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Silicon Valley is doing it again

By Martin Kenny and Timo Seppälä

The ability of the firms and entrepreneurs in Silicon Valley to find new technological opportunities is uncanny. After the dot-com bubble collapsed in 2000, many were concerned that the region had seen its final revolution. At that time, it was difficult to divine that social media, the mobile Internet/smartphones and applications would once again fuel entrepreneurial and investor success. The smartphone is causing problems for Internet and social media giants such as Google and Facebook as they try to monetize their mobile click streams. This creates new opportunities for entrepreneurs to figure out how to do it well. Someone will figure it out, and a new crop of entrepreneurs will become wealthy.

Only 10 years ago, everyone thought that even though Silicon Valley was the center of the computer industry, the telephone industry would continue to be controlled by overseas telecommunications network and hand set makers such as Ericsson. Nokia and the incumbent carriers, such as AT&T and Verizon. In 2012 that world is being swept away. Consider the size of the new smartphone market. In 2011 about 500 million smartphones were sold, but by 2015 there are likely to be about 4 billion mobile Internet access devices globally, as all mobile phones are converted to smartphones and pads continue to increase in number. The central players in today's smartphone industry are Apple with iOS, which recently became one of the most valuable firms in the history of the U.S. stock market, Google with Android

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and Samsung, a key member of the Android ecosystem. Microsoft, Dell, Nokia and many other computing and telecommunications leaders are faced with difficult decisions. This is Schumpeterian creative destruction on a scale never before imagined.

The struggle that the smartphone competition has ignited is causing the greatest explosion of global patent litigation ever. Apple, the closed system new entrant incumbent. Microsoft, the PC world incumbent, and Nokia are attacking the Android operating system because it allows any gadget maker to introduce a mobile Internet access device. These incumbents are claiming the Google/Android business model is leading to the violation of their patents because the operating system and services for free model is so disruptive.

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Google comes from the new Internet world, where standards such as those for the World Wide Web and TCP/IP are open and free. For Google, the idea of providing a free smartphone operating system was quite natural, since its sole goal is to protect its advertising model, which is predicated upon users freely choosing to utilize its various services such as search, maps, Gmail, YouTube, etc. For Android competitors, it is exceedingly difficult to attack Google directly.

The Google model of using the Internet's openness allows users to violate other forms of intellectual property right protection, as anyone can post copyrighted material online. Google points searchers to that material. For producers of copyrighted material, in the age of digitization it is exceedingly difficult to protect work. This situation has led a wide variety of firms petitioning courts around the world to enforce their eroding intellectual property rights to slow down the Google juggernaut.

Google's strategy is a direct riposte to Apple's brilliant strategy that began with the iPod, which created an online store and gave content producers a way of monetizing their wares. With this, Apple was able to recruit content producers. With the introduction of the iPhone, the store evolved into the App Store. Google adopted the Microsoft strategy of providing an operating system as a platform to any PC, pad and mobile phone producer. Google's twist was to give the operating system away and try to make profits on advertising. Backed by the Google brand, Asian gadget makers now had the operating system they needed to penetrate the smartphone market. Samsung, with its superb manufacturing capabilities, ability to deliver top quality components, and increasingly strong design sense, has now matched and possibly exceeded Apple in terms of device specifications, but not coolness. With a symbiotic relationship with the device makers. Android rapidly succeeded, and captured over 50 percent of the global market share, creating a market that attracted application makers.

The struggle between Apple, Google and Microsoft is intensifying as Apple banishes Google applications from its iPhones and iPads. Apple's recent move to develop its own maps and remove the Google Maps application is particularly interesting because it is forcing Apple customers to choose what today



Associated Pres

Kevin Packingham, chief product officer for Samsung Mobile USA, demonstrates the new Samsung Galaxy Note II, which runs Google's latestAndroid operating system, Jelly Bean. Google has become a central player in today's smartphone industry.

is an inferior product. By ousting Google from the ecosystem, Apple is forcing users to decide between the gadget and the information they want — a powerful test of what is most important: device or content. This also poses an interesting possibility that may surface in the future — Google may decide to no

longer support Apple smartphone users. In the past, firms have sued monopolists demanding equal treatment. Apple's decision to free itself from Google could be self-defeating, because the severing of the relationship is at Apple's behest, thereby freeing Google from any legal need to not discriminate.

Microsoft is another powerful combatant in the new mobile Internet ecosystem. Soon there will be more people using the Internet from a mobile device without a Windows operating system than those using a Windows-equipped personal computer. For Microsoft, the danger is that it will be relegated to the far more slowly growing PC market with the possibility that office productiv-

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ity software will be displaced from the desktop to the cloud or from the PC to a pad-like machine. Their fear is so great that they are introducing Windows 8, which is primarily built upon a smartphone-like user interface. It is an interesting stratagem to force PC users to learn the Windows smartphone protocols in the hopes that they will then also buy Windows smartphones because they need to understand only one system. There is a possibility that it will be successful. On the other hand, it might be the final straw that motivates users to look for alternatives to the Office application suite, which is the true source of Microsoft's power.

The ability of Silicon Valley to reinvent itself and capture new technological trends is astounding. The iPhone was introduced only five years ago, and today the center of the world mobile communications industry is Silicon Valley. The wealth created in this technological shift is remarkable, but with it are commensurate dangers to various incumbents. For venture capitalists, this shift, like previous technological shifts, offers tremendous oppor-

tunities. For the state of California, this is another shift that reinforces our place at the center of the world digital economy. For lawyers, this titanic struggle to control the mobile computing ecosystem is likely to be a cornucopia of fees.

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