LEARNING TECHNOLOGY
TRENDS & OUTLOOK REPORT – 2018

Gallagher

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INTRODUCTION

Learning and development technology has come a long way…and quickly. It wasn't that many years ago that the white board was considered a high-tech learning tool. Today's corporate training market represents over $200 billion worldwide, according to proprietary research from Bersin by Deloitte and, based on the work of the HR and Benefit Technology Practice of Gallagher Benefit Services, it will continue to expand, particularly considering new technologies such as artificial intelligence, virtual reality and others.

Employers increasingly see the value of learning and development. Gallagher's 2018 Benefits Strategy and Benchmarking Survey found that 63 percent of employers include employee development training as part of their wellbeing program, and that more than half (52 percent) believe they do not spend enough money on workforce training and development.

The term "learning" is often used to refer to the platform that supports employee training. But learning and development technology extends well beyond the platform. It's about giving employees the information they need to do their jobs now, and providing opportunities to grow in knowledge, experience and interaction to be prepared to do future jobs. Learning can be formally planned and assigned, self-directed or organic through daily experiences and people interactions. The most effective learning strategies draw on multiple approaches to match desired outcomes to the training format most conducive to getting results while making every effort to accommodate individual learning styles.

The learning and development function of a company is typically responsible for the acquisition, development, design, delivery and recordkeeping of training within the company and, increasingly, relies on some type of technology learning platform.

Some of the most exciting innovations in employee learning and development revolve around providing employees with training in unique, personalized ways that improve understanding and retention. However, most corporate employers initially turn to learning technology in response to compliance — either proactively (ticking off the box that says every employee has been trained on various subject matter as required by state laws, e.g., sexual harassment, or on safety, ethics or other industry-specific topics), or reactively (in response to a penalty or fine for non-compliance).

Fortunately, most employers quickly see the potential of learning platforms beyond compliance and embrace the opportunities they provide to support recruitment, retention, upskilling, engagement and more. The growing interest from employers in learning and development stems from today's need for specialized skills at a time when so many in the workforce are retiring, leaving skills gaps in the workforce. Coinciding with this are advances in learning technology, offering employers more ways to respond to the changing demands of the workforce. These new technologies — among them artificial intelligence and machine learning — support the evolutions in this sector, addressed in detail within this report.

As with all HR technology, employers should understand their requirements before purchasing a learning platform. Otherwise the product drives the strategy, rather than the strategy driving purchase decisions. The information in this report focuses on learning technology as it pertains to learning platforms and content for use on those platforms. This report includes current trends, an outlook for this market space and associated recommendations for employers and other key stakeholders.

This information is designed to help employers and their advisors understand the learning and development market and the factors they need to consider before purchasing supporting technology. Keep in mind, however, that employers do not need to be experts in learning to put their toe into the learning waters.

As with most industry technology, there are varying levels of sophistication with learning solutions; some being easier to implement than others. Use this report to gain a big picture understanding of the learning technology space to help determine need, interest and the range of available solutions. Consider engaging a consultant who specializes in learning technologies to assist with more detailed needs identification, product fit and subsequent purchases and implementation.

LEARNING & DEVELOPMENT DEFINED

For those not familiar with learning and development technology, the following definitions will be helpful to understand the trends, recommendations and outlook included within this report.

PLATFORM TYPES

1. **Learning Management System (LMS)**
   Supports the learning experience through the offering and tracking of online and classroom learning, reporting and compliance (but may not include content creation). Many other features are available to support various learning methodologies, including videos and documents, curricula (bundling multiple learning opportunities to create a course of study) and exams and "knowledge checks" through a test engine.

2. **Learning Content Management System (LCMS)**
   Supports the creation, launching and tracking of online (not live classroom) content, but does not offer the full functionality of an LMS, e.g., social learning or skill development. They may, however, integrate with a full functioning LMS.

INSTRUCTIONAL LEARNING CATEGORIES

1. **Synchronous**
   Learning that allows for real-time interaction with an instructor and other students. This type of learning can occur online through chat and videoconferencing. Students complete the course together in a traditional classroom or virtual classroom.

