



Learning on the Go: Mobile Learning as it's Lived

How mobile technology and social networks are changing the way we learn

By Rob Keery, Brightwave

2014 is the year that mobile Internet usage is finally set to overtake desktop. This represents a fundamental shift in the way that we conduct our online lives – the already dated stereotype of the Internet user as a solitary shut-in will become simply unrecognisable. The new stereotypical Web user is not a maladjusted loner exploring arcane corners of digital lore, but a smart, connected individual – or organisation – in the office or on the street, linking via smartphone to their social network: posting updates, pictures, and finding out what they need to know to manage their home and working lives.

Global Mobile vs Desktop Internet User Projection, 2007 - 2015

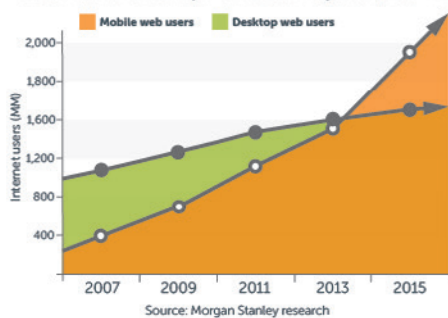


Figure 1. Internet User Projection, 2007-2015.

This ongoing socio-cultural trend has changed the way we live, and the way we work. Mobile has brought a level of flexibility and access to business that has enabled the emergence of the knowledge industries that dominate developed economies. But, the way workplace learning is delivered is yet to catch up with how our personal and working lives have been changed by our smartphones and the social networking apps they run.

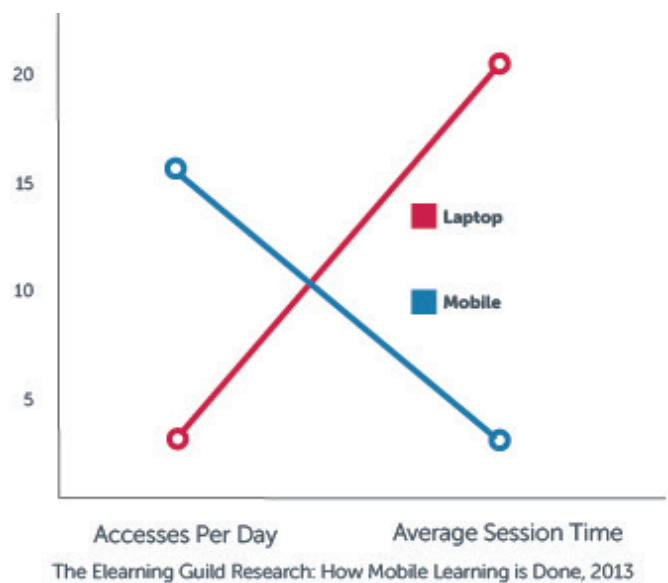


Figure 2. Internet Access and Session Time.

Figure 2 captures the major differences between the way learners use mobile devices versus laptop/desktop, and offers a real insight for designers of workplace learning: *mobile usage occurs in numerous short, frequent sessions throughout the day.* Learning solutions and interventions optimised for engaging mobile contexts should complement, not challenge these user habits.

Developing learning content for mobile requires more than understanding the basics of HTML5 or shrinking existing e-learning solutions to fit on a smaller screen. Mobile fundamentally changes the way learning intersects with learners' workflows, behaviours and practices. Packaging learning to fit in your pocket and still deliver a memorable, valuable experience requires a new way of thinking about what learning might mean.

Five Ways Mobile Changes Learning Design

Examples of the way mobile reconfigures both the form and content of learning delivery as it has been traditionally understood:

1. **Performance support** – Twenty-four hour access to key data, placing essential facts, figures and notes on best practice at your learners' fingertips;
2. **Chunking** – Micro-sized learning interventions accessed via mobile to complement a wider campaign of learning/organizational change;
3. **Push learning** – Targeted and scheduled delivery of brief organisation-wide announcements, updates and reminders;
4. **Video** – Size/configuration of mobile screens and user habituation privileges visual over textual information; and,
5. **Responsive design** – Online learning content design rethought from the ground-up in anticipation of its final home on a pocket-sized mobile screen.

The Emergence of the Personal Learning Network

How do we find out how to do our jobs? When you need that piece of essential information to overcome your current challenge, where do you go? There are several potential answers to this question. Perhaps it's your organisation's learning management system (LMS). Perhaps it's Google or YouTube, or perhaps you rely on the colleague sitting beside you. All of these methods of discovery have their benefits, but also their limitations; the information they give you may be too task or process-oriented; or too "hard" and factual for situations requiring nuance and soft skills.

Increasingly, the best (fastest, most reliable, most diverse/unbiased) solution to these obstacles is found in the personal learning network (PLN). A PLN is an informal grouping of personal and professional contacts connected via an individual's social platform(s) of choice. When a problem needs solving, today's connected mobile learner reaches out to their PLN and asks for their guidance, advice, or a good old-fashioned quick fix. The network responds to the learner's query, offering a rich range of solutions drawn from their wide breadth of individual experience. The network is enabled by social and mobile media technologies, but sustained by mutual need and the powerful incentives of group recognition and reputation.

