Unlock the Power of Mobile Learning for Your Organization Today

According to *The 2015 U.S. Mobile App Report* from comScore, mobile usage now accounts for 62% of digital media consumption in the United States versus 38% for desktop consumption. This means that 2 out of every 3 minutes of digital media consumed today are consumed on a smartphone or tablet. With steady advancements in mobile infrastructure – Wi-Fi and 3G/4G networks, mobile device performance and mobile apps focused on most aspects of our daily lives, these metrics should come as no surprise.

As learning and training technology adoption for educational content delivery often follows entertainment content consumption habits (remember VHS tapes? CD-ROMs? DVD's?), and organizations are increasingly leveraging mobility across the enterprise, today's learning professionals are in a great position to take the lead on mobile and demonstrate its business value.

Mobile usage **accounts for 62% of digital media consumption** versus desktop usage. Now is the time to consider your mobile learning – *or m-learning* – strategy.

In this whitepaper, we will focus on the five biggest keys to consider for successful m-learning when planning to offer your organization, its employees and business partners "anytime, anywhere" learning or training programs:

Five Keys for Successful m-Learning
Unlock the Power of Mobile Learning for Your Organization Today

LEARNER CONNECTIVITY
From where will your learners access the learning or training?

LEARNER DEVICES
On what devices are your learners likely to use to access your courses?

CONTENT FORMAT
Is your learning content fully optimized for effective mobile delivery?

INSTRUCTIONAL DESIGN
Are you designing a learning experience that is mobile-first, mobile best?

LEARNING MANAGEMENT
Is your Learning Management System (LMS) up to the m-learning challenge?

LEARNER CONNECTIVITY

The first thing to consider when developing a mobile learning program plan is gaining a clear understanding of the connectivity profile of your target audience(s). As the majority of us have experienced first hand, the quality of any mobile experience is largely dependent on the strength of the mobile connection to the Internet.

For example, using m-learning to train your remote field sales reps or service technicians seems like a no-brainer, right? However, such truly mobile job functions are often limited to mobile data connectivity (e.g., 3G or 4G network access) versus at-home or public Wi-Fi access. Conversely, learner segments that have ready, steady access to more stable, higher bandwidth Wi-Fi connections from their mobile devices may benefit from richer, more interactive learning and training content (video, animations, gaming) than their field counterparts.

Another aspect to consider under the learner connectivity profile is the data plans of your learners. If the m-learning content is accessed via mobile data connections (vs. Wi-Fi), there will be an associated delivery cost (borne either by your target learners or your organization) for accessing the content. As such, understanding the impact of your mobile courses in terms of size and data transfer will prevent nasty billing surprises for your learners (and associated negative blowback on your program).

In-flight and in-vehicle Wi-Fi are further extending the reach of more stable, higher-bandwidth mobile connectivity but there will still be "not-spots" for the foreseeable future. Painting a clear picture of how and where your target audience(s) will access your m-learning content will inform the best-fit format for your course content before you spend valuable time and money developing it, either internally or with a third-party content developer.

LEARNER DEVICES

Closely related to your learners' connectivity profiles, it is also critical to understand what devices your target audience(s) will use to access your m-learning courses. Common mobile device form factors include:

- Smartphone

- Tablet

- "Phablet" (smartphone + tablet)

- Wearables (e.g., smart watches)

Device form factor is a critical element of any m-learning plan, as it drives both content format and instructional design decisions you will make downstream. For example, if you know your learning content may be accessed from both smartphone and tablet devices, you will need to ensure that the content and the delivery technology are mobile responsive, dynamically adjusting the content based on the screen real estate and resolution of the learner's device.

In addition to the form factor(s) that your learners would be using, understanding the mobile operating system(s) (OS) that are powering their mobile devices:

- Android

- Apple iOS

- Windows

- Others

According to a recent *Forbes* article, global market share for OS are 80% for Android, 16% for Apple iOS, 3% for Windows and 1% for Others.

Over the past few years, more and more organizations are adopting a **Bring Your Own Device (BYOD)** policy as part of their mobility strategy, versus a company-owned device policy. While the latter ensures device homogeneity and increased security, the former allows for maximum employee flexibility and ease of adoption while albeit creating a more heterogeneous learner device profile.

Such BYOD policies underscore the benefits associated with a **mobile responsive approach** to m-learning content development and learning management, where your learners would access the learning or training courseware via the web browser already installed on their device (vs. them installing a device/OS-specific native app on their device prior).

Lastly, when considering device profile for your learning or training initiative, you should also determine whether the program would also need to be accessible from Internet-connected desktops, either exclusively or in combination with the learners' mobile devices.

CONTENT FORMAT

More and more DIY learning content development tools are embracing mobility, leveraging mobile-responsive user interfaces and user experiences to ensure successful m-learning. In addition, the growing adoption of HTML5 over Flash has expanded the reach of learning content across multiple mobile devices and operating systems.

Video-based learning and training content is a natural fit for mobile devices, albeit while keeping your learners' connectivity and device profiles. The broadest, HTML5-supported video container format for mobile delivery to multiple device profiles is MPEG-4 (.mp4), using the H-264 video standard. Video resolution will also be based on your learners' connectivity and device profiles, with a healthy tension between video quality and performance (size) on the intended devices.