2. **Asynchronous e-learning**
   Learning that can occur while the student is offline, using the internet, message boards and email to deliver coursework. Students can complete the course at their own pace.

ONLINE CONTENT DEVELOPMENT STANDARDS

1. **Shareable Content Object Reference Model (SCORM)**
   Content resides on the platform, and confirms the individual is interacting with the content, e.g., tracking responses to questions, length of time to review a page and bookmarking where a student left off when taking a break or ending a session. SCORM-compliant content represents roughly 80 percent of online, self-paced courses.

2. **Aviation Industry Computer-based Training Committee (AICC)**
   AICC content resides on the content provider's network and communicates learner interactions and statuses to the employer's LMS. The content provider maintains and updates the content, and the employer's learning technology systematically receives the updates.

The relevance to employers of the standard used for content development is related to the capability to house data on the platform. Employers with a high level of content requirements and who work with multiple third-party content providers typically rely on AICC-developed content.

OTHER LEARNING TERMS

- **Massive Open Online Courseware (MOOC)**
  An online course aimed at unlimited participation and open access via the internet. The emergence of MOOCs is associated with leading universities, including Harvard, Stanford, MIT, Duke, University of Michigan, Johns Hopkins and others, which make course content available through platforms such as Coursera, Udacity, and edX.

- **Virtual Instructor-led Training (vILT)**
  Refers to training in a web-based environment where a live instructor and other students are present — all of whom may interact with one another. The goal of vILT is to offer a synchronous learning environment that as closely as possible mirrors the traditional classroom experience. This differs from a webinar where there is little or no opportunity to interact with the instructor.

- **Experience API (xAPI)**
  A data standard for learning technology that supports data collection for a wide range of learning activities (online and offline) for an individual or group. "API" (application programming interface) refers to the capability to capture and share data in a consistent format from multiple technologies. xAPI is typically implemented with a Learning Record Store (LRS), a database specially designed to store records generated by xAPI, thereby allowing for reporting, analysis, etc. The LRS can be inside an LMS or function as a stand-alone tool.

TRENDS

Traditional training approaches which treat learning as a one-size-fits-all activity, have been found to be ineffective. The overall trend in learning and development is toward learning that is personalized to the individual learner in terms of:

1. The delivery medium for learning (video, online, user guides, etc.)

2. Recommended training to make the individual most successful in the job. This can be based on the individual's profile attributes (self-identified interests or role-based competencies) and recommendation algorithms written to consider the training of others in the same or similar position or function.

Artificial intelligence and machine learning play a big role in personalized learning. Following are the key trends the HRBT Practice sees in the market.

The talent gap is driving learning and development

It is a good time to be in the job market. According to the Hays US 2018 Salary Guide, 73 percent of employers say there is a skill shortage for their industry and 92 percent say this shortage is affecting business. Ambitious hiring expectations for 2019 will worsen the shortage. Employers increasingly look inside for existing talent that can be re-trained/upskilled to take on the jobs of the future — or current open positions. Learning and development are key to not only filling those open positions (the Hays survey also found that one of the main reasons for the shortage is a lack of available training and development), but it can also play a role in an effective recruitment and retention strategy. A 2016 study conducted by Fidelity Investments found that while salary and bonuses are key decision drivers for those considering a career change, other factors, including "career development," come into play. Millennials report they are willing to take, on average, a $7,600 pay cut for "improved quality of work life."

Employers and providers make good use of "extended enterprise" learning (also referred to as "subscription-based" training)

Increasingly, employers use their learning platform to provide training to individuals outside the employee base, typically by purchasing a set number of licenses or courses from the provider and then directing the learner to the provider's site to access a course. Non-employee learners may include contractors, suppliers, interns, temp workers and consumers. For example, a company might offer training on its product line to prospective partners to reduce time to reach competency and increase efficiency. Many hospitals and health provider offices use extended enterprise learning to educate and teach patients and their families about their illness and how to provide care and support. Extended enterprise learning can also increase revenue more directly, e.g., providing certification training to channel partners to boost sales. Currently, this model is used most often with compliance training in highly-regulated industries such as healthcare and higher education and requires a large pool of potential users to be profitable for the provider.

