

A background image of a business meeting with several people in professional attire sitting around a table, looking at documents and laptops. The image is overlaid with a semi-transparent blue filter.

UPCOMING E-LEARNING TRENDS AND USAGE OF TIN CAN IN TRAINING IN THE PHARMACEUTICAL INDUSTRY

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CURRENT STATE OF E-LEARNING IN THE PHARMACEUTICAL INDUSTRY

Almost all the online sales rep training is currently delivered via a Learning Management System (LMS). With the advent of newer technologies, understanding modern learning patterns, and the popularity of social media and mobile devices, coupled with the trend of delivering personalized and multi-modal instructional content, learning today is happening in ways that have so far been sidelined by the more “formal” online training methods.

Given this paradigm shift, it comes as no surprise that pharmaceutical companies are looking outside their traditional LMS to help achieve their training goals. Added to this is the fact that data collected via the traditional LMS are quite rigid and do not meet the growing need for measuring training effectiveness. In fact, the very idea of what an LMS is and its utility is being questioned. According to Brandon Hall’s latest report on LMS buying and usage trends titled “LMS Trends 2014: Satisfaction and Spending,” less than half of the respondents (45.5%) scored their LMS high in terms of overall value for the price they pay. Among the

many reasons for this dissatisfaction were poor reporting features, lack of mobile access, and the inability to adapt to the everchanging needs. While the survey was conducted across a variety of industries, pharmaceutical companies grapple with similar challenges:

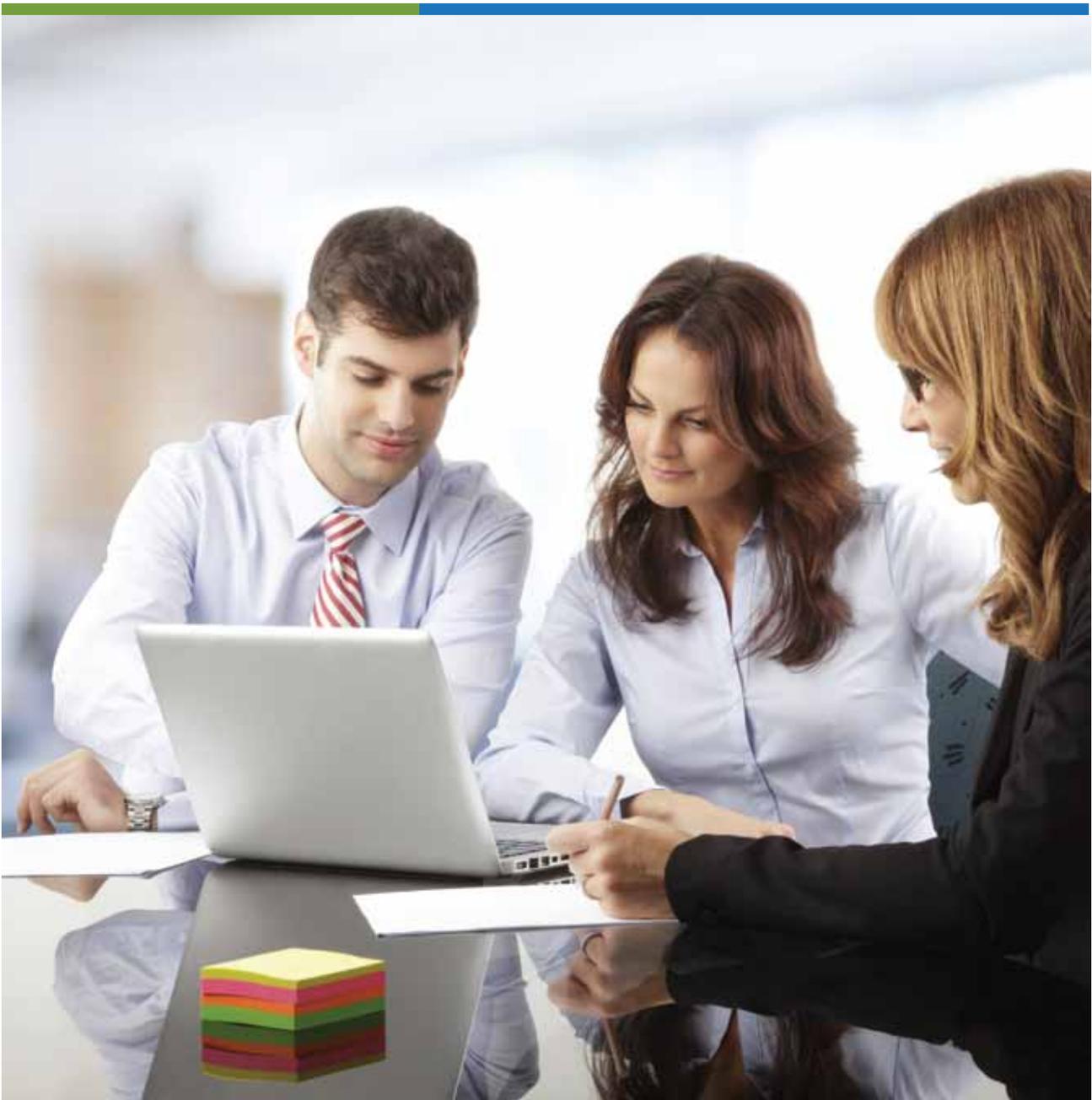
- A need for quantifiable results and ROI that justifies the high spends on an LMS.
- Training effectiveness that has not improved significantly owing to the fact that existing classroom training is being merely converted into e-learning content.
- Participants are bombarded with information and training material often crammed into a single session with the hope that some of it actually “sticks.”
- Given that the current training methodologies are more often less engaging and lack the ability to hold the interest of the participant beyond a certain period of time, participants tend to view training as something that needs to be endured and done away with rather than looking forward to attending such sessions.
- Informal learning options such as watching a YouTube video or



