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Going mobile: What it means for training developers

Presented by:
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The Mobile Monster

- Smartphone sales surpassed PC sales in 4Q 2011
 - 158.5 million smartphones (up 57 percent from same quarter previous year) compared with 120.2 million PCs.
- In 2011, tablet sales grew by 256% to nearly 73 million units
- Android activations are 700,000/day




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The Mobile Monster

- IDC predicts that by 2020 there will be 35 billion connected mobile devices
- Typical mobile knowledge worker accesses mobile device 30 times a day
- US consumers were found to spend as much time with mobile media than they do with print magazines and newspapers combined



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Do Mobile Devices = The Invention of the Printing Press?

- "It took writers, authors, publishers a while to figure out how to use the press, how to organize information and tell stories in new ways. It took awhile for the format to catch up to the new tools and technology."

Matthew Battles, Harvard historian and librarian



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What Does the Mobile Monster Mean for Us?



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Opportunities and Issues!

- About the mobile environment
- Performance support
- PDF
- e-Learning

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Mobile Apps

- Native apps
- Mobile web sites
- Hybrid



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Mobile Apps


- Native apps
 - Run on the smartphone's OS
 - Written in C, C++, Java ME, etc.
 - Does not need connectivity to work
 - Can store and retrieve phone data
 - Can use hardware features like accelerometer, camera, compass
 - Not portable to other phones
 - Faster



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Mobile Apps

- Mobile web sites
 - Run inside the smartphone's browser (even though you often cannot see the browser buttons)
 - Written in HTML or javascript
 - Requires connectivity to work
 - Generally cannot use smartphone's resources (contacts, calendars, photos) or features (accelerometer, camera, compass)



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Mobile Apps

- Mobile web sites
 - Can run on other phones
 - Slower
- Hybrid – Combination of app + web content



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Design Issues

Size matters!

Mobile Device	Resolution (number of distinct pixels in each dimension)	Screen Size (measured diagonally)
iPhone 4	960 x 640	3.5
Droid X	854 x 480	4.3
iPhone 3GS	320 x 480	3.5
Blackberry 9800 (Torch)	480 x 360	3.18
Blackberry 9650 (Bold)	480 x 360	2.4
iPad 2	1024 x 768	9.7

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Design Issues

- Remember - A mobile device is NOT a PC/Mac so, design for:
 - ✓ Touch
 - ✓ Scrolling and Navigation
 - ✓ Loading speed
 - ✓ On-the-go usage

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Design Issues - Touch



- Tap - To press or select a control or item (analogous to a single mouse click).
- Flick - To scroll or pan quickly.
- Double-tap - To zoom in and center an image. Double-tap to zoom out.

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Design Issues - Touch

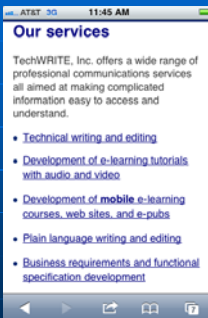
- Pinch open/close - To zoom in/out.
- Shake - To initiate or undo an action.
- Use the accelerometer - A built-in electronic component that measures tilt and motion (portrait/landscape flip).

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Design Issues - Touch


- Tappable elements - Need to be large enough for a finger tap.
- Links - Not too close together.



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Design Issues - Loading Speed

- Download speed is a big issue.
- Reduce the amount, size and complexity of graphics.
- Reduce the need to circle through a lot of links.



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Design Issues – Navigation and Scrolling

- Navigation modes must be different from PC or Mac.
- People are used to scrolling on smartphones.
- Be sure to test, test, test!

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Design Issues – On-the Go-UX

- Quick access to required information.
- Re-architect your old site to chunk information for mobile.
- Not used for long documents or training manuals.
- Searching issue: Reduce need for text entry.
- Bottom line: KISS

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Content Platforms


- Performance support tools
- Training documents in PDF
- e-learning or m-learning

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Performance Support

- Information people turn to on the job when they're:
 - Unsure about what to do or
 - Need reminders or
 - They're looking for a solution to a problem.




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Performance Support

- Short
- Easily comprehensible
- Easily accessible
- Perfect fit for mobile




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Performance Support

- Short videos
- Short animations (.swf)
- Podcasts
- Text messaging
- Quick reference cards, job aids, help cards



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Performance Support

- Reference information
- Step-by-step instructions
- No background or conceptual information
- Used on the job
- Short
- Terse language
- Often formatted in tables

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Performance Support



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Performance Support

Code	Symptom	Cause	Solution	More Info
Z02	Not printing when data entered	<ul style="list-style-type: none"> Data cable not connected. Proper port not enabled. Appropriate driver not installed. 	<ul style="list-style-type: none"> Securely connect data cable. Enter setup menu and select correct port. Reinstall correct driver. 	P. 6, 97
Z03	Label data is printing lightly	<ul style="list-style-type: none"> Printer darkness too low. Head pressure too low Print speed too fast. 	<ul style="list-style-type: none"> Increase darkness setting on printer or through driver on PC. Increase head pressure. Change print speed to a lower value on printer or through driver on the PC. 	P. 27, 61
Z04	Ribbon tearing when label is printed	<ul style="list-style-type: none"> Printer darkness set too high. Print speed set too slow. 	<ul style="list-style-type: none"> Decrease darkness setting on the printer or through the driver on the PC. Increase print speed on the printer or through the driver on the PC. 	P. 71, 75

Will it fit?

