

Thumb Wars

With Its BlackBerry a Big Hit, RIM Is Squeezed by All Comers

Rivals Covet Multiple Pieces
Of Wireless E-Mail Market;
Microsoft Is a Key Threat

Predecessor Was a Bullfrog

By MARK HEINZL

WATERLOO, Ontario—Every day, more than 100 million e-mails sent from across North America course through a data center hidden somewhere in this small university town.

The location—kept secret for security purposes—belongs to Research In Motion Ltd., a newcomer that struck gold with its BlackBerry wireless e-mail device. This unlikely spot is now the epicenter of a battle between some of the tech world's biggest players. More than 42,000 organizations have a BlackBerry e-mail server and 2.5 million people keep the gadget within arm's reach. The Los Angeles Police Department issues BlackBerries to some of its officers. Former Vice President Al Gore has one, as does Oprah Winfrey.

RIM commands a \$12.4 billion market valuation. It has made tycoons of Co-Chief Executive Officers Mike Lazaridis and Jim Balsillie, who found success after years of sometimes quixotic effort.

Awakened by RIM's achievement, tech giants and hungry upstarts are responding with an arsenal of gear aimed at cracking the BlackBerry's stronghold. Consumer-electronics companies such as Nokia Corp., Motorola Inc. and Samsung Electronics Co. are rolling out competing e-mail devices. Meanwhile, rivals are providing network software designed to intercept or block the revenue RIM generates from handling wireless e-mail traffic.

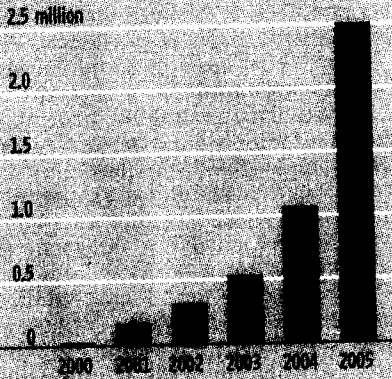
RIM now faces a classic technology-industry problem: Young companies that launch popular products aren't always the long-term winners. Netscape Corp.'s Web browser was superseded by a late alternative from Microsoft Corp. Google Inc.'s Internet-search service eclipsed



Mike Lazaridis

Juloy Fruit

Number of subscribers to RIM's BlackBerry wireless e-mail service, for fiscal years closing at the end of February.



Source: the company

early offerings by Yahoo Inc., and now Google itself faces intensifying counterattacks.

For RIM, which started life developing electronic signs for auto plants, the challenge is particularly acute. The still-nascent market is being attacked by a phalanx of competitors at multiple points along BlackBerry's food chain. Companies are developing software that allows wireless e-mail to work on a series of rival hand-held devices. Others are creating networks to handle e-mail traffic in competition with BlackBerry.

Being a pioneer, RIM developed a wireless e-mail system in fits and starts and in a way that makes it largely incompatible with devices made by other companies. RIM makes BlackBerry devices and helps wireless phone companies take care of the e-mail service, for a fee. It's not easy to get BlackBerry service on anything but the company's own hardware, a problem RIM is attempting to remedy.

Rivals, notably Microsoft, are trying to exploit that limitation. The Redmond, Wash., giant has included a free wireless e-mail feature on the latest version of its widely used e-mail server software. That gives phone companies the freedom to offer wireless e-mail services on handsets made by a wide range of companies, not just RIM.

RIM's Mr. Balsillie plays down the threats. He says others can't match RIM's global presence and customer base. As for Microsoft's interest in wireless e-mail, Mr. Balsillie says the firm

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RIM Feels Squeeze From Competitors

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has "been wanting to do this for years" and remains well behind.

Mr. Lazaridis, who was born in Turkey, emigrated with his family to Windsor, Ontario, where his father gained work on a Chrysler assembly line. As a boy, he loved to tinker with gadgets and recalls building a toy record player out of Lego blocks, a Dixie cup and a pin when he was 4 years old.

He started RIM over 20 years ago in a strip-mall office after answering a General Motors Corp. ad. The auto maker wanted someone to make an electronic-sign system to monitor plant operations. He won the contract and quit his engineering studies at University of Waterloo. Later, RIM developed a barcode reader used in a film-editing process employed on Hollywood movies such as Godfather III. It won Mr. Lazaridis an Emmy and an Oscar for technical innovation.

