Microsoft's new brain

Brutal competition. A stock going nowhere. Microsoft is in crisis, so Bill Gates has unleashed his new hire, software genius Ray Ozzie, to remake the company - and conquer the Web.

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By David Kirkpatrick, FORTUNE senior editor
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(FORTUNE Magazine) - Last June, Microsoft CEO Steve Ballmer summoned the company's top 15 executives to Robinswood, a rustic 19th-century house a few miles from Microsoft's Redmond, Wash., headquarters.

The meeting was urgent: Google (Research), Yahoo! (Research), and other newer companies had been amassing customers, revenue, and investor enthusiasm not by selling software, as Microsoft (Research) has for decades, but by deploying it over the Internet as advertising-supported services such as search and photo sharing. Even Microsoft Office was starting to feel heat from Web alternatives.

COURTESY: ROBYN TWOMEY

Ray Ozzie and Steve Ballmer head into the future of Microsoft together.

THE FOUR PLANS OF CHAIRMAN BILL

Microsoft has a history of making abrupt, high-risk strategic shifts.

ORIGINAL IDEA	REALITY CHECK
THE WINDOWS ERA BEGINS	
MAY 22, 1990	
Microsoft makes an OS for the masses, a Mac-like system with user-friendly icons and graphics.	Windows 3.0 is a smash. Because PC makers pre-install it, it lays the basis for total software domination.
THE INTERNET TIDAL WAVE	
DEC 7, 1995	
Gates declares the importance of the Internet, putting the Netscape browser in Microsoft's cross hairs.	Microsoft crushes Netscape in the browser wars, but spends years in federal court fighting antitrust charges.
THE .NET NONREVOLUTION	
JUN 22, 2000	
Microsoft unveils .Net, an ambitious, hard-to-define initiative to help customers build web-ready software.	.Net is adopted widely but works best with Windows computers. Sun's Java software continues to thrive on many types of machines.
THE OZZ-MAN COMETH	
NOV 1, 2005	
New strategy declared: meld online services with core Microsoft software, and make money from online ads.	Microsoft needs a new structure and culture to get it done. Google, Yahoo, eBay, and others have a huge headstart.

Fundamental questions faced the group: Was the company at risk? If so, what should it do? Should advertising - already a mainstay of Microsoft's MSN service - become a source of revenue for every division of the company?

It was an austere setting for making tough decisions. The room was cold, and several people complained about the food. Everyone sat elbow to elbow around a U-shaped table crammed into the small room. For 14 hours they debated revenue models, customer trends, the future of the Internet, the size of the advertising op-

portunity, and how Microsoft might have to change. Gradually the executives reached a consensus: Microsoft needed a major makeover.

"At the end," recalls one participant, "Steve was very clear - he went around the room and said, 'If anyone has concerns, you've got to say so now.'"

And who was in charge of this retreat? It wasn't Ballmer. And believe it or not, co-founder and chairman Bill Gates wasn't even present. Running the show was Ray Ozzie, who had been a Microsoft employee for less than two months.

But the chairman and the CEO already had so much confidence in Ozzie - a re-nowned programmer who had created Lotus Notes, one of software's biggest triumphs - that he had become Gates' proxy. Since the retreat, Ozzie's responsibilities have expanded even further. The white-haired, soft-voiced 50-year-old is spearheading the companywide transformation agreed upon at Robinswood.

"I cannot overstate the importance of what Ray Ozzie has done here," Gates says.

Microsoft is turning to Ozzie in a moment of crisis. There have been some embar-rassments, most notably the delay of the long-awaited upgrades of Microsoft's mainstay products, Windows and Office, until 2007.

Much more frustrating for the company has been the stock price, which has barely budged since 2002. Wall Street simply no longer sees Microsoft as a growth busi-ness. The company is still stupendously - and increasingly - profitable: Earnings have grown an average of 33 percent annually the past three years, and in 2005 the company earned $12.3 billion, a net margin of 31 percent. But last year reve-nues increased just 8 percent, to $39.8 billion.