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Will it fit?

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Categories
Details

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Performance Support

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Troubleshooting
 • Z02 - Not printing when data entered
 • Z03 - Label data is printing lightly
 • Z04 - Ribbon tearing when label is printed

Categories
Details

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Performance Support

The screenshot shows a mobile application interface. On the left, a 'Troubleshooting' menu lists three items: 'Z02 - Not printing when data entered', 'Z03 - Label data is printing lightly', and 'Z04 - Ribbon tearing when label is printed'. A red arrow points from the first item to a larger, detailed view of the same item on the right. The detailed view includes sections for 'Cause', 'Solution', and 'More Information'. At the bottom of this view, a 'Back to Main Menu' button is circled in red.

Performance Support

- Consolidate rows
- Combine columns
- Use hyperlinks

Code	Symptom	Cause	Solution	More Info
Z02	Not printing when data entered	<ul style="list-style-type: none"> Data cable not connected. Proper port not enabled. Appropriate driver not installed. 	<ul style="list-style-type: none"> Securely connect data cable. Enter setup menu and select correct port. Reinstall correct driver. 	P. 6, 97
Z03	Label data is printing lightly	<ul style="list-style-type: none"> Printer firmware too low. Head pressure too low. Print speed too fast. 	<ul style="list-style-type: none"> Increase firmware setting on printer or through driver utility. Increase head pressure. Change print speed to a lower value on printer or through driver utility. 	P. 21, 93

Performance Support

- WebHelp

The screenshot shows a mobile application interface for 'Web Receiver Help'. On the left, a 'Table of Contents' menu lists several topics. A red arrow points from the 'Table of Contents' item to a larger, detailed view of the 'Table of Contents' page on the right. The detailed view lists various topics such as 'How to receive with invoice data', 'How to undo a receiver', 'How to select a P O', 'How to receive partial orders', 'How to receive full orders', and 'How to inquire about receivers'.

Performance Support


- Converted to Performance Support

The screenshot shows a mobile application interface for 'Web Receiver Help'. The page displays a search bar at the top, which is circled in red. Below the search bar, a list of topics is shown, including 'How to receive with invoice data', 'How to undo a receiver', 'How to select a P O', 'How to receive partial orders', and 'How to receive full orders'.

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PDF

- Sometimes Reader needs to load.
- Designed for the printed page.
- Type too small to read

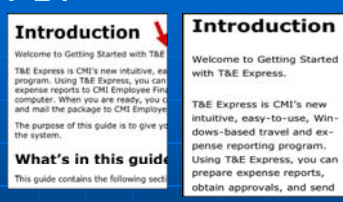


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PDF

- Enlarging it causes you to scroll horizontally.
- No page flow except if you use Reader X but only on Android and iOS devices
- Fine on iPad.




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e-Learning

- No Flash on iPhone or iPad
- Adobe will stop supporting Flash in mobile browsers.
- Focus will change to HTML5.




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e-Learning

- So what's an e-learning developer to do?
 - Convert to .mp4
 - Convert to HTML5
 - Keep producing Flash
- More info? blog.techw.com




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e-Learning

- Can't simply shrink PC/Mac-based e-learning tutorials.
- Need to re-size graphics and captions.




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e-Learning

- Controls need to be larger.

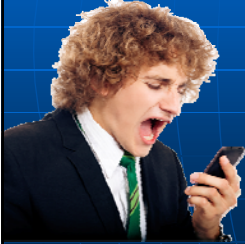


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e-Learning


- Keep is short and to the point!
- No one wants to slog through a long tutorial on a smartphone!




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Taming the mobile monster



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For More Information:

Examples of mobile web sites


<http://www.mobileawesomeness.com>

<http://iphone.appstorm.net/roundups/design/30-gorgeous-iphone-optimized-websites/>

Apple design standards

<http://developer.apple.com/library/ios/#documentation/userexperience/conceptual/mobil> <http://www.viziapps.com/ehg/introduction/introduction.html>

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For More Information:

Flash and HTML5

<http://blog.techw.com/>

Five things you can't do with HTML5 (yet)

<http://blogs.msdn.com/b/thebeebbs/archive/2011/12/04/five-things-you-cant-do-with-html5-yet.aspx>

Examples of .swf converted to HTML5

http://www.facebook.com/adobecapivate?sk=app_303058359733981

Make your own mobile apps

MobiFlex - <http://www.viziapps.com/LearnMore.aspx>

MadCap Flare - <http://www.madcapsoftware.com/>

17 Solutions to build your own mobile app - <http://www.practicaecommerce.com/articles/2573-17-Solutions-to-Build-Your-Own-Mobile-App/page/2>

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