Virtual instructor-led training (vILT) is gaining new ground

vILT first appeared in the learning technology ecosystem during the mid-2000's recession as a way to cut travel cost without eliminating training opportunities. vILT enables employers to bring everyone into the same (virtual) room where employees can interact with each other and the instructor (unlike a webinar). With improved technology and tools, there is an increased demand for vILT functionality and learning technology platforms are responding.

Artificial intelligence (AI) and machine learning are taking learning to the next level

AI and machine learning are now standard in most industry leading learning platforms such as Cornerstone, Skillsoft Percipio and SumTotal Learn. Providers creating new learning tools incorporate AI and machine learning to present relevant training via a customized learner experience in real time. (Training that matches the user's interests or profile, what's trending for the position, etc. based on the system's aggregated data across the larger universe of learners, versus manual coding based on the population of a single company). As AI is in relative infancy, the applications for learning are limited only by the imagination. This sector can expect to see greater and more sophisticated applications. AI for learning is not without risk, however. Learning is a very individual experience; therefore, AI should not replace the role of management talking with individuals to make personal assessments of potential that could be missed by AI, and to avoid a cookie cutter approach for learning. For organizations with limited budgets, the good news is that there has been no significant increase in price in learning platforms as a direct result of the development of AI. This has helped to put AI and machine learning in reach for small-market employers which typically must wait for new technology to trickle down to an affordable level. In fact, small-market employers are a key target market for AI as it allows them to focus limited resources on soft skills and personalized strategies.

Micro-learning is gaining ground

More content providers are turning to micro-learning for developing and delivering content. Content providers develop two- to four-minute quick videos or online avatar segments that, together, comprise a training course. Well-designed micro-learning fits easily into most employees' days, whereas carving out even a one- or two-hour time block for training can be hard to do. Further, bite-size information resonates better with younger generations who grew up in the age of the internet and were exposed early on to a constant flow of information and the capability to get just-in-time and just enough information to complete a task. Easily administered via smartphones and tablets, micro-learning fits today's technologies and accommodates fast-changing information. Employers considering micro-learning as part of a learning strategy should engage their information technology team to ensure that internal protocols will support this delivery method — both within and outside of the company's firewalls.

Micro-learning is not a solution for all cases, however. If compliance is the driving strategy or there is high risk associated with the content of the training, e.g., sexual harassment (think liability), anti-spam legislation (financial penalties), micro-learning is likely not the best option. Further, there is insufficient research to discount the possibility of fragmented learning or the inability to synthesize and construct appropriate mental models from micro-learning, particularly for highly complex tasks. So, while the jury is still out for some on the effectiveness of micro-learning, the immediate results, low-cost options and ease of access make this a popular learning method that is likely to continue to gain traction in the marketplace.

More industry-specific content providers emerging and crossing over to offer more LMS functionality

There is a growing number of content service providers emerging to offer industry-specific LMS services. These providers develop specialized content for industries such as healthcare, manufacturing and engineering and, among other functions, support continuing education (CE) tracking. They also provide an attractive solution to small-market employers (up to 250 employees) by providing content and a learning platform from a single source, thereby reducing the associated cost. This is a market differentiator for compliance training in the small market. Larger market clients typically require more advanced technology.

Merger and acquisition activity ongoing

There has been steady M&A activity in this sector for more than a decade, typically with larger companies acquiring small providers. There continues to be a trend of talent management providers acquiring learning technology platforms to achieve a more comprehensive approach to developing human capital resources from hire to retire. It is more common for LMS providers to merge/acquire content providers, although there are exceptions. (In 2014, Skillsoft, a large training content provider, acquired SumTotal Systems, a well-known talent management platform that includes an LMS.) Within this framework, three themes emerge:

1. Larger acquiring LMS companies opt to maintain the smaller acquired company's brand and focus to expand their market reach (versus simply absorbing their book of business and moving them onto their platform). One example is Saba Software's 2017 acquisition of Halogen Software.

2. Integrated HCM providers acquire learning technology companies to fill a missing component of their talent management suite of services as is the case when SAP obtained Litmos through its 2018 acquisition of CallidusCloud.

