Test this is going to work before betting the farm on it.	

Find out what content integration standards your LMS requires. There are two main standards – SCORM and AICC. SCORM is the de facto industry standard content format. There are two commonly supported versions 1.2 and 1.4 (also known as 2004). Find out what LMS integration capabilities your proposed simulation vendor supports.

Remember, in order to integrate your training content within the LMS, both the LMS and the training tool need to be SCORM (or AICC) conformant.

- **Intranet:**

If you've not got an LMS and you want to put the training content on-line, then you'll be looking at your intranet as the solution. Compared to an LMS there are some positives and some negatives.

**Intranet Risk / Benefit Summary:**

Risk	Benefit
Storage location and bandwidth. There will be a large quantity of data.	Easier deployment of content.
Simulations are typically bandwidth hungry. Stress test the solution. If you have distributed offices with low bandwidth you may need to replicate the content to local instances per office.	Probably easier for users to access content on an ad-hoc moment of need basis, as they don't need to sign in and navigate within the LMS.
Lack of personalization. You will not have the personalized learning plan provided by the LMS.	Avoids the LMS administration aspects.
Reporting. Some simulation vendors provide assessment and result storage and reporting capability built in to the solution. Others do not. If you want to track results check this.	It may be easier to connect the new system to the Intranet for context sensitive help searches compared to integrating in this way to the LMS Server.

**Integrated On-line Help**

In the long term, a powerful method for users to access the training materials they need is to provide them the content in relation to the context of their screen. Context sensitive help provides the promise that whenever a user gets stuck they can automatically search for training materials and help content relevant to the task in front of them.

Some simulation tool vendors provide such a capability. It is recommended that you research this capability carefully as it is unlikely that any simulation vendor can automatically provide context sensitive help for all software applications.

**Case Studies**

**Airbus**

Airbus is a leading aircraft manufacturer that employs over 47,000 people. Headquartered in Toulouse, France, Airbus is jointly owned by EADS (80%) and BAE Systems (20%). As a manufacturer of aircraft, Airbus must comply with Civil Aviation Authority (CAA) standards, and demonstrate that its staff are properly trained in all matters pertaining to manufacture.

Historically, training within Airbus had always been classroom-based. In 2002, with a SAP upgrade looming, the company sought a more practical and cost-effective method of training to enable them to comply with CAA standards.

They now use simulations as the main training and competency assessment mechanism for users of the SAP system. They have enabled Airbus to demonstrate to the CAA that there are

training and assessment processes in place to comply with their regulations.

“STT Trainer enabled 22 trainers working part-time to create 200 lessons for the SAP upgrade in only 20 weeks. The training we have designed with STT Trainer has also proved popular with our end-users”.....Robin Simms, Airbus

For the full article please see the following link: <http://ftp.stt-trainer.com/case-study-airbus.pdf>

## **T-Online**

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T-Online's Customer Care Centre is committed to providing fast friendly and competent support for over 12 million registered customers, 24 hours a day, 7 days a week. To provide an excellent level of service cost-effectively, it is essential that T-Online call centre professionals are well trained and competent in using their various applications to respond to customer queries quickly, accurately and in a friendly manner.

As T-Online offers such a variety of different products it needs to have many custom developed applications to meet the company's unique needs. Training was a challenge because customised training was often needed for many people within an extremely short time frame.

To fulfill these needs, T-Online started to use blended eLearning and rapid eLearning development tools. The company wanted a solution that could simulate the entire system, present it in smaller segments, and provide immediate feedback. The system also needed to be easy to use for the learners and the trainers, as well as SCORM compliant for easy integration into their existing Learning Management System.

STT Trainer fulfilled all of T-Online's strict requirements and was able to easily fit into the company's unique set-up, and support their complex, custom-developed applications.

“The blended learning approach - (classroom-based combined with computer-based training) - saves us approximately 30% of the training time we previously spent. With a call centre as busy as ours, it's highly critical to find time slots for training, so we need to ensure that every minute spent in training is effective”.....Bernd Wiest, T-Online

For more information please see the following link:

<http://ftp.stt-trainer.com/case-study-t-online.pdf>

## **About STT Trainer**

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STT Trainer from Kaplan IT Learning is one of the most recognised simulation based training tools for large system implementations. STT Trainer provides a solution for any Windows based software roll-out.

STT Trainer provides a compelling solution for enterprise training including a workgroup content development methodology which helps project teams keep on target and maintain consistent standards.

STT Trainer's advanced object recognition speeds the capture and creation of interactive simulations. From a single Capture and single editable source file you can create:

- Software demonstrations
- Interactive simulation training tutorials
- Interactive simulation tests (self assessments)
- On-Line Help
- High Quality documents (HTML, Word and PDF)

STT Trainer content can be deployed to your Intranet or to any SCORM conformant LMS. You can even deploy via CD and train off-line.

STT Trainer has won many awards and received consistent recognition by leading industry experts and analysts.

To learn more visit: <http://www.stt-trainer.com>