participating in an online forum, which happen outside the purview of the organization or are not within the established training norms are not recognized as being effective. Moreover, there are a host of newer instructional design approaches such as Gamification, Spaced Learning, Chunking, and Learning via Social Media that, while promising to change the very way in which training is

delivered, pose a challenge to pharma companies as to how exactly can they be seamlessly introduced across the organization.

- Lastly, with longer working hours, increased pressure to deliver results, and shorter attention span of Gen Y employees, small learning chunks are being preferred vis-à-vis longer e-training sessions.



WHY IS SCORM LOSING ITS SHEEN IN LIGHT OF THE NEW TRENDS IN E-LEARNING?

For most pharmaceutical companies worldwide, SCORM (Shareable Content Object Reference Model) has been the most preferred and obvious choice of standard to deliver their e-learning content. In light of the growing popularity of newer learning methodologies, especially the informal ones, a SCORM-compliant LMS no longer appears to be the most appropriate tool to support an organization's training needs. There is a need for a better alternative to track and report data. Some of the drawbacks of an LMS include the following:

- The technical requirements of implementing a SCORM-compliant program in an LMS are high. This may pose a challenge when an organization is planning on introducing new channels of learning into a program.
- The amount and kind of information that can be tracked is limited in an LMS. Any kind of training that happens outside its confines remains largely untracked owing to the availability of a limited set of reports and even more limited customization capabilities.

- While there are standards that govern how SCORM-based content sends data into an LMS, there are no similar guidelines on how the LMS should use and report these data. On the other hand, a Learning Record Store (LRS), which in Tin Can parlance is a repository for learning records, can share data with analytical tools, reporting tools, and even other LRSs. In short, an LMS is not required to make its SCORM data accessible or be interoperable with other LMS's as most of them are designed as "closed" systems, while Tin Can deals with both the flow of data into and the retrieval of data out of the LRS. This limitation of an LMS further hinders the creation of customized reports.



