



Introduction.

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Thank You

Flash Developer 10 years

- Agency work, microsites, CMS, Localisation
- Mobile development, FlashCast, FlashLite
- Technical reviewer, Training

About the presentation

- Some background to what I have learnt over the last 18 months.
- Show some a (very) simple flash movie running across devices.
- Explain decision making I use.
- Show the code, secondary really.

Growth in Mobile Interest

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- Over the last 18 months I have become more Mobile
- iPhone - Changed the game (more detail later)
- Media Marketing, Mobile and tech is making it main stream
- We are not the main target demographic (Children and Emerging markets)

Major Mobile Players

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Major Mobile Players

Note they are a mix of hardware and software/services

- Google - Android, Google docs, Google Mail etc.
- Apple - Iphone, Mobile Me, iTunes
- Nokia - Ovi, Maps etc
- Microsoft - Windows Mobile, microsoft live/passport, hotmail

Excludes Service Providers - Vodaphone, tMobile etc.

- Excludes Content Providers
- Traditional like Disney
 - More recent like Social networks and Web 2.0 offerings

The enigma of Mobile social networking - Using a Mobile device to communicate asynchronously like sms.



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Developing for is not Not Just about Phones But Mobile Devices and Data

- Laptops
- PSP
- Mobile Phones
- Smart Phones / Feature Phones
- Desktop
- ITV

Challenges & Opportunities of Mobile Development

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Realized through my experience

MOBILE CONTENT CHALLENGES - These are not just Flash Specific, but things every one is dealing with.

Device variation is huge

- Hardware (device power/performance)
- Form factors (screen sizes)
- Operating Systems

About Content & Data

- Data Tariffs Suck
 - Costly
 - Difficult to understand
 - Not always portable (roaming)
- Not really 'always' on.



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MOBILE CONTENT OPPORTUNITIES - These are not just Flash Specific, but things every one is dealing with.

- Competing with Existing Traditional Content more directly in usage (compared to Web)
 - METRO
- Breaking traditional content habits
- Mobile UI and Interaction (new ways to learn, and use) lots of variation at the moment.
- Mobile Content and Services (updates and location)
- Context & Relevancy (task specific applications)

Unique Design Challenges

- UI Considerations
- Limited Space
 - Pyramid Journalism

Unique Opportunities

- Location Awareness
- Personal connection/relationship
- Mobility
- Impulse Usage

Complex mix of Technologies & Practices

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- Its still early days for the mobile. Like the browser Wars all over again
- Browser as a platform (XHTML, JavaScript, Flash, SilverLight, later SVG lively kernel) (web kit becomes the platform)
- Applications and packages (sis, jar, javaME, C++, flash extended via kunari)
- Services, Widget frameworks



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iPhone has been a (super) long game product

- Started with first generation iPod
- Created a unique habit in docking. Compare to Nokia.
- Non techies interest in tech.
- Technically its not that good a device.

What iPhone proves is you don't need horse a lot of horse power to enable users.
Good UI design goes a long way.

What does Flash Offer

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What iPhone proves is you don't need horse a lot of horse power to enable users.

Back to 1998 - flash/swf core competency.

- Small file size
- Streaming
- Flexible media control (text, images, video, audio)
- Rich interaction (animation and transitions)
- Data enabled (txt, xml, server side integration, SWX/swf)

Easy(ish) to develop

- Great workflow and Tool Chain
- Great community support
- Great Tools support

Good coverage

- In browser and stand alone
- Plugin/player detection
- Bill Perry (player penetration updates)

The Flash Development Rift

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AS3 vs AS2 vs AS1

- FL1 has huge reach still, which is AS1 - 1 year player updates are nothing, 5 yrs on and FL1 still has a huge, and growing user base.
- AS2 is the minimum level most developers would like to work with.
- AS2 == Flash Lite 2 or 3
- Its much easier now I know how to Plan, Map and Code. Flex provides a mind set.
- Moving good coding practices back to AS 1
- Coding in an OOPY manner, but not necessarily completely OOP (Memory/Performance)
- Reference Mooks articles on AS3

Fragmentation

- 10 Flash Player Versions
- Flash 8+9+10, Air (Desktop)
- Flash SDK 7+6 (Wii, PSP, PS3)
- FlashLite1-3, FlashCast (mobile)

DEMO THE FLASH



Demo

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Detecting Devices
Load site data
Load Visual Media
Load Text Media

Structure, planning and conversions are important inside and out.

Resources & Research

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Try living for a week only using your mobile to access the web. (We can do it better)

FlashKit (old files and flash knowledge)

Mook (AS 2 Definitive guide, & AS the definitive guide)

Adobe (forums, and developer articles)

Nokia (forums, components, examples, docs)

Sony (forums, components, examples, docs)

Designing for Small Screens (studio 7.5)

dev.mobi (general mobile news and resources)

Cameron Moll (<http://www.cameronmoll.com/> - <http://mobilewebbook.com/>)

http://patterns.littlespringsdesign.com/index.php/Main_Page (lots of links to mobile resources)

Fin

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Q&A