The members of the network might be on different continents or sitting right across from you. They might be a newcomer with a fresh insight or an acknowledged expert who's seen it all; traditional communication/participation barriers collapse within the supportive environment of the PLN – a globalised study group that evolves from question to question, project to project.

These advantages do not have to be confined to the individual learner either – the principles of social learning

can easily be scaled down to focus on a particular project or challenge, or scaled up to inspire cultural change across an entire multinational organisation. Enterprise platforms are now available that bring these benefits and advantages in-house, creating environments within the organisation where solutions to difficult problems can be worked out in collaboration, across far-flung teams and offices. Informational silos and expertise can be freed up by applying the principles of the PLN to localised micro-networks within the organisation, which cross team boundaries to bring disparate individuals and skill sets together, unlocking knowledge and experience to drive innovation and effective learning throughout the business.

xAPI – Connecting Our Online and Offline Lives

The experience application programming interface (xAPI) – initially known as Project Tin Can – is an open source software specification for managing e-learning data. Released in 2012, the xAPI was designed to better manage the various forms of data not covered by SCORM, the e-learning industry's previous specification standard, and reflect the major, largely technology-driven changes in the way people learn in the workplace:

- Via multiple, usually mobile devices (smartphones and tablets);
- Through a mix of formal online learning courses and informal, often learner-sourced resources; and,
- In a variety of online and offline experiential contexts.

The experience application programming interface's (xAPI) strength and potential for revolutionising learning technology lies in the simplicity of the format it uses to describe complex data. Whatever learning experiences you might encounter in your life – from a conversation at the water cooler to a multi-part massive open online course (MOOC) – xAPI condenses it into a simple string of code that can be stored, quantified and analysed.

Experience application programming interface data statements are formed of just three core elements:

[actor] [verb] [object]

or

[I] [did] [this]

For example:

[John Smith] [attended] [a training seminar]

From the starting point of this deceptively straightforward formula, xAPI can capture any amount of information about someone's experiences and store for later analysis. The range of information is limited only by the sophistication of the capture and recording tools.

This means a training seminar can be recorded on the learner's phone, turned into xAPI data and stored for later inspection and assessment.

In a world where learning is increasingly mediated by digital technology, xAPI makes the borders between online and "real" life more porous than ever.

Personal Learning Capture

Perhaps the most significant application of mobile technology to the way we learn now and into the future comes from its potential to alter the learner's place in the traditional top-down learning ecology. While we are already seeing the rise of bring your own device (BYOD) training events, reflecting the relative sophistication of learners' personal mobile technology over that commonly supplied by their employers, the potential for disruption goes a step further.

The data capture and sharing capacities of the smartphone, combined with radical new learning technology standards like xAPI (see inset box), have the potential to rewrite the circuitry of learning, putting the learner truly in the driving seat. The technology in our hands today does not just offer us new ways to request the information we need – it empowers us to discover, capture, and share our own learning experiences, to decide for ourselves both what we need to know and how we wish to find it out.

Scenario

Let's imagine a learner on their way to a meeting who needs to refresh their knowledge of email marketing. Pulling out their tablet or smartphone, they log on to the corporate LMS to find an e-learning course that's five years old – out-of-date and practically useless. But, of course, with their smartphone and xAPI, they can find their own learning resources.

A quick Google search gives them instant access resources from industry experts, detailing the most up-to-date email marketing methods – insider tips and hints honed by real testing and experience. Within a matter of minutes, the gaps in the learner's knowledge are filled.

But, before they close their browser and put their new learning into practice, they click a button in the browser

toolbar. Experience application programming interface powers this new “bookmarklet” browser button – which is already hooked up to the company LMS or learning system – so as the button is clicked, a new learning experience is recorded and saved.

The meeting goes well, and the client says something about the way they're using the product, which stops our learner in their tracks. The learner asks them to repeat it, but this time they have their phone ready and they film the client saying it. The learner uploads the video to the LMS and shares it with his enterprise PLN, and the whole team understands this new, previously unheard-of insight before our learner has even returned to the office. They have a whole new perspective on their work, which in a pre-mobile learning world, would have been impossible to capture and harness in a meaningful way.

This scenario isn't fiction. Next-generation learning systems are already supplying this kind of functionality, allowing learners to generate and share their own learning resources. The technology we all carry around in our pockets changes not only the way our learners learn, but empowers them to take control of their learning and become creators, consumers, and curators of the best learning content to support and optimise workplace performance.

About the Author



Rob Keery is community manager with next-generation learning experts Brightwave. He's interested in the intersection of social media, online communities and digital marketing; and how their common principles of engagement, interaction, and contribution can be applied to workplace learning. He'd love to hear from you at rob.keery@brightwave.co.uk.