TIN CAN — BUILDING A TREASURE CHEST OF LEARNING EXPERIENCES

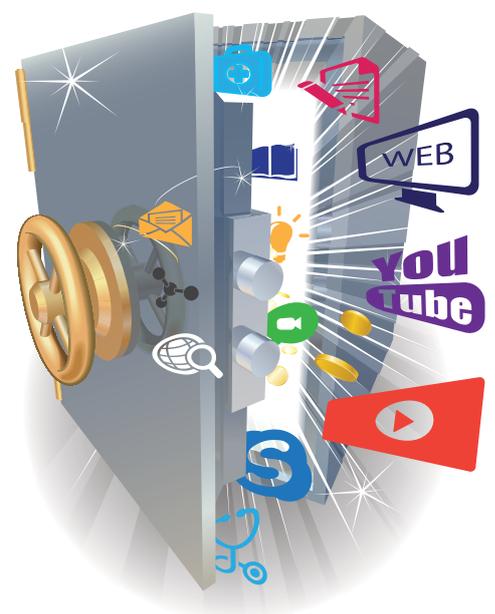


The newest buzzword that is growing louder in e-learning circles these days is the Experience API, which is popularly known as Tin Can. The biggest advantage of Tin Can is that it can help companies track learning data that are collected from the more “informal” learning methods (for instance, reading a book or an article on the Web, watching a YouTube video, etc.)

With Tin Can, the entire Web becomes a massive source of learning content. As the content is readily available, it can be tracked immediately with no lag whatsoever when compared with an LMS. There is no longer a dependency on the LMS to deliver learning content to the employees of an organization. A bookmarklet that is similar to a standard internet browser bookmark in functionality and also the fact that it is built into the web browser would enable any experience on the web to be recorded in an LRS. For instance, sales reps can use the bookmarklet to denote that they have viewed the payment workflow video related to a diagnostic device. These data get instantly recorded within a LRS, which is a repository to store all data generated via the

Tin Can API. Similarly, all such learning activities taken up by employees of a pharmaceutical organization, including attending a medical conference, reading an online blog post about the latest clinical analysis data, and reading a physical book (the learning experience can be captured in the LRS by scanning the barcode on the book), etc. can be tracked within the LRS. Tin Can also mandates that the learning data thus collected have to be made available to other LRSs. This comes as a boon to training departments within organizations, which can now use the collected data to generate reports of any kind, not only from within a single LRS but also from multiple ones.

Tin Can relies heavily on the concept of “activity streams,” each one of them following a simple





English statement format—Actor, Verb and Object (“I Did This”). These three objects form the core of each of the Tin Can statements that are fed into the LRS. An example of a Tin Can statement would be – “Michael Whittaker completed ‘Competitive Landscape in the External Diagnostic Space’ e-learning module.” The specification provides a standard vocabulary of terms that can be used; however the specification also allows organizations to define their own semantics for the data. Additionally, the specification provides flexibility in what information is captured beyond the core elements. Given the flexibility of these statements, organizations are now able to track learning activities of almost any nature (both online and offline). As activity streams get collected in the LRS, an organization can identify the

learning activities that lead to the most effective outcomes and phase out the remaining. Linking training to on-the-job performance, which has been the holy grail of the pharma training departments, comes closer to practical reality with the adoption of Tin Can. Further, learning data are no longer limited to only what is generated from within an LMS. While Tin Can frees up the need to be bound to an LMS, a traditional SCORM-compliant LMS does score a few brownie points in terms of managing an organization’s mandatory training, for example, compliance training. To get the best of both worlds, the LRS can reside within the LMS. Combining the two provides the benefits of the LMS’s approach to discovering and enrolling in content with the LRS’s ability to track and integrate a wide variety of learning models and content.



IN THE FACE OF THE NUMEROUS CHALLENGES THAT PHARMACEUTICAL COMPANIES ARE CURRENTLY WRESTLING WITH, THERE ARE A NUMBER OF EMERGING TRENDS IN THE E-LEARNING SPACE THAT AIM TO INCREASE BOTH THE LEARNING EFFECTIVENESS AND KEEP LEARNERS ENGAGED.