3. Content and learning platform providers realize that partnering is integral to their industry success. They form partnerships and alliances to expand functionality and content and to fill niche needs. Also, some LMS providers partner with content providers to re-sell their content, directly through a marketplace (as with UltiPro Learning which resells BizLibrary and Brainer content) or allowing their clients to custom curate their own course catalog (using content from multiple providers' catalogs). The benefits for customers include better pricing (typically buying licenses in bulk) and the ease of working with a single provider to access content from multiple content providers.

Learning finally arrives at the integration table

Third-party integration capability was an early differentiator in many other HR technology sectors but learning and development was slow to take up that enhancement. Things have changed, and learning integration through APIs, file uploads, etc., is now equally competitive as seen elsewhere. Learning platforms integrate with core HRIS systems and other employee data tracking systems to support learning activities. For example, many healthcare and manufacturing companies integrate their LMS and badging software to control access to the LMS based on the employee's successful completion of required training. Integration represents an opportunity for massive market growth with employers purchasing more learning-related services from third-party providers through their LMS platform. For example, several providers offer technology that will go out to an employer's communication intranet to post an individual's transcript as well as the ability to click-through to a course, bringing the training to the learner in real time. The increased employer interest in a smooth and uninterrupted integration with other platforms, e.g., performance management, has resulted in new service offerings. Learning and talent management provider Cornerstone OnDemand's Partner Marketplace (launched in 2015) was an early entry to this space, enabling greater integration with other HR technology providers. In 2016, SAP Successfactors announced its App Center, which offers a range of HR-related solutions built by both partners and groups within SAP. Supported by integration, learning and performance management are melding into a single discipline.

Organizations training non-exempt employees choose between lesser of two evils

Employers with large numbers of non-exempt employees must choose between higher payroll costs to cover mandated overtime pay for training or the loss in productivity if training occurs during the regular work hours. To eliminate the potential for triggering overtime pay, some companies take advantage of the security roles and permissions within a learning platform to block employees from logging in when they are off-shift.

Increased collaboration and social learning in leading industry learning platforms and the development of supporting policies

In general, top tier learning platforms include collaborative and social learning experiences as standard functionality, e.g., the capability to identify experts for a piece of knowledge and how to connect with that expert. Other providers are working towards this — either developing the capability directly or through partnerships. Tools such as Slack and Workplace by Facebook are taking steps to increase collaboration. While this type of learning support is gaining "must have" status, not all organizations embrace it. There are concerns about misuse (Why is that employee reaching out?) and use of time (Is the time to collaborate returning on the investment?). While most employers support this type of organic, learner-driven collaboration, some struggle to measure and prove the return on investment and to develop employee-centric policies around its use.

Gamification is being used to engage and motivate learners

The concept of gamification in learning, which several years ago seemed like just another flavor of the month, has made significant strides in proving that learners are intrinsically motivated when able to visually see their own progress as well as measure their progress against others completing similar learning tasks. Learning platforms that offer some type of gamification options generally allow for the association of points and badges to individual training courses, tests, and training curricula. The use of this technology has proven to be most successful in encouraging learners to complete new hire, compliance and mandatory job skill training. Use of gamification in the Virtual Instructor-led Training (vILT) environment has shown to improve voluntary attendance at training sessions and increased activity on internal discussion boards. Although learning management systems have been widely used for many years, there are still many workers who are not familiar or comfortable with online learning. Gamification technology helps with engagement and adoption of the platform.

Growing need for content curation

With so much training content available, it is becoming increasingly difficult to focus learners on content that is most relevant to their jobs and to their individual development goals. Content curation has become a key role of learning and development professionals, making it easier for learners to find and consume just-in-time training that meets their needs. In the same way that more food is wasted than consumed at most all-you-can-eat establishments, so is the case when offering a large smorgasbord of training content. Similarly, curating a large amount of content for multiple learning modes can seem a daunting challenge for learning and development professionals. However, there is often technology built into learning management systems to help with content curation, including technology supported by artificial intelligence (recommending learning based on job titles, functional roles, business groups, etc.) and social collaboration (whereby the learner becomes a content curator by rating and recommending content and sharing internal and external content with other learners with like interests — much the way one might share a favorite playlist). Saba LMS Cloud and Cornerstone both offer this learner-driven feature.

