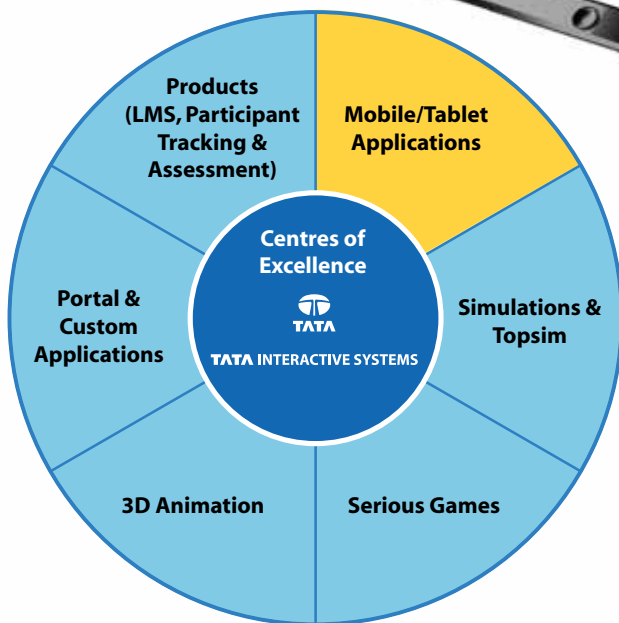


# MOBILE LEARNING: TO CONVERT OR NOT TO CONVERT?



*The six 'Centres of Excellence' at TIS foster thought leadership and core expertise for differentiated products & service offerings. Videos from these Centres of Excellence are available at <http://www.youtube.com/tatainteractivesys>*

*Should you convert your legacy learning to integrate with mobile devices? Read this no-nonsense guide by **Nitin Mistry** before deciding.*



## MOBILE LEARNING: **TO CONVERT OR NOT TO CONVERT?**

When it comes to mobile learning many organisations are scared to take the plunge. This hesitation is understandable, but the mobile revolution is here to stay. According to the IT Consulting firm IDC, 2011 saw shipment of nearly one billion smart connected devices. By 2016, the number will grow to just under 2 billion.

Tim Cook, Apple CEO, recently outlined his company's vision: "When we're talking about the post-PC world, we're talking about a world where the PC is no longer the center of your digital world, but rather just the device. We're talking about a world where your new device, the devices you use the most, need to be more portable, more personal, and dramatically easier to use than any PC has ever been."

How should you approach the shift to mobile? Are you better off starting from scratch or migrating your existing learning resources to mobile solutions? A great approach is to tap into the experience and insights already developed by leading organisations. Discover the the necessary steps to creating cutting edge learning for delivery on tablets and smartphones to your clients across the enterprise.

### **WHAT'S STOPPING YOU FROM ADOPTING MOBILE LEARNING?**

Most companies are still hesitant to adopt mobile learning because they are unsure if it is here to stay. If you look at the explosive sales of smart phones and tablets as compared to sales of PCs, it is clearly not a question of 'if' but 'when'. Here are the key challenges:

#### **Challenge #1: Technological**

Up until last year flash was being used predominantly for mobile learning, on PCs and certain smartphones. Many features of HTML5 have been built with the consideration of being able to run on low powered devices such as Smartphone and tablets. This core technology has now emerged as a strong contender for a cross platform flash solution despite the fact that HTML5 it is not yet a W3C (World Wide Web Consortium) designated standard.

#### **Challenge #2: Device diversity**

Mobile learning today needs to be made compatible with iOS, Android and Windows operating systems running on a plethora of devices. HTML5 has been widely adopted and is supported by most of them.





## MOBILE LEARNING: **TO CONVERT OR NOT TO CONVERT?**

### **Challenge #3: Legacy content conversion**

A lot of companies are currently sitting on hundreds of hours of existing learning content and wish to port this to mobile devices. As part of this conversion there are several cost implications to consider. If mobile devices need to be supplied to the workforce, maintenance and hardware costs may be daunting. And creating multiple variations of the same learning course for different gadgets, multiplies the cost.

### **Challenge #4: Design – reduce, reuse, recycle**

It is important to understand that the instructional design for legacy learning programmes may not be optimised for mobile platforms and smartphone delivery. Creating learning for delivery via smartphones will also throw up several user interface design challenges (*see boxout below*).

