

# DeCare Systems Ireland

Creating solutions that *drive* your success

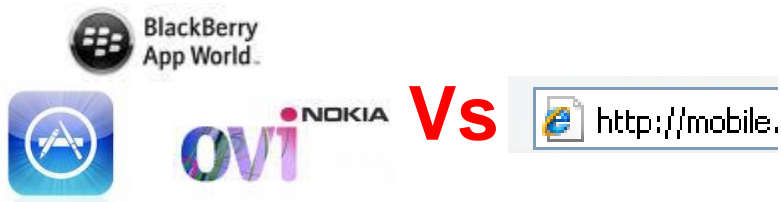
## *Native App Vs Mobile Web*

# Mobile Commerce Options

- As organisations begin to identify a mobile commerce strategy to provide customers with mobile access to key services and product information, they are faced with fundamental choices in deciding which mediums are best suited to achieve their objectives.



Which App Store?  
(Apple v RIM v Android v Palm v Symbian)













Native Apps or Mobile Web?

Let DSI help you navigate the range of options and create a mobile strategy that works best for you.

# The App Stores

Virtually every Smartphone now has a mobile application storefront, so how do they compare? Well, its not a huge surprise, stick with Apple.

Handsets	No. Apps	PROS	CONS	Winning In
  <p>iPhone iPhone 3G iPhone 3GS iPod Touch</p>	85,000	<ul style="list-style-type: none"> <li>- First to market</li> <li>- 85,000 apps already</li> <li>- Loyal following</li> <li>- Brand perception</li> <li>- Richest functionality</li> </ul>	<ul style="list-style-type: none"> <li>- Tied to AT &amp; T in US</li> <li>- Expensive</li> <li>- Limited Handsets</li> <li>- Security perception</li> <li>- Complex development</li> </ul>	N America (Consumer) W Europe Australasia
  <p>Storm Bold Curve Tour Pearl</p>	3,000	<ul style="list-style-type: none"> <li>- Corporate support</li> <li>- Security perception</li> <li>- Physical keypad</li> </ul>	<ul style="list-style-type: none"> <li>- Ageing handsets</li> <li>- Corporate image</li> <li>- Limits placed by physical keypad</li> <li>- More expensive apps (\$2.99 min)</li> </ul>	N America (Corporate)
  <p>Samsung Spica HTC Magic Motorola DEXT Sony Xperia X3 T-Mobile Pulse</p>	10,000	<ul style="list-style-type: none"> <li>- Handset Agnostic</li> <li>- Google backing</li> <li>- Open Source</li> </ul>	<ul style="list-style-type: none"> <li>- Small number of compatible phones</li> <li>- Lack of loyal customer base</li> <li>- Must work on variety of phones, so limits ability to push boundaries</li> </ul>	Nowhere (yet)
  <p>Palm Pre Palm Pixi</p>	100	<ul style="list-style-type: none"> <li>- Good reviews</li> </ul>	<ul style="list-style-type: none"> <li>- Very late to market</li> <li>- Direct competitor to iPhone</li> <li>- Tied to exclusive carriers</li> <li>- Expensive</li> <li>- Loss of brand support</li> </ul>	Nowhere
  <p>Nokia Sony Ericsson LG Motorola</p>	4,000	<ul style="list-style-type: none"> <li>- Huge market share for non-smartphones</li> <li>- Handset Agnostic</li> <li>- Open source</li> </ul>	<ul style="list-style-type: none"> <li>- Must work on variety of phones, so limits ability to push boundaries</li> </ul>	Asia S America E Europe