OUTLOOK

The user experience will continue to drive innovation

As with technology in general, personalizing the user experience is where the next wave of enhancements will come from. With learning and development, however, the added complexity of differing learning styles present challenges. Successful learning platforms will offer learning experiences that go beyond basic personalization and respond to the multiple ways people learn. In short, not only presenting customized content, but customized content in a way that is most conducive to learning for that individual.

A more standard definition of "learning" will emerge. There's a lot of talk by employers about learning and development in recruitment and retention activities but, for some, it's more a buzz word than a commitment to current and future employees. What baby boomer employees expect from learning and development may be drastically different than what a Generation Y or Z employee expects, including the availability and recognition for more informal learning.

Predictive analytics will advance to help benchmark performance to learning. Predictive analytics can correlate benchmarks of performance to the learning required to "clone" the next successful employee. For example, an employer uses performance data to assess how well an employee grew professionally over a defined period, and then uses that same data as a standard for new hires. Employees interested in advancement will embrace this model in an environment where learning is encouraged (rather than forced) based on suggested activities to develop the skill sets and competences associated with someone very successful in the same position. More effort is needed to develop an aggregated model. A comparison of one position to another one (or two) positions creates the potential for an unreasonable standard (an extraordinary employee who hits the ball out of the park every time) or a standard based on undesirable workplace behavior, e.g., an individual who overachieves, but as the result of refusing to cooperate with other employees. As many employees go through training for training's sake, they are no longer engaged and see no value. Implemented correctly, predictive analytics can identify training opportunities that are well aligned with the job and job performance, which will elicit a positive response from the employee.

Experience API (xAPI) will evolve to manage more types of learning. Platforms with xAPI allow for learning to be tracked from external platforms, systems and websites, and stored via a Learning Record Store (LRS). Historically there was no way to capture and track learning that didn't meet standard asynchronous/e-learning protocols such as SCORM and AICC content, as well as informal learning. For example, an employee independently seeks out and reads useful information, thereby gaining valuable knowledge applicable to their job. This is not documented as part of the individual's training record or transcript. With the technology of xAPI via a Learning Record Store, more learning technology providers are developing this functionality as standard within their platforms. As employers respond to employee interests, look for more learning technology platforms to include xAPI and to become more sophisticated in their capability to accommodate and manage informal learning experiences.

Remote workers will continue to drive vILT as a delivery method. As the workforce becomes more global and the focus on flexible work arrangements increases, virtual instructor-led training (vILT) will become increasingly popular as a viable solution for delivering synchronous learning to employees. Also driving vILT are reductions in training budgets and short turnaround times for delivering timely training to employees. Companies which seek to deliver virtual training that more closely resembles the classroom experience will benefit greatly from a platform with vILT functionality that provides a marketplace integration with webinar providers like GoToMeeting, Webex and AdobeConnect.

GDPR may be a barrier for artificial intelligence. The most effective AI is based on real, personal data which can't completely be made anonymous. It's too soon to know if and to what degree the EU's GDPR and GDPR-like privacy laws will have on learning platforms. Further, whether more states will follow California's lead with the passage of the California Consumer Privacy Act of 2018 (CCPA), changing the landscape of privacy laws and compliance for many years to come. The new law, set to go in into effect on January 1, 2020, gives Californians more control over the information businesses collect on them, and imposes new data privacy requirements and prohibitions on those businesses. Non-compliance and violations of the CCPA will also expose businesses to costly penalties and the risk of private lawsuits. Service providers will struggle to ensure compliance with all these new laws, particularly in the absence of case law to bring clarity to some areas where (in the instance of GDPR), there are conflicting laws. This will remain an important issue for the foreseeable future.

