

ELearnSAS- A Win-Win Situation.

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In today's world of online shopping, online dating and online match-making, the concept of online learning isn't a new one. The SAS® world isn't an exception to this versatile and efficient learning environment called e-learning.

The global e-learning industry market has been growing at an annual growth rate of 9.2%. The global self-paced e-learning market reached 32 billion in revenue in 2010, and is expected to reach \$107 billion by the end of 2015. Growth rates reveal revenue opportunities, and the top three countries that have shown remarkable growth rates are India (55%), China (52%) and Malaysia (41%). The LMS Market was worth \$2.55 billion in 2013 with an estimated compound annual growth rate of approximately 25.2%. This market is expected to worth \$4 billion by the end of 2015 and over \$7 billion in 2018. The highest proportion of revenue contribution is expected to be generated in North America. The online corporate market is expected to grow by 13% per year up to 2017. Today, 77% of USA companies offer online corporate training to improve the professional development of their employees.¹

ADVANTAGES OF AN E-LEARNING:

There is a reason why online e-learning courses have taken a gained popularity in the past few years. A few of the reasons for their growing usage are:

Greater access to expertise: e-learning takes away geographical barriers and time zone restrictions from teaching. Access to best expertise is possible from any corner of the world.

Simple Logistics: Better participation in ensured due to flexible timings. E-learning courses like Lynda.com, Khan Academy are flourishing examples of their popularity.

Immediate result and feedback: Based on quick and smart evaluation techniques, most e-learning courses can evaluate how well the course curriculum has been understood by the users.

Incorporates self-discipline and responsibility: Gone are the days of doing things "just because you have to". Availability of resources fishes out the pro-active candidates from the crowd.

Better Retention: With addition of humor, interaction and animation, learning experience can be made more convincing. This ensures better retention.

Lower Cost: It is more expensive to print newer editions of textbooks than updating online courses.

Better fit for businesses: Owing to global expansion, employees are not restricted to one city, state, country or even continents. Online learning is an opportunity in today's scattered virtual offices. While 11% of the companies are currently using Podcasting and 18% use mobile applications, 74% of companies currently use Learning Management Systems (LMS) and virtual classroom/webcasting/video broadcasting.

STRATEGY AND RESOURCES INVOLVED IN SAS RELATED E-LEARNING:

Planning on designing a course material depending on the target audience is the first and foremost step. While teaching a programming language like SAS, we need to keep the following details in mind.

1. **Simple and consistent data:** Data that is simple to understand ensures better grasping. It is good to keep the same data throughout the course to maintain familiarity.
2. **Practices:** Practicing code is imperative for programming to make the experience more hands-on. This encourages candidates to actually type the code than just memorize the text. SAS on Academics has made it very easy for trainers / institutions to grant access to SAS software. Trainers can upload their class contents on cloud and all students with access to a single link will have access to SAS software as well as course data.
3. **Quiz:** A quiz following chapters ensures that student is grasping the key concept. Interactive quizzes followed by virtual rewards for instant gratification keeps users motivated.
4. **Practical Approach:** Recording the screen where the actual code is being typed, run and the output is seen

is more convincing than just talking about it. Incorporating common errors and showing users how to resolve them is the practical approach.

5. Appropriate Documents/material: The closer the teaching material is to the real world, the better the course will be rated. For example, users need to see an actual CRF, if you are teaching a course about annotation of CRF. They actually need to look at a real protocol, a real Implementation Guide, a real SAP if you are teaching about writing specifications or analysis.
6. Interesting: The e-learning courses should not be boring. Instead of staring at a monotonous screen, the students should be kept involved by data flying on the screen, use of colors, characters, animations, different sounds effects and humor in moderation.
7. Where to stop: Online courses should not be too much in detail. They are meant to make the user understand the key concepts.

EXPERTISE AND CHALLENGES:

To design an online learning course, a lot of resources are required. It's a coordinated team effort with experts working on graphics, writing, content, recording, narration, quiz compilation, monetization, marketing and advertising.

Designing a course, specially a technical one, becomes challenging when the technical knowledge and the expertise required to make an e-learning course does not come together well. A person writing the narration may not be technically sound. A narrator may not be well versed with the terminology involved. It is an ideal situation where someone who has technical knowledge writes, narrates and evaluates the e-learning content.

Trainers teaching online courses should be able to project the content that can be understood in an online environment because they cannot rely on eye contact or facial cues to determine whether students are maintaining interest in a teaching session.

In online teaching modules, the narration pace should be slow, easily comprehensible and with minimal accent.

Close captioning is worth investing time into, as it makes it easy to understand difficult and new terminology. It is also possible to go through the course when the user does not have ear-phones and is studying in a library etc. Close captioning should be optional because sometimes it distracts people who understand the course while listening only.

Background music or too colorful displays should be avoided while talking about important concepts to avoid loss of focus.

Audio capture requires a software that can level the variations in the voice pitch as our voice can be different depending on our mood, time of the day, distance from the microphone and so on. On the other hand, the voice should show the variations needed and not sound very plain and monotonous.

