Nokia Leads Microsoft in Smartphone Struggle

Abstract: Nokia’s licensing of its Symbian-based Series 60 interface could win it most of the smartphone market. Microsoft’s best hope is to make its Smartphone 2002 operating system the de facto standard for business users.

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Recommendations

Mobile phone manufacturers should:

- Develop expertise in personal information management and e-mail synchronization. This will help ensure that their smartphones appeal to the lucrative business market.
- Use their brand strength to increase sales of smartphones.
- Where necessary, form partnerships with — or source products from — original design manufacturers (ODMs) to compete in the high-risk, low-volume smartphone segment.

Application developers should:

- Decide which smartphone software platforms to support by observing which ones mobile network operators optimize their portals for.

Definition of a Smartphone

A smartphone is a mobile terminal with an open operating system, online and offline capability, and the size and appearance of a traditional mobile phone.
Microsoft and Nokia Compete Over Smartphones

As the smartphone market emerges, two giants are locked in competition. Microsoft and Nokia have each worked for several years to control this market.

The two rivals offer competing software platforms. Nokia's Series 60 user interface uses the Symbian operating system (OS). Microsoft's Smartphone 2002 is built on Windows CE 3.0. Both ran commercially available smartphones in 2002.

Nokia — by far the world's largest manufacturer of mobile phones — has the advantage so far, but the contest has only just begun in earnest. It should be intriguing, because it pits a top hardware company against a top software company — each of which believes its chief strength in hardware or software can compensate for its inexperience in the other area.

Victory promises rich rewards because, although smartphones will account for less than 10 percent of the mobile phone market in 2005, "smart" devices will eventually become a vital part of phone manufacturers' product ranges.

Nokia's Mobile Software Division Provides Major Benefits

Nokia's creation of a division — Nokia Mobile Software — that would seek to license mobile phone software and user interfaces to other manufacturers (including Nokia Mobile Phones) met with skepticism when announced in November 2001. At the time, it seemed unlikely that major mobile phone manufacturers would want to work with Nokia — their main rival — to deliver software that would run the next generation of phones.

Now, however, it looks like an inspired strategic move. It gives Nokia the chance to:

- Exploit its intellectual property and expertise in user interfaces.
- Define the direction of the smartphone as a category.
- Persuade mobile phone manufacturers planning to use Symbian that they should license the Series 60 interface, by assuring them of Nokia Mobile Software's separation from Nokia Mobile Phones. In this way, Nokia can make money and keep control of this important layer of software.
- Most importantly, compete directly with Microsoft by layering the Series 60 interface and software on top of the Symbian OS.

Microsoft Seeks Partners to Develop Smartphones

In 1999, Bill Gates revealed that Microsoft planned a smartphone platform to extend its software beyond the PC and into the lucrative mobile phone market.

Microsoft wanted to work with a leading mobile phone manufacturer but was, in effect, locked out. All but one leading maker instead chose Symbian for its smartphones. The exception was Samsung, which licensed both camps' platforms.

Hence, Microsoft had to look elsewhere for partners and, in February 2001, announced that it would also work with Japan's Mitsubishi and U.K. phone manufacturer Sendo to deliver its first commercial smartphones.

Throughout 2001, Microsoft also made announcements about its other mobile phone product — its Pocket PC 2002 Phone Edition software. Later, products using it were announced, such as the mmO2 XDA (made by HTC Corporation).
Creating a Smartphone Proves Harder Than Expected

Microsoft and Nokia struggled to deliver smartphones, and this delayed their delivery. Both underestimated the complexity of producing a device that combined the functions of PDA and mobile phone.

Nokia was, however, helped by its licensing strategy. This attracted players like Matsushita (Panasonic), Samsung, Sendo and Siemens, because it soon became clear that smartphones’ greater reliance on software meant that only the market leaders could afford to develop these high-risk, low-volume products from scratch.

Microsoft’s task was made harder by having to develop a compact, powerful OS to compete with Symbian’s and compelling reference designs for mobile phone manufacturers. It also had to devise a new partnership strategy, once it became clear that its control of, and behavior in, the PC market had put most leading mobile phone makers off working with it. By late 2002, it was apparent that Microsoft’s best approach was to befriend ODMs in markets such as China, Korea and Taiwan.

Thus, Microsoft has had to take a radically different strategic direction from Nokia. It is banking on unfamiliar names such as HTC and Compal Communications supplying smartphones to well-known manufacturers and operators, so eroding the dominance of vertically integrated manufacturers like Nokia and Motorola. Microsoft believes that operators wanting more control of their brand’s positioning on smartphones — and of the specification of these products — will source them from its licensees. Orange and mmO₂ already have.

Nokia Must Capitalize on Mobile Phone Leadership

Nokia has several advantages over Microsoft in offering smartphones to consumers. It has opportunities to:

- Exploit its well-known and respected mobile phone brand. It must do this, because decisions to buy mobile phones are increasingly based on brand and fashion in maturing markets such as Western Europe and North America.

- Make the Series 60 interface the de facto standard for consumer smartphones by working with manufacturers like Siemens, Samsung and Matsushita (which together have more than 20 percent of the market).