Investors are much more excited about Google, which grew 92 percent, to $6.1 bil-lion. And Google is only the most prominent of a new generation of Net businesses now hitting their stride in both the marketplace and the stock market.

Then there are the really big strategic problems, such as figuring out how to fight back as free open-source software continues its relentless advance around the world. Or - and this was high on the agenda at Robinswood - coming up with ways to negate the advantage that Internet-based companies like Google and Yahoo! have in improving their products whenever they want.

Customers who use software delivered over the Internet can be assured of a state-of-the-art experience as the software is centrally and continually updated. Microsoft, however, has to distribute code for any change to the hundreds of millions of PCs where its desktop software resides. It thus releases new products infrequently. (Vista, the upcoming version of Windows, is the first big upgrade since Windows XP in 2001.)

"I would never underestimate that team," says Dick Lampman, who heads [Hewlett-Packard's](#) ([Research](#)) research labs and has worked with Microsoft for decades. "But right now the rate of change seems to be moving against them."

Gates and Ballmer hate hearing people say things like that. They want to put Microsoft back out in front of the industry, where it has been for most of its history. Gates says he is fed up with Google being seen as the "thought leader" of the Internet Age.

Ballmer says, "We have the birthright to lead the pack. We've got more technology. We've got more experience."

Put simply, Ozzie's assignment is to Webify everything: To intertwine Microsoft's entire product line - software for consumers, software for businesses, Xboxes, all of it - with the vast and ever-growing power of the Net.

"Everything we do should have a presence on the Web," Ozzie says.
Whereas PC software draws mainly on resources on your hard drive, this new software will rely heavily on the "cloud," as they call the Net at Microsoft. The company is planning a suite of applications that run on this new hybrid platform, just as Office and other software run on Windows PCs.

Microsoft took its first big step in this direction in November when it launched Windows Live, a Web site that includes the company's new search service as well as news and e-mail. While Microsoft will still sell plenty of software, Ozzie thinks this shift to the Web will also spawn a huge advertising business. You'll see ads whenever you use certain Microsoft Internet services; ads already appear in Microsoft's Web search product.

Doing all that is even more ambitious than it sounds. For one thing, it is hugely expensive. Software was once a low-capital-cost industry, but not anymore: To deliver a Web-based product line, Microsoft must build a global network of server farms that will cost "staggering" amounts of money, says Ozzie.

That may finally give Microsoft a use for the massive amounts of cash it has kept on hand for years ($35 billion, as of the most recent quarter). And the plan represents yet another abrupt, high-risk strategic shift for a company that in its 31-year history has already gambled on at least three.

Steve Ballmer is not always Mr. Sunshine, but once it became clear that Ozzie would join Microsoft, he went into a day or two of irrepressible elation. He was popping into colleagues' offices in a way he rarely does, talking excitedly about the great Ozzie and how amazed he was that it had all worked out. Ballmer says that he always knew Ozzie would fit in, and that he had wanted to hire him for 23 years.

Adds Gates: "For over a decade we've said that if we had one wish of somebody we could hire...we'd want to hire Ray."

Ozzie commanded unquestioning respect on technical matters from the day he walked in, which is unheard of in Microsoft's competitive culture.

"With Ray, it was like he had always been part of us," says an executive. That deference dates back to the 1980s, when Ozzie began working on Notes, a breakthrough communications and collaboration tool for internal corporate networks that pushed Windows to its technological limits. Indeed, Gates says no one gave the company better feedback on Windows than Ozzie.

Shortly after IBM bought Lotus in 1995, Ozzie quit and founded Groove Networks, which took a Net-centric approach to collaboration, this time for workers inside and outside an office. Microsoft tried several times to buy Groove and finally succeeded last March, when Ozzie agreed to sell for an undisclosed amount. (Groove software is being incorporated into a high-end version of Office.)