	Mobile Web	Native Apps
<b>Portability</b>	Can be built once and will run on any device with a browser. Support for multiple browser types can lead to add complexity and tendency to build for lowest common denominator	Needs to be developed for each platform individually (iPhone, Blackberry, Android, Symbian, Windows Mobile .....)
<b>Hyper Links</b>	Full support for hyperlinks to link within site and to external sites	Navigation within the app is extremely easy and user friendly. Navigating to an external site requires applications to be left and browsers opened. In the case of the iPhone the application will be closed
<b>Discoverability</b>	All existing search engines will find your site. External links from any source (e.g. Social media) can take the user directly to your site	Discovering Apps within the various stores can be difficult for users, especially in the App store with 85k Apps and poor navigation. Plan on having to increase marketing budget to get it noticed
<b>Audience</b>	Anyone who has web access on their mobile device.	Limited to the number of people who own the platform. Market size should be carefully considered before investing in development and support of a new platform
<b>Use of Device Hardware</b>	Interaction with hardware is much more limited and complex, though not impossible in all cases. Introduction of HTML5 and new wave of browsers should improve things but always likely to lag.	Able to use all functions native to the phone, including, but not limited to (GPS, Accelerometer, Camera, Compass, Microphone, Address Book, Touch Screen)
<b>Support &amp; Deployment</b>	Easy to maintain and instant. Follows same deployment and support processes as existing web sites	Heavily regulated and slow, opaque process. At the mercy of the App police! Fix releases can take days to get deployed. User dependent installation and updates Storage space on handsets is limited and Apps may be removed to free up space or may be unable to install due to lack of space
<b>Costs</b>	None, other than the development costs.	Some App stores charge for development access and deployment. Additional cost of developing for each platform
<b>Revenue</b>	Revenue can only be generated in same ways as existing web sites	Revenue can be gained by selling applications – all app stores provide the infrastructure. (Apple take 30%, RIM 20%) Add on functionality can be charged for through account and micropayments can be facilitated through Apple account
<b>Offline Browsing</b>	Not possible, other than to view a single downloaded page	Can be fully functional offline if well designed.
<b>Performance</b>	Can be very poor, especially over cell networks. All content and mark up needs to be downloaded so page bloat needs to be avoided, which can limit functionality	Excellent. Payloads can be kept very low, since only require data to be transferred. Access to accelerometer provides high speed performance for anything with visual component.
<b>User Interface</b>	Need to keep graphical content to a minimum and limited access to hardware resources mean that UI can be simple and clumsy. Can only be accessed through url in browser	Highly stylized interfaces provide immersive experience. Ability to launch App direct from handset interface
<b>Notifications</b>	No push based notification available	iPhone provides ability to push Audio and Visual notifications to the user that notify them of content update

# Mobile Web Design Considerations

Delivering services and product information in a manner that would be conducive to Mobile Web browsing requires consideration for the following

Simplicity is key	→ Where possible remove any content that will not display on any handset in the intended audience.
Reusability	→ Try to make use of your existing eCommerce site code. Adding a new UI layer is much easier than building something all over again.
User Interface	→ Remember that for most mobiles you are working with a portrait, not landscape display, so organise your content in a vertical, not horizontal manner.
Full Catalog	→ Unless you are selling tickets or another product that a user may have to buy whilst on the move, it is unlikely that they will browse from a non wi-fi environment. As such you might as well include your entire product catalog and as much functionality as possible. Consider it a different view of your existing site. (this advice would differ for a news service or sites with differing requirements)
Navigation	→ Navigating your catalog is the key element to designing a mobile commerce site. Consider simplifying as much as possible and making search even more prominent. Sacrifice content and functionality for good navigation if necessary.

# Native Apps Supporting a Multi-Channel Strategy

The latest generations of the iPhone and iPod Touch offer platform functionality that now makes mobile commerce a viable channel for multi-channel organizations.

1

## Audience

- Capitalize on the growing user base - iPhone applications run on both iPhone and iPod Touch
- Worldwide distribution of applications and subsequent upgrades for consumers via iTunes App Store

2

## Leverage Organizational Software Assets

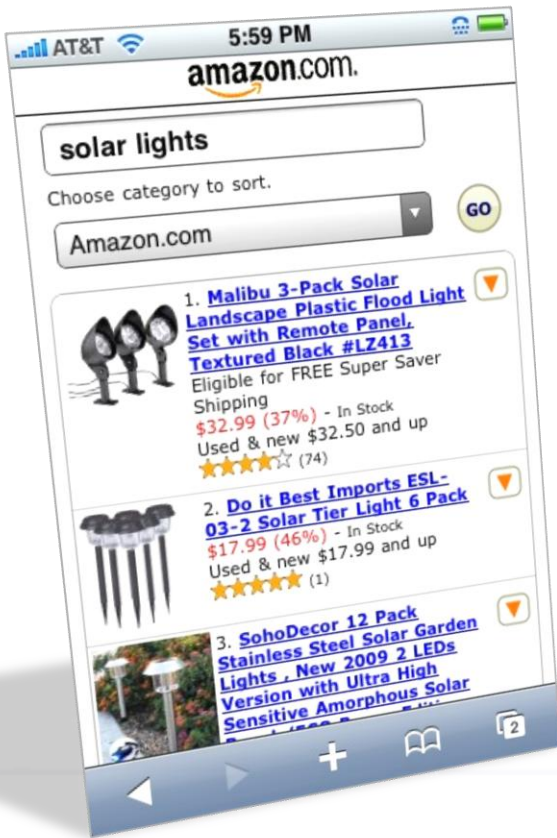
- Sophisticated enterprise quality software development kit available for the iPhone
- Compliment organization's existing online services and interface with existing technology assets

