In mobile-innovation race, software's rise crowns new kings

February 15 2011, By Aude Lagorce

Once upon a time, in the dark ages of technology three years ago, consumers entered mobile-phone shops and asked about megapixels, battery life and screen resolution before setting their heart on a model.

Then Apple Inc. launched the iPhone, Google Inc. released the Android open-source operating system, and in the space of two years, the hardware-led innovation cycle that had forever ruled the industry was broken.

Today, all prospective mobile-phone buyers care about are software-defined features: applications, user interface, Web browsing and e-mail.

"The innovation cycle as we used to understand it is over," said Pierre Ferragu, an analyst at Bernstein.

And with it the days when Finnish giant Nokia Corp. could afford to miss big design trends and, thanks to its scale and distribution, still make heaps of money by bringing breakthrough hardware innovation to the mass market a few years after a rival first hit upon it.

The industry landscape has shifted from a "battle of devices to a war of ecosystems," Nokia Chief Executive Stephen Elop said last month.

Why does it matter? Because this seemingly innocuous shift from hardware- to software-led innovation has thoroughly redistributed power in the industry, allowing the emergence of new leaders like Apple,

steadfastly eroding the dominance of Nokia and BlackBerry maker [Research In Motion](#) Ltd., and breathing new life into smaller - and sometimes nearly moribund players - like Motorola Mobility Holdings Inc., Sony Ericsson and HTC Corp.

Nowhere will this new state of affairs - where manufacturing and distribution scale have become secondary to software dexterity - be as obvious as at Mobile World Congress, the industry's largest annual gathering, which takes place next week in Barcelona, Spain.

The pecking order of attendants is changing.

Nokia, the key representative of the old guard, won't have a stand at the event, though Elop will in a keynote speech try to revive investors' confidence in the company's prospects.

Meanwhile, up-and-coming Android star HTC, whose brand awareness skyrocketed in 2010 thanks to its Desire handset, will take over a large hall and compete with Samsung, Sony Ericsson and Motorola for attention.

Apple, as always, will be absent, preferring to show off its new gadgets at its own, exclusive events.

Mobile World Congress will remain a product-focused show in 2011, with dozens of phones and tablets launched, but the way the gadgets are pitched will reflect the new dynamics. That means less attention for sleek aluminum casings peeking from executives' suit pockets and much more focus on gadgets' software abilities, to be showed off in live demonstrations.

The talking bits of the event will also reflect software's newfound supremacy, with several keynote speeches and seminars devoted to

applications, from how to make them profitable to how to develop useful ones for the medical sector.

The crowning of applications goes hand-in-hand with the incredible popularity of the iPhone, but it's also been helped by Android's meteoric rise over the past 12 months.

At last year's event, though Android was on everyone's lips, the industry had yet to see a true blockbuster powered by the operating system Google bet on three years ago.

The first Android devices, launched in late 2008 and 2009, never gained much traction, but Google kept working on the platform, updating it at a record pace.

"Google has been updating Android every three months. And because the burden of research and development falls on them, the handset makers have been able to come up with new devices more quickly," said Royal Bank of Scotland analyst Didier Scemama.

The effort finally paid off in mid-2010, when Motorola's Droid, HTC's Desire and Sony Ericsson's Xperia X10 achieved blockbuster status, finally bearing witness to the platform's potential.

By the end of 2010, more than 300,000 Android phones were being activated every day and the operating system's share of smart-phone shipments had soared to 30 percent from less than 5 percent in late 2009.

In the fourth quarter, it actually became the world's No. 1 smart phone operating system ahead of Nokia's Symbian, research firm Canalys said.

The breathtaking ascent of the platform is creating new winners and losers.

To the winners first: Motorola and [Sony Ericsson](), the mobile-phone-making joint venture of Japan's Sony Corp. and Sweden's Ericsson AB, have restored their margins and returned to a profit thanks to their Android bet.

"Android has been extremely important for these two, which were losing market share rapidly in their key geographies," Scemama said.

Now to the losers. Android's success bodes ill for integrated hardware-and-software players, like Nokia and Research in Motion, which have struggled to upgrade their own operating systems to offer the same user experience as Android.

Time is now running out for them.

Nokia's ownership of the industry's total profit pool has collapsed from 57 percent in the third quarter of 2008 to 14 percent in the third quarter of 2010, while Apple's has shot up from zero to 50 percent over the same period, Bernstein found.

"Android is creating a dividing line between winners and losers," Ferragu said. "Alternative integrated platforms are being left behind in a game in which first-mover advantage is huge and in which software-development capabilities are necessary to succeed."

As a result, all handset makers face a difficult decision: to join the Android bandwagon and risk losing their ability to differentiate on software, or to persist with a different operating system and risk seeing their market share dwindle.

Some analysts think Nokia should make the jump.

"Adopting Android would allow Nokia to close the software-quality gap

with its Android-powered competition, while moving the battlefield back into the hardware domain, Nokia's strong suit," Exane BNP Paribas analyst Alexander Peterc said.

"Suddenly the smart phone war would look like a battle that Nokia - the logistics, mass-manufacturing, cost-leading powerhouse - can and should win," he added.

So far the Finnish maker has not relented, but it may yet change its mind. On Friday, Elop will unveil the company's long-term strategy at a much-awaited capital markets day.

The Wall Street Journal this week published an internal memo Elop sent to employees comparing Nokia to a man standing on the edge of a burning oil platform and preparing to jump into icy waters to avoid burning to death.

The following day the Journal reported that Nokia was in talks with Microsoft Corp. about using the U.S. giant's mobile operating system, Windows Phone 7, in smart phones.

Among the Android refuseniks, BlackBerry maker Research in Motion could also soon find itself in trouble, in part because its business model relies on charging users for a service -e-mail access- that is now widely available for free.

"We believe that RIM's profitability is about to be significantly challenged," Ferragu said.

The Asian makers, meanwhile, are proving more pragmatic. Samsung, which for a while supported four different operating systems - including Symbian, Microsoft's Windows Phone 7, Android and its own Bada - has quietly shifted its focus almost exclusively to Android over the past few

months. Roughly 80 percent of its phones run on that platform.

But it's another Asian manufacturer that's benefited the most from Android's spectacular success: Taiwan-based HTC.

In less than two years the company's status has skyrocketed, along with its brand recognition. In 2010, shipments more than doubled to nearly 25 million units. It's also expected to become a leader in 4G smart phones in the U.S.

HTC's example, however, may be falsely comforting to the myriad manufacturers, including LG, Huawei and ZTE, that are now rushing out Android smart phones.

"The number of manufacturers that have the software engineering resources to deliver enough differentiation on Android is small and shrinking," warned Geoff Blaber, senior analyst at U.K.-based telecoms consultancy CCS Insight.

That may be exactly what Google wants.

"They have created a lot of competition, are giving manufacturers the flexibility to deliver customization, but in fact they're cleverly pushing them towards a very controlled Google experience down the road," Blaber said.

(c) 2011, MarketWatch.com Inc.
Distributed by McClatchy-Tribune Information Services.