Augmented and virtual reality will have a growing presence in learning and development. For select industries seeking highly specific outcomes, augmented (and to a lesser degree, virtual) reality will be among the near-future big evolutions. Augmented reality is already in use in such industries as manufacturing and healthcare where exact processes need to be learned. SHRM's HR Magazine reported in 2017 that investments in learning programs and augmented reality at Boeing cut assembly time of wire harnesses by 25 percent and error rates to nearly zero. As the technology becomes more affordable, so too will usage and the number and type of learning applications.

RECOMMENDATIONS

FOR EMPLOYERS

Position yourself to be an employer of choice

Access to learning and development is a key element of recruitment and retention, particularly among younger generations which are critical to the long-term success of a company. Assess, develop and implement effective learning programs that enable leaders to grow (increasing organizational impact) while simultaneously helping employees improve their skills and advance their careers. Doing so will yield more engaged and loyal employees.

Define "learning" for your company

Learning and development can mean a lot of different things, e.g., do you plan for learning to support and recognize collaboration, social learning, compliance, skill development, professional and personal development? Understanding the broad parameters and associated possibilities of learning are critical to identifying a best-fit platform. And while a best-fit platform may not support every need, defining what learning means to you and identifying and prioritizing your requirements up front (see next recommendation) will guide you as you consider a platform's capability to work smoothly with your core HR platform and third-party tools, e.g., performance management, onboarding and controlled access systems.

Develop a sound strategy based on what you need now and in the future and let strategy drive purchasing

To purchase the right technology, employers need to start by answering the basic question, "What do I want to accomplish?" Is it compliance, professional development, both? Then think bigger.

- Consider how your industry may be changing and how you need to equip your employees with the skills they need for the future.

- Define your unique population, e.g., global workforce, technicians, soft-skilled professionals, part-timers, etc., so you have a clear picture of whom you need to train (now and in the future).

Thoughtful responses to these points will help develop a strategy to guide purchasing decisions. Consult, as needed, with a professional to help you understand the range of market options (integrated third-party products and using curated content through machine learning and artificial intelligence) and related decisions, e.g., where content sits. Look for platforms that support API and integration for an improved user experience and more robust employee offering. Don't readily adopt a platform that worked great at your last job; every organization is unique.

Align learning with corporate strategy

Training departments within corporate HR are shrinking (it's hard to prove the ROI). While this should provide a ripe opportunity to introduce learning technology, some companies move learning and development under an "employee effectiveness" umbrella. In doing so, the focus tends to be around creating an employee "feel good system" versus achieving the company's business objectives. HR managers need to work to align learning and development as part of the company's go-forward strategy with the development of current employees — insuring they have the skills needed to meet the demands of the company, today and tomorrow.

Consider performance a part of the learning strategy

What do you expect of your employees from training: a change in behavior, new technical skills, career growth? Set employee expectations up front on how you want them to use the learning platform (based on your strategy). In doing so, the employee is far more likely to engage, and the result will be better. Address the role learning plays in performance reviews. Learning has a place for proactive discussions (here are ways to help you achieve goals for the next review) and reactive discussions (here is training to help you get where you need to be to match your peers).

Inquire about content providers when selecting an LMS

Many employers begin their foray into learning by asking for a learning management system (LMS), which allows them to check the box on compliance and tracking but fail to think about where the content will come from. As LMS providers are typically not in the content business, it's critical to ask the source of the content when considering an LMS.

Avoid a 100 percent online learning environment

Too much of good thing can be bad. A frequently cited example is a national big box store's early 2000s experiment with PowerPoint-based online learning as the sole method of training, which was largely deemed unsuccessful. The lesson holds true today. As part of a training strategy, identify what employees need to do as a result of the training and provide real-world opportunities to demonstrate competency through practice, interaction with skilled employees, Q&A, etc.

Ask if a service provider has a data privacy strategy

While the area of privacy laws and its impact on learning technology is not well-defined (particularly considering rapid advancements in artificial intelligence and machine learning), providers should, at the very least, have begun devising a strategy to address compliance issues. The strategy should consider state-specific privacy laws as well as the EU's GDPR privacy laws, especially if doing business internationally. (Note that the GDPR's definition of doing business internationally is quite broad. Consult legal counsel to determine GDPR's applicability to your business).