RIM's first venture into wireless communications came in the early 1990s after Mr. Lazaridis took a trip to Sweden to learn about Telefon AB L.M. Ericsson and its Mobitex data-networking gear. William Frezza, a manager at Ericsson's U.S. operations, hired Mr. Lazaridis to write software letting Ericsson's wireless modems work with a souped-up Hewlett-Packard calculator to create a wireless messaging device. Mr. Frezza talked Ericsson into lending RIM \$50,000. The resulting contraption was a bulky beast by today's standards. It didn't draw many customers, but it worked.

"We used to have contests to see who could send e-mail from the strangest places," Mr. Frezza says. He sent one message from a voting booth as he cast his ballot for Ross Perot.

In 1992, the Waterloo-based technology contractor that employed Mr. Balsillie was bought out. He quickly accepted an offer from Mr. Lazaridis to run RIM's business operations.

The two were an effective tag team. Mr. Lazaridis, 44 years old, scribbled technical diagrams on a whiteboard. Mr. Balsillie, also 44 and an avid sportsman who competes in triathlons and plays ice hockey, would talk about business matters such as market potential, contracts and pricing.

Their first service operated on the Mobitex network, which Ericsson built for Canada's Rogers Communications Inc. and a unit of U.S. phone giant BellSouth Corp. All agreed the devices had to be smaller, more battery-efficient and easier to use. RIM made some enhancements. Mr. Lazaridis rejected screen-handwriting technology, fashionable at the time, in favor of something unusual: a keyboard to be typed with two thumbs.

The resulting wallet-sized product had a flip-open screen and a full keyboard. RIM later nicknamed it the Bullfrog. Mr. Lazaridis became excited about its prospects during a 1996 conference in San Francisco, when panelists debated whether the industry could produce the very device he was using: "I don't believe it—they don't know about this product," Mr. Lazaridis typed with his thumbs in a message back to Waterloo.

quired expensive network maintenance, cost more than \$450 and its flip-lid was always breaking. Most people hadn't become accustomed to regular e-mail, let alone wireless messaging.

By 1997, BellSouth was ready to give up. Mr. Lazaridis remembers the "depressing" call he and Mr. Balsillie received from Jim Hobbs, a BellSouth executive, who said the phone company was considering shutting down or selling part of the Mobitex network unless they came up with a new plan.

Mr. Lazaridis arrived home dejected. His wife handed over their newborn son, saying, "It's your turn." After finally getting the baby to sleep around midnight, Mr. Lazaridis turned on his computer in the basement and listened to some rock music. In a three-hour blur, he wrote the blueprints for a reconfiguration of BellSouth's network that supported a sleek, one-piece, battery-efficient device smaller than a deck of cards, with a thumb-wheel for scrolling and clicking.

It would become the first BlackBerry. He e-mailed the plans to Mr. Balsillie at 3 a.m. and said he'd likely be in the office late. "No problem," Mr. Balsillie e-mailed back later that morning, "I've already turned it into a presentation" on PowerPoint.

Days later, the two flew to Atlanta and gave their pitch to a group of BellSouth executives. Watching Mr. Lazaridis as he waved a wooden model of the proposed device, "I was thinking he was full of it," recalls George Pappas, a former BellSouth executive, who was at the meeting. But he adds: "What was so impressive was they were determined to make it happen."

BellSouth decided to give it one more

try. A few weeks later, it launched a major network reconfiguration and gave RIM its biggest order yet, for \$75 million of BlackBerries. The name came from a branding company hired by RIM. One employee there thought the tiny keys looked like seeds and half-jokingly suggested "strawberry." The RIM executives had previously called it the PocketLink.

The BlackBerry won rave reviews. RIM launched new models with color screens and Web capabilities. On her television show in 2003, Oprah Winfrey gushed over the device—"my new favorite thing that I take everywhere"—and gave free BlackBerries to her audience. The device became known as the "crackberry" for its addictiveness.

"You couldn't pry the thing out of their hands," says Dennis Guzy, an information-technology official with the Pennsylvania attorney general's office, talking about his staff. He expects as much as two-thirds of the department's 900 employees will have BlackBerries in the next couple years, up from 71 currently.

A BlackBerry with phone and e-mail capabilities retails for about \$200 but is sometimes given away by companies offering special promotions. A typical monthly service fee is between \$30 and \$40.

Just as BlackBerry was taking off, RIM made a crucial strategic shift.

Originally, RIM set out to provide sales and service on its own. It was a risky move given RIM's meager resources. Mr. Lazaridis recalls spending a Christmas holiday in the basement buying network airtime while his wife entertained guests.

RIM realized it would be easier to let phone companies handle the customers.

