



Acquisition Research Program: Creating Synergy for Informed Change

Examining the Apple App Store Business Model for Application to U.S. Navy Requirements

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Naval Open Architecture (NOA)

- The use of open standards with published interfaces to achieve modular and interoperable systems.
- A primary goal of this model is to reduce software acquisition costs through the re-use of modular software components.
- A key enabler of the NOA initiative is maintaining an efficient and effective software repository.
 - The Navy's Software Hardware Asset Reuse Enterprise (SHARE) is accessed through Forge.mil
 - Other services have similar software repositories



- The total benefit of software repositories will correspond to the quality and quantity of the applications deposited into them.

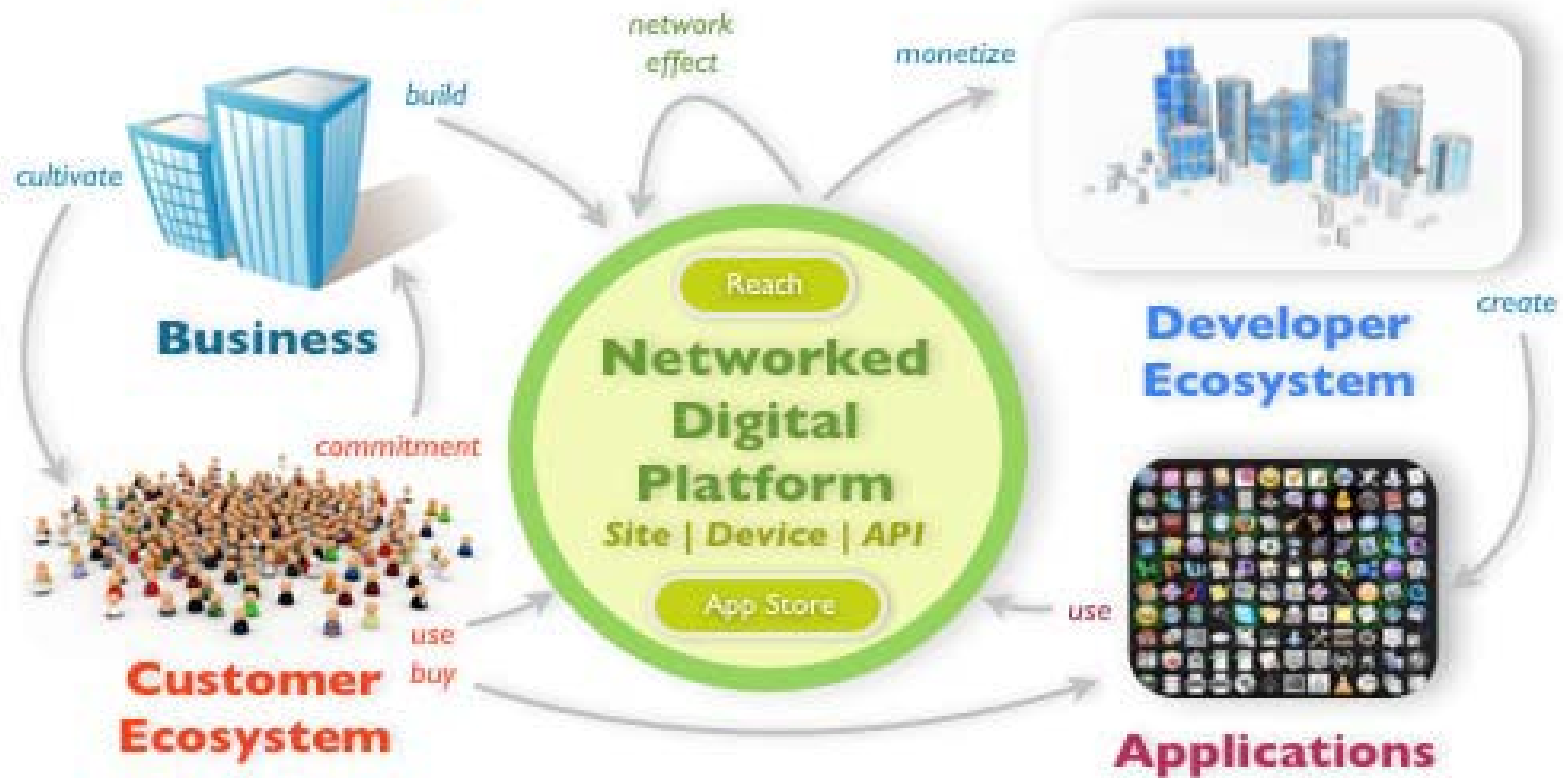
- The Apple App Store is indisputably the most successful software repository in the private sector.
 - As of March 2012, Apples lists more than 550,000 applications available.
 - On March 5, 2012 Apple announced more than 25 billion apps have been downloaded.