Don't assume gamification appeals only to younger generations

The increased adoption of gamification technology in organizations across different industries and diverse workforces has debunked the idea that only younger generations will be motivated by accumulating points and badges, and tracking level progression. Making gamification a part of your learning strategy and using this technology within a service providers platform, if offered, is generally an easy undertaking that typically involves the administrator(s) determining point values for training content, assigning the point values and associated badges and turning on permissions for learners to accumulate points and view the leaderboard.

Engage IT support team at an early stage when considering learning technologies

While integration of technology into existing systems continues to improve, "seamless" is more of a marketing pitch than a reality. Enroll the expertise of your internal IT support team (or external consultants, as needed) to consider internal dependencies that may affect the ease of access or functionality of integrated learning tools. Look at this from the perspective of your current and long-term strategy to ensure your network will support more advanced technology (HTML 5) and user access (mobile) at the point to want to take learning to the next level.

FOR SERVICE PROVIDERS

Provide a clean, easy-to-navigate user interface personalized to the user

This is the new norm and best encourages learners to interact with the technology. A learning platform that delivers training that is personalized to their position, interests and prior experiences — and presents the training in the learner's preferred learning format — increases learner interaction with the platform.

Build tools for multiple devices

Users (and their employers) increasingly expect mobile access for all HR technologies. Consider how the technology will work across multiple devices and customize accordingly. While a platform may technically be accessible via a smart phone, without a dynamic rendering to know which type of device is being used to access the platform, the user experience may be more challenging and potentially negative.

Maintain your competitive position with integration and analysis

Integration capabilities across technology platforms and data analysis (for business intelligence) are equally important. Make it easier for HR to extract data on employees by providing a central reporting repository that helps tell the story of the current and future state of employee skills, performance and organizational needs.

Provide more and better use cases for collaboration/social learning, including engagement and ROI

Employees want this type of learning support and employers want to be responsive to employees but need help in justifying the cost to the C-suite and worry about misuse of time and systems. Sample best-practice policies will be welcomed by employers.

Apply sound instructional design practices to micro-learning

The ease and low cost of micro-learning can create a temptation to move too quickly to get the information out. The identified weaknesses of micro-learning (insufficient content integration, typically doesn't support long-term goals, fails to capitalize on pre-existing knowledge) can be minimized with sound instructional design practices and thoughtful decision making on when to use micro-learning.

Pre-assessment of learning preferences

Today's sophisticated learning platforms assess individual learning preferences based on user activity, e.g., the employee is sent both a video link to their mobile phone and an email with an attachment. The action the employee chooses dictates future delivery of learning opportunities. Providers seeking cutting-edge status should develop technology to assess the employee's preference up front, allowing learning systems to customize to the learner's preferences more proactively. This could be as simple as asking the employees how they like to learn.

If seeking investment capital, avoid business models that focus on number of users, versus revenue

The volume of investment dollars in U.S. education technology companies is down from its 2015 peak of $1.45 billion according to EdSurge, although there remains a strong, albeit smaller, investment market that is on an upward growth trend ($1.2 billion in 2017 after dropping to $1 billion in 2016) with a declining number of deals. With fewer investors in the market, they will want real revenue and know that a high number of users does not necessarily translate to dollars.

FOR BENEFIT ADVISORS

Become knowledgeable on the basics of learning and development

If you're not yet getting questions from your clients about learning, you will soon. This report is a good start. Familiarize yourself with the language around learning so you can have an informed discussion with your clients about needs and opportunities. Understand that recommendation actions associated with current trends may not be easily or affordably implemented for some clients. Look for opportunities to help clients put their toe in the water (see last recommendation in this section on technology for small-market employers). If learning technology would benefit your clients but there is no executive buy-in for a big learning initiative, encourage them to take a small, first step and build from there, based on progress against learning goals.

Match service providers to employer clients based on employer strategy

Selecting the best technology for an organization, regardless of size, starts with understanding the organization's learning strategy and specific requirements. Engage HR technology consultants to assist in helping your client develop strategy, define needs and identify a best-fit provider.

Recognize that not all learning technology is created equal

There are content-only providers, learning content systems, and comprehensive learning management systems. Your clients may refer to all of this as a learning system, but failure to instruct them on the differences risks a poor match and an unhappy (former) client.