#### **Smartphones – user interface design challenge**

*It is important to bear in mind the following points when creating learning for smartphones:*

- Becoming conscious of screen real estate and as a result focusing on the most critical navigation elements on screen
- Designing learning in smaller chunks, thus allowing users to jump in and out as required
- Getting rid of frills and the tendency to add things just to fill up space
- Designing one or two column layouts for adaptability to different screen sizes
- Using less animation, unless absolutely necessary to aid learning
- Making visuals sleek and minimalistic
- Including additional links to allow for social interaction
- Adopting infographics to say more with less
- Maximising the use of gestures like swipe, pinch zoom and seamless scrolls
- Gamifying navigation if content lends itself

So, your shift to mobile learning will be influenced by the proliferation and diversity of devices, reuse of legacy learning content and cost considerations in executing a conversion. Is it possible to overcome these obstacles and turn them into opportunities to deliver learning that complements your increasingly mobile and geographically dispersed workforce?

Until recently the choice of authoring tools to create HTML/HTML5 content had been limited to products like Rapid Intake, Adobe Edge, Adobe Captivate 5.5 and Claro.

The big challenge so far has been that of device diversity – one version of a course would not be able to run on every mobile device and platform. The authoring tools mentioned above allow authoring and publishing courses for some devices but for other devices there has had to be a compromise in the design and development process.

The best solution is to create a complete mobile learning ecosystem – one that can effectively resolve the challenges of device diversity, HTML5 authoring and instructional design for mobile devices. For example, a product suite called LEARNow™ features 'Fluid Resolution' which adapts automatically to the display size of any device like Apple, Blackberry, Android OS etc.



## MOBILE LEARNING: TO CONVERT OR NOT TO CONVERT?

A platform such as this seek to facilitate a fundamental shift in making mobile learning a reality while keeping adoption costs low.

### TOP TIPS

The first question to ask yourself, is 'What should be converted?' A three-course meal for breakfast is just as inappropriate as a tub of popcorn and large soft drink for lunch.

Scenario	PC to Tablets	PC to Tablets	PC to Smartphones
<b>Design Element</b>	(From Flash to HTML)	(Original source in HTML)	(Source in Flash/HTML)
<b>Instructional Design</b>	<b>Low</b> Varies with degree of content layering	<b>Low</b> Higher if you decide to enrich courses	<b>High</b> Complete overhaul
<b>Visual Design</b>	<b>Medium</b> Export vector art to SVG/PNG	<b>Low</b> If source is HTML; higher if you decide to enrich courses	<b>Medium</b> Some reuse if HTML, or export to SVG/PNG
<b>Technical Design</b>	<b>High</b> Starting from scratch	<b>Medium to High</b> Depends on richness of media and interactivity	<b>High</b> Starting from scratch

High, medium or low? The table shows the degree of effort required to convert PC learning to mobile learning.

Here are some winning candidates for conversion, both from a visual and duration perspective:

- Short nuggets – created just for mobile platform or excerpted from existing courseware. Restricted to a maximum of 5 minutes duration.
- Video and audio (remember, phones were originally just audio devices).
- Knowledge-checks including those with extensive feedback to reinforce learning.
- Quick performance support tools.

### CONVERSION TO MOBILE

From the 'conversion to mobile' table (see image), we can see that a conversion from PC to tablets with the original course being in HTML is a likely candidate for conversion to mobile learning.

Where Flash courses are involved, converting from PC to tablets puts a greater degree of effort on the visual and technical design fronts. Finally converting from PC to Smartphone involves the highest degree of effort owing to the small form factors of these devices.

Don't forget to test your masterpiece on the actual targeted device. Not just to confirm compatibility today, but on every day there is an update or upgrade of the target device, browser, platform or operating system. Remember, HTML5 is still just a candidate and not yet a standard designated by the W3C. Hence courses and nuggets in perfect working order do tend to break on new upgrades and might require continual monitoring and repair.

**Nitin Mistry** heads the Mobile Solutions Centre of Excellence at Tata Interactive Systems.

Follow us at:



[www.tatainteractive.com](http://www.tatainteractive.com)

Tata Interactive Systems | 18, Grosvenor Place | London SW1X 7HS | Office +44 (0)207 235 8281