- **Research Goal:** Examine the business model of the Apple App Store to identify which of its effective business practices might be applied to the DoN/DoD software repositories.
- **Methodology:** Apple declined fact gathering interviews but recommended enrolling in the App Store Developer program to gain first hand knowledge (including access to restricted web portals).

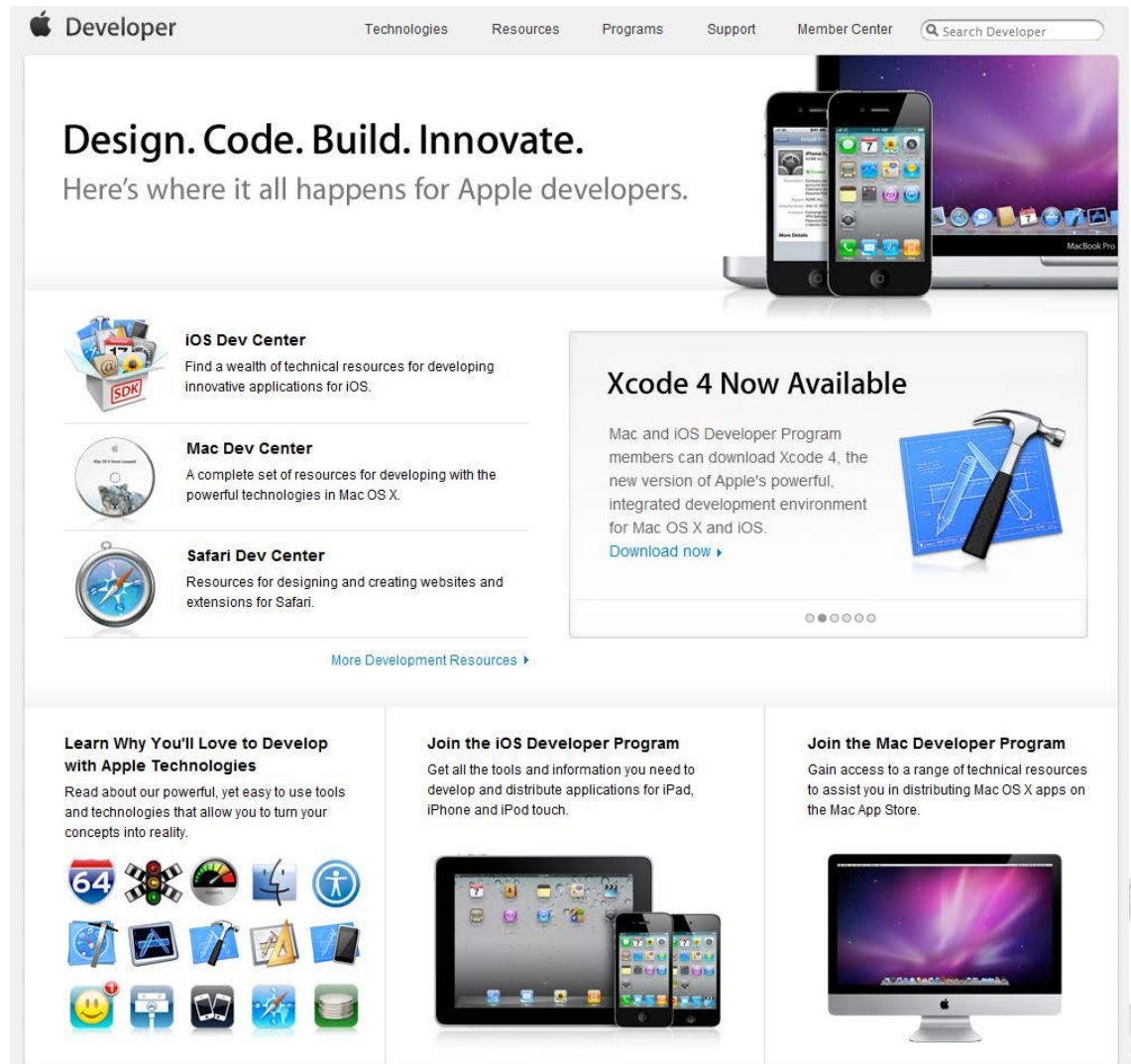


The App Store As A Digital Business Model



Apple Developer Welcome Page

- Intuitive
- Efficient
- Comprehensive



The screenshot shows the Apple Developer website's welcome page. At the top, there's a navigation bar with the Apple logo, 'Developer', and links for 'Technologies', 'Resources', 'Programs', 'Support', and 'Member Center'. A search bar is on the right. The main heading reads 'Design. Code. Build. Innovate.' followed by 'Here's where it all happens for Apple developers.' Below this, there are three main sections: 'iOS Dev Center' (with an SDK icon), 'Mac Dev Center' (with a Mac OS X icon), and 'Safari Dev Center' (with a Safari icon). To the right, a large banner for 'Xcode 4 Now Available' features an image of a hammer on blueprints and a 'Download now' link. At the bottom, there are three columns: 'Learn Why You'll Love to Develop with Apple Technologies' (with a grid of icons), 'Join the iOS Developer Program' (with images of an iPad and iPhones), and 'Join the Mac Developer Program' (with an iMac image).

Apple's Welcoming Statement to Developers

Apple provides a complete ecosystem for developers. All the components including hardware, the operating systems, and the developer tools are designed by one company, and they're all designed to work together seamlessly—creating an easier, more intuitive experience so developers can focus on making great apps.



Apple's developer portal provides one-stop shopping to resources:

- Download tools like the iOS Software Developer Kit (SDK)
- Getting started videos
- Coding how-to guides and sample code
- Forums to brainstorm with other developers



The Software Development Process

1. Select a project template and design the user interface.
2. Write the app's unique code.
3. Test the app on your Mac using the iPad/iPhone simulator.
4. Test the app on a real iPad/iPhone
5. Submit to Apple



Apple's Vetting Process

- Apps can be rejected for either policy violations or technical problems.
 - Apple cites more than 100 different reasons an app might be rejected.
 - Policy guidelines are very restrict, such as all apps must be developed using only the tools provided by Apple.
 - No app can duplicate the functionality of an Apple app.



Pros and Cons of the Apple App Store Business Model

Pros:

1. Greatest possible assurance of safe applications
2. Exemplary and comprehensive web portal
3. A symbiotic relationship between the end user and developer ecosystems
4. Effective management and marketing of application updates
5. A self-contained application directory and store
6. Centralized payment processing
7. End-user feedback and rating system



Pros and Cons of the Apple App Store Business Model (cont'd)

Cons:

1. Potential bottleneck for distribution
2. Excessive delays in correcting application bugs
3. You can only download the current version of an application
4. Inability for developers to contact users who leave negative feedback
5. Rejection of apps that employ non-Apple code



Challenges to Applying the App Store Business Model to DoN/DoD

1. Complying with or changing existing software acquisition policies and regulations
2. Defining and communicating product and business requirements
3. Controlling the process
4. Incentivizing and supporting developer participation
5. Establishing an effective vetting process



Questions?

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