Understand options for small-market and small-budget employers

Enterprise services, e.g., LinkedIn's learning license, offers training resources that can supplement company-specific live training. While more sophisticated learning technology is becoming affordable for more groups, offering your client an inexpensive way to take the first step into learning can pay off down the road when they are ready for a more customized solution. Be mindful that some small-market solutions have limitations and are not as broad as those targeting larger markets. For example, a provider may say they can support video but supports only one format.

FOR INVESTORS

Understand what constitutes true artificial intelligence

Companies that encompass machine learning/artificial intelligence and virtual/augmented reality are often in search of investors. Take the time to educate yourself on what's real AI versus AI hype. There is currently a lot of the latter out there and as true AI becomes more commonplace those products that got into the market based on hype will soon disappear or be forced to re-design with better technology.

Look for companies that have established content partnerships

As employers often fail to consider where content will come from when purchasing a learning management system, service providers that have a robust platform with established content partnerships to deliver a total solution are best positioned to gain market share. Also consider ease of integration. App marketplaces typically deliver the best user experience, especially for those who look for simple, easy-to-connect technology.

Consider high-profile failures

According to EdSurge, 2015 was the peak of funding totals for the education technology sector with nearly $1.5 billion. Not all those deals panned out, but among the failures may be some gems that with a fresh injection of investment funds can be polished up; or which, when combined through a partnership with another solution, may offer new value.

ABOUT GALLAGHER'S HR & BENEFITS TECHNOLOGY CONSULTING PRACTICE

Gallagher's HR & Benefits Technology Consulting Practice provides outsourcing intelligence and associated consulting to stakeholders in the benefits and HR technology and outsourcing industry. Gallagher consultants research hundreds of technology market service providers covering a wide array of industry verticals, including benefits, private exchanges, Patient Protection and Affordable Care Act compliance, human capital management, COBRA, healthcare spending accounts and leave management. The team's in-depth understanding of the service provider market and vast experience sourcing and implementing solutions is key to their clients achieving full operational success.

Concentrating on 2–25,000 life organizations, Gallagher's HR & Benefits Technology team is recognized for its well-researched and unbiased sourcing advice and service provider capability audits. A deep working knowledge of the market and its many players – including benefit administration service providers – enables our consultants to bring together the right players to provide the right solution for the client's needs.

For more information, please visit www.ajg.com, or contact us at 312.690.2690.

METHODOLOGY

Gallagher's HR & Benefits Technology Consulting Practice works with employers, multiple employer trusts, benefits consultants, service providers, insurance carriers and the investment community on an in-depth basis every day. This interaction provides a rich and holistic view of the human capital management and benefit administration technology and outsourcing space.

Beyond focusing on strategy and other big picture issues, Gallagher works side-by-side with clients to ensure proposed solutions deliver the envisioned success. This includes assessing options, identifying and mitigating risk and evaluating service providers.

Annually, Gallagher's HR & Benefits Technology consultants engage in and track thousands of interactions and hundreds of unique situations. These interactions and situations cover all regions of the United States as well as domestic clients with global operations. Service provider-related support (intelligence, selection, management, and replacement) represents a significant part of our business, resulting in a very rich pool of industry intelligence.

As a trusted advisor to the industry, Gallagher's HRBT team is involved in the following practices:

- Needs assessment
- Service provider request for proposals (RFPs) development and analysis
- Product demonstrations
- Employer implementations
- Employer interviews and discussion
- Product competitive analysis
- Product roadmap development
- Strategy development
- Service provider research

These activities are performed within a wide range of industry verticals including:

- Human capital management
- Benefit administration
- COBRA and PPACA compliance
- Healthcare spending accounts
- Private exchanges
- Decision support tools
- Leave management
- Learning management

Since 2005, Gallagher's HRBT consulting team has engaged in these activities with hundreds of companies working in these verticals, resulting in unique insight and intelligence. This is the basis for Gallagher's in-depth market analysis.

This report offers Gallagher's informed point of view, supported by the research and advisory work done by their experienced consultants.

CITATIONS POLICY