In exchange, RIM receives about 10% to 20% of the monthly fee charged by carriers. RIM agreed to handle e-mail traffic and provide technical support.

BellSouth, for one, learned quickly about the BlackBerry's appeal. Visiting Lehman Brothers Inc. in 1999, former BellSouth marketing executive Janet Boudris remembers being shocked to find employees in hallways, lunchrooms and even within arm's reach of their computers thumbing their BlackBerryes.

Today, 100 wireless carriers sell BlackBerry hand-helds and service and 80 more will start this year. RIM's 120,000-square-foot plant in Waterloo, which works round-the-clock, isn't big enough. RIM recently agreed to take over the leather factory next door. For its fiscal year ended Feb. 26, 2005, RIM had net income of \$213 million on revenue of \$1.35 billion.

But given the excitement surrounding wireless e-mail, competition has become fierce. K2 Enterprises, a small Hammond, La., firm that runs accounting seminars, switched from BlackBerryes to Treos, made by PalmOne Inc., Milpitas, Calif., about 18 months ago. K2 Executive Vice President Randolph Johnston says the Treo has better phone quality and editing capabilities. He likes its MP3 player and camera. PalmOne says it has sold more than a million Treo devices.

Meanwhile, a host of companies are pushing wireless e-mail networks as BlackBerry alternatives. For example, Good Technology Inc., Santa Clara, Calif., says it has signed up more than 5,000 organizations for its rival system, which runs with gadgets that compete with the BlackBerry.

In this arena, some say Microsoft is the biggest long-term threat. In March, it reached a deal allowing handsets running software made by the United Kingdom's Symbian Ltd. to work on Mi-

crosoft's e-mail servers. The pact followed a similar deal with Nokia.

The software giant says it won't charge service providers, such as cell-phone companies, a monthly fee to handle e-mail traffic, as BlackBerry does. Scott Horn, senior director of Microsoft's mobile-devices division, argues that will encourage service providers to push Microsoft's system.

RIM's Mr. Balsillie contends that service providers won't actually save money working with Microsoft. He notes they still have to set up customer support and back-up facilities that RIM currently provides for its fee.

For companies already running Microsoft systems, there are cost savings. Dion Baird, senior network architect for the Oregon Department of Education, says his boss was interested in giving BlackBerryes to some staffers. He found the department could save about \$10,000 by using the Microsoft system that already runs its regular e-mail, obviating the need to buy a BlackBerry server and license its software. "It really wasn't much of a decision after that," says Mr. Baird, who chose hand-helds made by Siemens AG.

An executive at a top wireless company says the Microsoft service "represents a fantastic opportunity" to get more companies interested in wireless e-mail because many already have the requisite technology in place.

Microsoft declines to say how many people use its servers for wireless e-mail.

Estimates range from below 20,000—according to Pablo Perez-Fernandez, an analyst with Houston securities firm Stanford Group Co.—to below 100,000, an estimate from Gartner Group analyst Ken Dulaney.

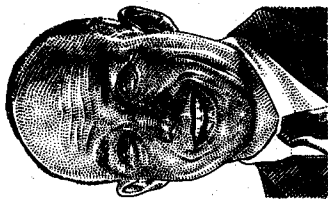
RIM's counterattack is focused on addressing criticism that BlackBerry technology doesn't work well with other systems and devices. One stumbling block was a patent battle that discouraged consumer-electronics manufacturers from selling their own brand of hand-helds in the U.S. that work with the BlackBerry network. RIM recently agreed to pay \$450 million to NTP Inc., of Arlington, Va., to end that dispute.

RIM is now pressing gadget makers to include BlackBerry software on their devices. Two years into the program, only about half a dozen models are available, and some rivals appear reluctant to hop on board.

RIM last summer announced plans for Motorola to launch a phone and e-mail device that could hook up to the BlackBerry system. But Motorola launched the device without the BlackBerry link. Mark Gubert, RIM's vice president for corporate marketing, says he expects Motorola to include the BlackBerry feature in the future. A Motorola spokesman agrees, but wouldn't give a timetable.

The number of BlackBerry subscribers using such non-BlackBerry devices—a key measure of RIM's attempt to open up its system—is a "five-figure number," RIM said this month, a tiny fraction of its customer base.

RIM, for its part, says its main challenge now is running fast enough to meet the existing demand. "You try launching [with] a hundred carriers in a year," says Mr. Balsillie after pecking away on his BlackBerry. "They all want to go yesterday."



Jim Balsillie