

## How the 'walled garden' promotes innovation

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By Thomas Hazlett

An intense iPhone buzz sent a high-pitched signal to Apple fanatics early this summer in the US. They hurled themselves into AT&T sales offices and are still giggly with technophile delight.

The means by which Apple a computer products company without wireless assets launched the mobile phone of the century illustrates how markets introduce innovation. AT&T was eager to host the iPhone on its mobile network. The carrier extended terms so generous (Apple reputedly keeps all handset revenues and \$10 a month per subscriber) that, while Apple's market capitalisation surged \$20bn on iPhone profits buzz, AT&T's shares barely budged.

Apple purchased network access for its devices and is being lavishly compensated for its ingenuity. This crushes the argument that mobile networks are closed and need to be prised open by government intervention a position US regulators have nudged towards in recent rulings.

However, Apple's wireless entry is seen by some as emblematic of the underlying problem. The iPhone is iPhony, writes Tim Wu, a law professor at Columbia University, in Slate magazine. Apple's business model is perverse. "If Apple wanted to be 'revolutionary'," writes Mr Wu, "it would sell an unlocked version of the iPhone that, like a computer, you could bring to the carrier of your choice." Instead, Apple chose AT&T as its exclusive network, violating "network neutrality".

Apple is too busy with its product launch to notice. One million customers bought iPhones in the first 79 days; analysts project 4.5m units sold in the first year. Hosting this Apple party is a curious way for carriers to lock out innovation. It is even more remarkable that critics could configure Apple's entrepreneurship as an attack on creativity. They claim that only a device that is optimised for any application and capable of accessing any network is efficient.

They are wrong. What works best for consumers is a competitive process in which independent developers, content owners, hardware vendors and networks vie to discover preferred packages and pricing. When decision-makers compete for customers and answer to shareholders, a sophisticated balance obtains. The alternative proposition, business models voted on by regulators, is a recipe for stasis.

Apple could have offered its device as an "open" platform, but instead chose (as with iTunes, iPods and Apple computers) to control how it builds, and how buyers use, its product. It aims for competitive superiority. Quashing its model bops the innovator on the head.

Unbundling phones from networks is suggested as a policy fix in the US. European phones, working with different Sim cards across carriers and borders, are the model. Innovation in the European Union is said to flourish. But the iPhone came first to the US, as did the BlackBerry and advanced broadband networks using CDMA data formats. That is not surprising given that US networks are afforded wide latitude in designing their systems. Licences in the EU mandate a GSM standard. What is recommended as "open" in fact deprives customers of a most basic cellular choice: technology.

Consumers evince strong preferences for network co-ordination. Perhaps the most impressive

burst of wireless innovation was launched in 1999 by DoCoMo's iMode in Japan, enabling easy handset access to e-commerce sites. Content providers pay a cut to DoCoMo, which bills users.

The platform has been called a "walled garden", as applications must abide by strict rules. Economist Len Waverman, of the London Business School, writes that DoCoMo initiated three significant controls never before used in wireless: limiting prices charged by independent vendors; showing customers their charges for content in real time, as incurred; and restricting bandwidth-hogging applications.

Rejecting "neutrality", iMode proved a rousing success, attracting over 35m subscribers by mid-2003. DoCoMo's mobile rivals responded with managed web platforms of their own. Today, customers choose from bountiful, competing gardens.

Innovators such as DoCoMo and Apple bask in the opportunity to craft custom products and business models. Liberal spectrum policies that invigorate markets intensify that creative dynamic. Regulations that foist preordained structures on consumers and suppliers do not.

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