Screen capture requires good knowledge of graphics, animation, narration along with images, Photoshop, snipping and snag-it tools to bring out a perfect display. A picture is worth a thousand words but video can be worth ten thousand words.

FEATURES OF A GOOD E-COURSE:

A well structured course is logical in design, easy to navigate and inviting to the user. You can ask yourself the following questions ...

- Is the objective of the course clear?
- Do the audio/video/pictures used support your learning objectives?
- If you are aiming at a global audience does it have appropriate closed-captioning?
- What do your reviews say? Take feedback from subject matter experts.
- How does the subject matter relate to the real world context?
- If multiple authors are contributing their inputs, is information stored with their respective details and earning reports?
- Can we issue a certificate of completion and have a database store them?
- Is the website secure?
- Is there a forum or a discussion board to keep the discussions alive?
- Is there a room in the course to add more information, if the need arises?
- Is the online course complemented by direct question-answer sessions with the help of WebEx /

GoToMeeting tools etc.

- Brand integration in the e-learning course in line with the brand image of your client?
- Are the multimedia elements supported by all browsers?
- Do you have a feedback survey at the end for users to give their input?
- Does your course give appropriate additional resources and reference links? Do these links work?
- Does your lesson give a summary of the takeaway points?
- Does your course work equally well on tablets and smart-phones? (not required, but an added advantage)
- Is your course/company linked to the social networking sites like facebook, twitter etc ?

TOOLS:

Various tools are required to make knowledge travel from an author's brain to your computer screen in the form of an e-course. Just to name a few....

- Articulate Storyline – A user friendly tool that has slide templates, trigger set up, states, animation, quiz and various styling options with customizable design and color themes.
- Go animate – A soft-ware to create interactions, cartoons, add humor, have character and props moving around and also export it in HD quality video to keep on the computer or published on you tube and other sharing sites. This also provides one-click sharing options to major social networks and online marketing platforms.
- Camtasia – A powerful tool that helps to create professional videos by capturing screen movements or importing a video from other sources.
- Webex- A web conferencing tool that allows screen-sharing, and phone conferencing for multiple users at a time anywhere in real time.
- Audacity- Audacity is an audio editor and recorder for many operating systems. It can record computer play-backs, live audio, convert tapes and records into digital recordings etc.
- Snip-it takes a snap-shot of your screen, which can be annotated, saved or shared.
- Snag-it – With a few clicks, it captures screen shots and videos and lets you customize the screen capture.
- Hardware like microphone, noise-cancelling device, webcam (If required).
- An authoring tool is required that compiles and integrates all that we have captured for the course. There are standards tools like SCORM and AICC.
- Wacom (Pen Tablet) lets you digitally paint, sketch or put ideas into words with multiple fonts and colors and digitally share them with multiple people at a time.
- All learning modules need to be put on a website with a LMS system installed on it. This also helps to track each user that takes the course.

Due to all the challenges, resources and planning involved, we do not see that many e-learning courses out there. There is a need for platforms where authors willing to share their knowledge can transform their expertise into e-learning courses that are interactive, user-friendly and traceable. (This is where my company comes into picture.) There are companies like lynda.com and elearnsas.com that gives trainer an platform to share their knowledge and monetize it.

ADVERTIZING/MARKETING:

Once the e-course is ready, we need to market it to the appropriate audience,

One way to advertize your e-learn course is to put it on the web, so that people are prompted when they search for the key-words on Google. It is a good investment to pay Google for the initial few months to stay at least on the first page of Google search. If your content is good and safe, your ranking increases over time with more people visiting your site.

Platforms like PharmaSUG, SUGI and SAS Global Forum are ideal to meet and network with SAS Gurus willing to exchange their knowledge for free (and I'm telling you that you can get paid for it). Being an online course author is an opportunity to be recognized as an expert in your field.

Online training cannot be a sole and perfect learning tool by itself. Teacher student interaction and online course material need to complement each other to yield the desired results. Occasional meetings with the instructor can be organized via tools like WebEx and GoToMeeting to incorporate face to face interaction.

A WIN-WIN SITUATION:

In a nutshell, online training has a bright future ahead. A win-win situation that enables companies to utilize resources smartly, grants better compliance to the instructors and keeps the students happy due to the flexibility it provides. Small wonder that e-learning is becoming a big hit among professional trainers, education institutes and the corporate world.

We have just knocked at the door that opens to an entire world of prospects. Future of e-learning industry is paved with exponential growth and immense opportunities. Now, more than ever, learners and companies are turning “e-learn” to achieve personal and professional growth. What does your e-learning future have in store for you?

REFERENCES

Articles: Writing for Online Learners and Readers: Mastroianni, Caterina

Writing in the Digital Age: Hunter, Dorothy

Launching your e-learning Course: Pappas, Christopher

1 Website : <http://elearningindustry.com/elearning-statistics-and-facts-for-2015>

RECOMMENDED READING

- 72 tips for using Media to Engage and Teach (May 2014)
- E-learning 101: Concepts, Trends, Applications (Jan 2014)

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