Even before he became an employee, Ozzie attended the annual March retreat of the company's top 110 or so executives, at the swank Semiahmoo Resort on the Washington coast near Canada. At that point, Ozzie says, all he was trying to do was better understand Microsoft's corporate culture.

There was a lot to observe. Early in the two-day program was a team-building exercise in which the executives broke into groups of six or seven. Each group was given a bag of parts for a battery-powered Mars rover. The goal: Build it quickly but with the fewest parts. Gates' team won.

The next day the executives were assigned by Ballmer to breakout sessions to brainstorm topics like making Microsoft more agile and improving the company's consumer strategy. Gates, Ozzie, and several other top technologists were put in a group tasked with better defining the "core" - the set of things Microsoft does uniquely well that could be used across all Microsoft's product lines. Not everyone liked the idea - wouldn't it be divisive and demeaning for anyone not working on a project affiliated with this core?

Ozzie drank it all in. "It was the first time I had a chance as an insider to see how people within the company relate to Bill," he recalls of the breakout session.

When the group filed into its appointed conference room, "they tended to just naturally fall with Bill at one end and other people around the sides. In some ways they were being deferential, and in some ways he was just one of the gang in a really lively peer discussion."

Even inside Microsoft, Bill Gates is Bill Gates, World's Richest Man. When he walks through a building, people stop and gawk.

"When you have really strong leaders," says Dan'l Lewin, a vice president who has been with the company five years, "even smart people can become dependent and stop acting smart."

Ozzie can do what Gates no longer can - not only formulate strategy but also help implement it by working with the troops. People tell stories of the approachable Ozzie having long conversations with low-level programmers by the coffee machine about security strategies or other arcana.

"Ray brings people together in a way others don't," says Blake Irving, head of Internet communications products at MSN. "He's sort of a grand unifier across the company."

One conclusion of the Semiahmoo retreat was that the idea of the core needed to be embraced. But as often happens at large companies trying to change, the initiative stalled. Ballmer had assigned several executives to arrange a larger event for the company's senior R&D people to hash out the concept, only to discover at a regular staff meeting that the team refused to organize it. They had concluded that reorganizing around the core was a bet-the-company move requiring much more thinking before rolling anything out to the wider employee population. The room was silent. Nobody was quite sure how to proceed.

Then the CEO had an idea.
"Everybody was pretty busy," Ballmer says, "and here he is - Mr. Ray Ozzie himself! He understands these issues."

So Ballmer assigned Ozzie to be responsible for figuring out not only what were the company's core technologies, but also the "essence and spirit," as Ballmer says, that the company should "hang itself around."

Soon after, he asked Ozzie to chair the Robinswood off-site in June. The newcomer confesses that on receiving this assignment he had "more than a bit of anxiety, given that I'd never worked with these folks before."

But many of the company's leaders, including Gates, were impressed with the way Ozzie looked at technological challenges.

"Ray really starts with the customer," says Windows and MSN boss Kevin Johnson. "He looks at things 'outside in,' as he says, not technology-out."

Many executives now concede that Microsoft tended to take the opposite approach - focusing first on the technical possibilities and only later on what customers really wanted.

As a senior executive puts it, "Our customers buy our products in an integrated fashion, but we build them in a siloed fashion."

Ozzie spent several weeks thinking about the company's problems, talking to Gates, and writing down his thoughts. The 51-page memo he wrote for the Robinswood meeting dwelled at length on the kind of trouble-free integrated customer experience he thought Microsoft ought to deliver. "What is being proposed herein is not the be all and end all with regard to significant initiatives," the introduction

reads. "[It] is intended to be a unifying force. A binding force. A galvanizing force for all major initiatives going on within the company."

Gates, Ballmer, Ozzie, and one or two others gathered beforehand to plan tactics. Getting buy-in from everyone was essential. But Ballmer asked Gates not to attend the retreat because he was worried the founder's presence might keep people from freely expressing doubts about the plan.