- Expand its relationships with mobile operators. Its first smartphone, the 7650, was among three handsets at the launch of Vodafone’s consumer service proposition (see “Vodafone Live! Signals New Strategy for Consumer Services,” TELC-WW-DA-0130). Global operators like T-Mobile and Orange have also launched service propositions that support the Series 60 interface, because of the growing availability of smartphones that use it.

- Respond swiftly to the needs of operators’ services in order to keep its smartphone features competitive.

- Benefit from new features that may result from Nokia Mobile Software’s permitting licensees to license their innovations back into the Series 60 interface.

- Hope to attract application developers with its 36 percent share of the mobile phone market, its extensive distribution through business-to-consumer (Nokia Software Market) and business-to-business (Nokia Tradepoint) electronic marketplaces, and its relationships with operators.
A strong case can be made for selling smartphones to consumers via operators' mass-market service offerings. But Nokia also has at least one important weakness compared with Microsoft:

- Symbian-based products struggle to interact with key business tools and software — a failing that must be rectified if they are to succeed in the business market.
- Asian manufacturers that support Microsoft may be able to increase their market share, as Samsung has.

**Microsoft Must Deliver Standard Corporate Smartphone**

Microsoft’s long-term commitment to the smartphone market will help it capitalize on its best opportunity — namely to make its smartphones the de facto standard for business users. It can try to do this by using its experience and dominance of the PC and "back office" markets to optimize smartphones for these users — much as it has in the PDA market, where it has slowly eroded Palm’s market share. This would win it an important segment, in that business users are often mobile operators' most valuable customers.

In October 2002, Orange launched the Orange Smartphone SPV, which uses the Smartphone 2002 platform (see "Orange to Offer First Commercial Windows Smartphone," TELC-WW-DA-0129). But, despite this step forward, Microsoft has had problems with the platform:

- It has failed to generate significant sales (as has Pocket PC 2002 Phone Edition).
- Its original partner, Sendo, severed relations and defected to Nokia’s Series 60 platform (see “Microsoft Partner Defects but Smart Phone Battle Continues,” FT-18-7857). At the end of 2002, Sendo also began legal action against Microsoft.
- The SPV has been dogged by delays, lack of availability and poor performance, including slow operation and limited battery life.

Even so, Gartner Dataquest remains positive about future releases of Microsoft’s platform. Microsoft’s huge financial resources will probably enable it to develop the platform quickly and solve many of its early problems. It will have to, because further problems with Smartphone 2002-based phones could result in a serious setback. They could:

- Contribute to a rise in market share for Nokia's Series 60 interface and other Symbian products.
- Discourage operators from working with Microsoft, and so block its progress. Microsoft’s strategy is for the main brand on the smartphone to be the operator’s. As a result, any problems with the phone will, in the user’s eyes, reflect on the operator — a pitfall Microsoft perhaps overlooked.

**Nokia's and Microsoft's Platforms Differ Significantly**

Differences between Nokia’s Series 60 interface and Microsoft’s Smartphone 2002 concern their:

- Principal target customer:
  - Nokia’s platform is defined with consumers in mind.
  - Microsoft’s is more suited to business users.
Optimization as a phone platform:

- Nokia’s platform is more advanced, offering longer battery life and attending to details that users expect of a mobile phone. Its user interface is more intuitive, especially in delivering services such as the Multimedia Messaging Service.

- Microsoft is still learning. Its initial devices suffer from short battery life. They also struggle with basic operations like key assignments: the features are there, but less accessible. It will take at least one more revision for its user interface to rival Nokia’s. Also, most of Microsoft’s ODMs have yet to fine-tune their hardware designs.

Optimization for personal information and e-mail, particularly for businesses:

- Microsoft has a clear advantage in personal information management and delivering e-mails via Microsoft Exchange Server. It also has better application development tools. It therefore has an advantage in targeting business users.

- Nokia, by contrast, does not fully understand the business environment.

Fate May Rest in Samsung’s Hands

The Series 60 interface will continue to gain momentum as more phone makers license it together with the Symbian OS. Indeed, it should become the de facto smartphone platform for consumers as more operators optimize their service architecture for it.

Microsoft’s Smartphone 2002 platform is likely to attract another major mobile phone manufacturer — perhaps Motorola — probably as part of a regional strategy similar to that of Samsung (Smartphone 2002 in North America; Symbian in Europe, the Middle East and Africa; and, perhaps, Linux in China).

Samsung is a key manufacturer for smartphone platforms, for two reasons. Firstly, it has doubled its share of the mobile phone market during the last 18 months, and has ambitious plans for further growth. Secondly, it has a pragmatic strategy of licensing Smartphone 2002 as well as offering a Series 60-based smartphone and a Palm OS-based smartphone.

We believe it plans to work with a major U.S. operator to deliver a CDMA-based Microsoft smartphone. But, worryingly for Microsoft, Symbian appears to have gained more favor with Samsung recently. At the CeBIT trade show in March 2003, it announced the SGH-D700 — a Symbian-based smartphone using Nokia’s Series 60 interface.

Once Samsung has a commercial Microsoft smartphone, light should be shed on the various platforms’ relative strengths; for Samsung will not be afraid to focus its efforts on the most successful one. And, if it drops one — or if one performs much better than the others — its competitors may do the same.