Adobe's Portable Document Format (.pdf) is an excellent format for easily developing and delivering ancillary or additional performance support resources to mobile learners in parallel with the mobile course. Most content authoring tools (e.g., MS Office apps, Apple Keynote, Adobe Creative Cloud apps, et al) offer the option to export or save content to PDF. Advantages of this format are its preservation of the design and layout of the original file, as well as the ability to zoom in, search and click on hyperlinks in the file.

Lastly, be sure to consider learning standards when planning m-learning initiatives and developing mobile content. Both the more common SCORM and emerging xAPI ("TinCan") standards are often helpful when tracking learner activity and progress, in conjunction with or independent of an LMS.

INSTRUCTIONAL DESIGN

Not all learning initiatives and objectives are best suited for an m-learning approach. When considering a mobile learning strategy, mobile curriculum rollout or a mobile pilot, designing your programs to drive your both your learning objectives and a graceful mobile experience for your learners is key.

In addition to the considerations addressed above, some additional elements (and opportunities!) to focus on for your m-learning course or content design include:

- **Structure & Duration:** Shorter, "bite-sized" content modules work best for mobile learning experiences. Structuring mobile courses in this manner increases learner engagement, drives more stable performance across a broad range of learner connectivity profiles and reduces learner fatigue.

- **Mobile Responsiveness:** As referenced above, the entire learning experience – from learner enrollment through course access and delivery to completion – should be device aware and deliver the same quality learning experience, regardless of your learners' device profile during a given session.

- **Interactivity:** As many of you have probably already experienced in your personal and professional lives, smartphones and tablets are inherently tactile when compared to "cold" laptop or desktop monitors. Such tactility enables you to improve learner engagement, assessment, and reinforcement using "touch" design techniques in your program.

- **Safe Practice & Assessment:** The on-board camera and microphone on your learners' devices may be used to support "safe practice" and competency assessment for a variety of business applications. For example, using such techniques to train, assess and certify a sales channel on pitching a new product or service is a great way to easily capture and assess learner performance and provide constructive feedback or remediation.

- **Social Learning:** Designing peer-to-peer interaction into your m-learning takes full advantage of your learners' mobile experience and expectations. Leveraging social mobile platforms (Twitter, LinkedIn Groups, et al) as part of your program design allows you to better connect your learners, as well as provide them additional SME support. In addition, some LMS offerings now feature integrated social learning features, minimizing the complexity of incorporating social learning into your design mix.

- **Gamification:** While on the costlier end of the content development spectrum, gamification techniques may be used to make mobile learning more fun and even competitive, driving utilization and completion rates through game-based learning activities. Badging and leaderboards create additional rewards for learners while driving visibility on and accountability for personal performance.

- **Augmented Reality (AR):** QR codes and other AR technology may be used to enhance the mobile learning experience, allowing learners to leverage the on-board camera or microphones on their device to discover additional information and interactions that support the learning program.

- **Geo-Location:** As mobile devices are inherently location aware (think GPS), geo-location is an emerging technique for learning and training applications, providing learners with learning interventions and performance support that are highly personalized and deeply contextual to their physical location at the time of learning. Such techniques will become more and more prevalent for equipment training, certification and certification in the healthcare and manufacturing industry verticals.

Whatever design elements you choose to incorporate into your m-learning program, be sure that your design is tuned for the mobile learning experience, keeping in mind the learner connectivity and device profiles for your audience.

LEARNING MANAGEMENT

Lastly, now that you (hopefully) have a better sense of what matters most when considering a mobile learning strategy, even the best designed, imaginative and engaging m-learning experience will fail if your LMS is not up to the challenge.

Key LMS features you should consider before embarking on your m-learning journey:

- **Mobile Responsiveness:** Your LMS should be fully mobile responsive across all user roles, featuring a grid-based layout and design that "snaps" in the web browser to account for the various screen resolutions of your learners' devices. This design construct will ensure that your learners will have quality experience regardless of the device they're on in a given session.

- **Ease of Use:** In addition to a responsive, grid-based layout, the user interface design should consider mobile as well as desktop learners. Readability and usability change as learners shift from larger desktop or laptop monitor resolutions through tablet or phablet devices down to the portrait view on a smartphone. Whether assessing your current LMS or assessing a new one, be sure to access critical learning management functions on all devices identified in your learner device profile and confirm usability.

- **Performance:** Look for LMS solutions that are hosted in the cloud, offering a secure, high performing and stable user experience across the breadth of mobile connections identified in your learner connectivity profile. As your mobile learners will access your learning content anytime, anywhere, it is important that your LMS is always on and always available through any Internet-connected device.

- **Administration:** While providing your learners with access to courses and content from their mobile devices is a win, giving your administrators and managers mobile access to user management and reporting features is complete victory.

- **Mobile Learning Features:** In addition to the core capabilities above, some LMS solutions also offer features designed specifically for mobile learners. Such features include social learning timelines or course walls; calendar integration; SMS-based messaging and notifications; and ILT classroom management tools.

GET MOBILE WITH YOUR LEARNING & TRAINING

Mobile learning – *or m-learning* – creates an exciting opportunity for learning professionals to extend the reach of learning and training initiatives – further integrating learning opportunities into the workday or out into the field – ultimately driving adoption, utilization and completion rates.

Paired with a cloud-based, mobile-ready LMS, your mobile learning and training programs will provide all your stakeholders – executives, managers, learners and other business partners – with anytime, anywhere access to improved operational or business performance.

Best of luck and safe (virtual) travels!