Ozzie started the meeting talking about the growth of the Internet and the fact that users now often have multiple devices and lots of ways to interact with technology. He spoke of the growth of broadband, the rapid development of Web advertising, and the challenge posed by Google and others.

His manner, as usual, was genial and nonconfrontational - but he didn't mince words about Microsoft's past mistakes. With Gates absent, Ozzie says, the entire group went through a "cathartic exercise of venting about every negative thing" in the company's technical and organizational strategy of recent years. "It was story after story after story."

Opinions varied about the move toward services. Some felt this wasn't the time to be thinking about grand strategic shifts, because thousands across the company were still working around the clock to complete the new versions of Windows and Office. Others spoke excitedly about how weaving Internet capabilities into Microsoft's products could reignite growth. After hours of back and forth, the hoped-for consensus emerged.

"At the end of that thing you looked each other in the eye and said, 'I'm ready to go do this,'" says Kevin Johnson.

Immediately after Robinswood, Ballmer initiated a series of weekly half-day meetings for the executives who had been at the retreat. Assistants scrambled to clear schedules; Ozzie set the agenda and chaired the meetings.

Each week for eight weeks they debated a specific aspect of the new strategy in the bland conference room adjacent to Ballmer's office - What should the user interface look like? What about the technical architecture?

Ozzie remembers "vigorous disagreement" over business models based on advertising revenue, vs. those based on transaction fees or traditional licensing.

"It's clear that in the consumer realm, online advertising is this new economic engine," says Ozzie. "It's not as obvious how that engine is applied in the enterprise market."

But the companywide excitement about the potential of online advertising is palpable. MSN's Blake Irving calculates that annual worldwide advertising spending amounts to about half-a-trillion dollars, vs. total software industry revenue of about $120 billion.

"Only 3.6 percent of that half-a-trillion today is being spent online," he says with relish, "even though 20 percent of all media viewership - including instant messaging, et cetera - is online now. So just assume that 3.6 percent grows to match the media opportunity. We want to be part of as much of that 20 points as we can."

In mid-September Ballmer announced a set of major organizational changes and promotions. Ozzie was officially named chief technology officer. Most significant, Windows and MSN were joined in a new Platform Products and Services group headed by Johnson. Connecting MSN with the all-important Windows was a significant change: It was the first outward sign that things at Microsoft were finally shifting toward the Net.

Ozzie and his staff moved into the tightly secured executive suite where Gates and Ballmer work, on the top floor of one of the many nondescript office buildings on Microsoft's 226-acre campus. Mail rooms were converted to offices to accommodate the newcomers. Ozzie's brother and alter-ego, Jack, himself a top programmer, moved from Groove's headquarters in Beverly, Mass., to join the team.

(Ozzie himself still has a house in Massachusetts. In the early months he flew home every other weekend in a company jet. Now his wife flies out often to visit him in the high-rise apartment he's bought overlooking Seattle's harbor.)

Ballmer asked Johnson to work closely with Ozzie and run organizational interference for him. Before this new platforms job, Johnson had spent 2 1/2 years running Microsoft's sales, where he talked to customers every day. He shares Ozzie's user-first obsession more than any other top executive, and the two bonded immediately.

"It's not quite like Bill and Steve's marriage, where they finish each other's sentences," says an executive who works with all of them, "but it's a very good partnership."

In September, Ballmer made another big move, hiring Kevin Turner from Wal-Mart to be the company's new chief operating officer. (The company hadn't had a COO since 2002.) The deliberations around the new strategy had convinced Ballmer he had to step back from day-to-day management, so he wanted an operations expert. Turner had been CEO of Sam's Club at Wal-Mart, and before that had been Wal-Mart's CIO.

On Nov. 1, Gates and Ozzie appeared before the press in San Francisco to announce some of the products and services Ozzie and company had been brewing behind the scenes. After six months, the core had taken concrete form - as Windows Live.