3

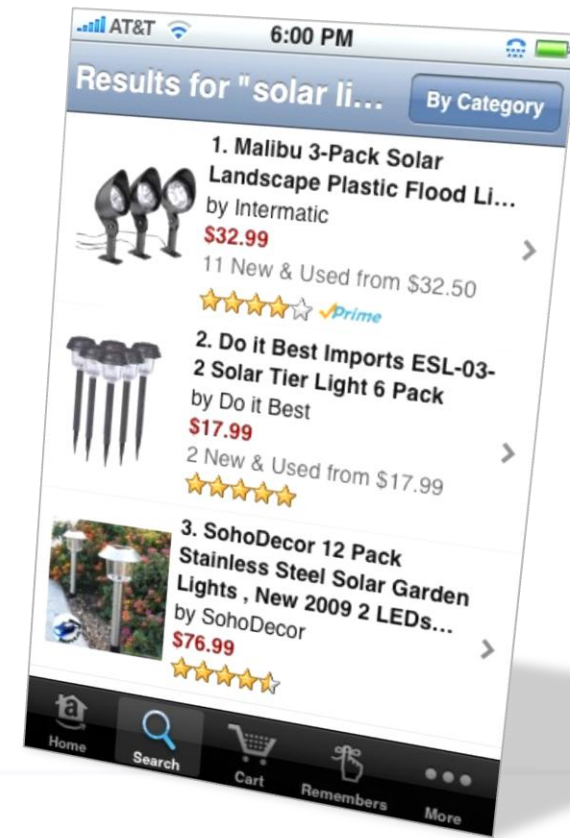
## Improve Effectiveness

- Low cost of entry
- Provide iPhone applications that allow customers access services anywhere, anytime
- Track customer interests through analytics and build a multifaceted view of customers

# Mobile Web v Native Apps - Summary



Test	Winner
Speed	✓ APP
UI	✓ APP
Features	✓ APP
Navigation	✓ APP
Audience	✓ WEB



# The Verdict

- **Mobile Web** should be used to provide a simple working version of a **website**. The site should be optimized for small screen display with Flash and large images removed to ensure the site functions on all devices. Unless it is felt that ordering over slow networks whilst travelling is likely (e.g. Tickets) then there is little need to consider non Wi-Fi browsing.
- **Mobile Apps** should capitalize on features of the smart device and incorporate functions that deliver real benefit to the end user. Such features should be engaging and become part of the users overall 'mobile behaviour'. Such applications should need to engage the user for a maximum of several minutes and should be operable with little or no degradation of performance over slow cell networks or even with no connectivity. Great care should be taken over UI design and the functional flow of the application.
- **The Mobile Web and Mobile Apps are not mutually exclusive** and organisations can benefit from the implementation of both, with careful consideration over which functions are best suited to each medium.
- In the short to medium term **(1-2 years) DSI believes that Mobile Apps will be the winners**, with Apple dominating the space. As such we feel that development should be focused on the iPhone, with consideration for Blackberry and Android where the application is considered critical.
- The **move from the traditional fixed line broadband PC web model to a mobile smart device will accelerate** over the next few years. The key benefits of an always-on smart device include; awareness of its surroundings, awareness of its owners preferences, awareness of the owners social network, awareness of compatible hardware/software and awareness of its orientation. These benefits can **only** be delivered through a mobile application. In the not too distant future these factors will **unlock a series of exciting opportunities for business** that the existing web technology stack is simply unable to deliver.

# Contact us

Let DSI help you select the best mobile solution for you.



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