UPCOMING TRENDS IN E-LEARNING AND HOW TIN CAN SUPPORTS THEM

CHUNKING OR MICRO-LEARNING AND SPACED LEARNING

Considering learners often tend to perceive extended e-learning sessions as an ordeal, chunking or micro-learning breaks such sessions into short units of information, each spanning a few minutes that could be in the form of games, videos, mini e-modules, etc. Also, recent researches on how the brain processes long-term memory have shown that there is a marked improvement in information recall when a learner is exposed to the learning content at regular intervals spaced over time. When bundled together, the delivery of short quizzes, games, assessments, and mini e-modules at pre-defined intervals has been shown to be very effective in memory recall. With the advent of smartphones, this information can easily be delivered and accessed at the learner's convenience anytime, anywhere. Once the learner has finished the training unit on their mobile device, they could simply click on a bookmarklet and in turn the data gets stored in the Tin Can LRS. In case an Internet connection is

unavailable, these statements can be stored locally on the device and then pushed into the LRS when the device comes online.

LEARNING VIA SOCIAL MEDIA

Organizations are coming to terms with the fact that in addition to the traditional learning methods, today a lot of learning tends to happen from one's peers. One way to harness the power of social media is to build online learning communities within the training platform that encourages discussions and peer-to-peer learning within a closed community. Sharing topic-specific content and an "ask-anexpert" section on these communities, along with a leaderboard of the top "givers," promise to encourage a culture of continual learning within an organization. Adding in a federated search feature helps an employee access learning assets spread across the organization. Based on the number of "likes" and comments for a particular course, an organization can determine the most popular courses and phase out the lower ranking ones. Such comments can also be a powerful medium to assess feedback from the employees. Further, these "likes"

and comments can be converted into Tin Can statements, fed into an LRS for recording the employee's learning experiences, and then the data collected can be used for analysis and reporting. Tin Can is also flexible enough to use meta tags from a variety of sources where learning assets are stored (SharePoint, Saba, Kaltura, etc.) and funnel them to the user through a single, easy-to-navigate interface.

GAMIFICATION

Online games weave in the elements of challenges, peer-to-peer comparisons, and achieving goals into the concept of learning. Using games as an effective learning methodology has been gaining traction over the years. Gamification of training content helps make the whole experience fun and keeps the participant engaged. Studies have shown that being able to compare one against his/her peers and to have his/her performance tracked on a "leaderboard" is a powerful motivator for learning. There is a need for developing games that not only teach new concepts but are engaging enough to keep the learner coming back for more. A Tin Can-compliant learning system can have custom built features that help do gap-analysis, generate leaderboards based on the data

collected, and aid in determining the skills that need improvement vis-à-vis just a total score or pass/fail status that is typically in a SCORM based model.



WHY TIN CAN?

Tin Can is helpful in tracking informal learning, real-world performance, simulations, games, etc. With years of experience in developing learning content for the top pharmaceutical companies in the world and with its finger on the pulse of the latest e-learning trends, Indegene has been keeping tabs on the latest developments in the Tin Can space and feels that it is the possible answer to addressing both the limitations of SCORM and helping a pharmaceutical company adopt the latest e-learning trends. Indegene is clearly excited about the many possibilities that Tin Can offers, be it in the space of mobile learning, spaced learning, gamification, or micro-learning. This new technology effectively addresses the need for personalization of learning by delivering content on an individual's preferred learning device (mobile, tablet, or PC) and in a way that would keep them engaged the most (games, short quizzes, videos, mini e-modules, etc.). Pharmaceutical companies are yet to recognize and institutionalize the informal learning methods and adapt their training initiatives to the newer learning technologies and trends with the help of Tin Can. It is clearly a win-win scenario for both an organization and its employees.