Two days before the unveiling, Ozzie and Gates had sent a pair of memos to Microsoft's top 100 managers and technologists. Gates had turned 50 that weekend, and at this moment of passage he was letting someone else do what only he had done before - lay out the grand strategy.

Gates' two-page memo was basically a cover letter for Ozzie's impassioned seven-page argument for upheaval, "The Internet Services Disruption."

Gates wrote, "The next sea change is upon us." He also wrote that he expected Ozzie's memo would eventually be seen to be as critical to the company as the most famous memo he himself had ever sent - the 1995 one called "The Internet Tidal Wave," which reoriented the company to battle Netscape, the Google of its day. After that memo, Microsoft made its Internet Explorer browser the de facto standard on the Internet.

Ozzie composed the memo himself - with trepidation. "The first time I showed it to Bill," he says, "I didn't know if he was going to say, 'Are you crazy? You just got here!' But he said, 'No, this is really good, and I think we should emphasize this or this.'"

Inevitably, the memo leaked. But the world generally liked what it saw. On his influential blog, Dave Winer, one of software's top programming thinkers and a notorious curmudgeon, wrote, "One thing about MS culture, even after all these years, there's a core inside that's...willing to change in order to win. Good for them." In the days after the memo was posted online, Ozzie was deluged with positive feedback from Microsoft employees.

Now comes the hard slog of reinvigorating a 70,000-employee business. Many of the new services the company is coming up with cut across multiple parts of the organization and will require much closer cooperation than has been common in the past. That makes for tension.

There is also restlessness around the company as the MSN group's power grows in the age of services. It was seen for a long time as a somewhat flaky outpost.

One salesman tells an in-house joke: "What's the difference between MSN and the Boy Scouts? The Boy Scouts have adult supervision."

But those freewheeling MSN folk are roaring ahead now. "Our people feel this is validation, and that the quest we've been on is a righteous quest," says MSN's Irving.

MSN is mobbed with internal applicants when jobs open up. Irving says teams at MSN are working on 20 new products to be unveiled this year. "At our business planning review, Steve and Bill looked at our roadmap and said it was the most aggressive they'd ever seen," he adds proudly.

One new service Microsoft has already started to deploy is online e-mail for large organizations. The idea is to use the Windows Live server farms to host e-mail so that companies don't have to operate and maintain their own servers, as they historically have with Microsoft Outlook.

"We can do it pretty economically when you look at our marginal cost of hosting an-other mailbox in our massive infrastructure," says Ozzie.

As massive as that infrastructure is now, Ozzie says it pales in comparison to what will be needed when everyone is using the Internet for high-definition video and other data-rich goodies. He says he has a 300-page printout on his desk that shows where telecommunications and power assets are located globally, country by coun-try.

"Just think about where there are windmills, dams, and other natural power sources around the world, and that's where you're going to see server farms," he says.

Though he won't get very specific, Ozzie says that he is amazed at the amounts Microsoft is spending, and that the cost of building the physical infrastructure for Web services will be a major barrier limiting the number of players in this business.

"The people who could build a viable services infrastructure of scale," he says, "are companies that have both the will and the capacity to invest staggering amounts of money - staggering amounts." Think billions, many billions.

He goes on, "Who has the will and the capacity? Exxon could do it, but do they have the stuff to use it for?" Microsoft, says Ozzie, will have a very large number of applications to make the investments justifiable.

Microsoft has to move before Google or even Yahoo! offers its own large-scale services for businesses over the Web. Up to now those companies have focused on consumers, but it's widely believed in Silicon Valley that Google, at least, will soon launch corporate e-mail services to exploit the infrastructure it's already built for Gmail.

(Google is rumored to have a million servers around the world and, according to a knowledgeable source, is already the top electricity user in at least one large U.S. state. Google would not comment.)

Microsoft is planning to use its server farms to offer anyone huge amounts of online storage of digital data. It even has a name for that future service: Live Drive. With Live Drive, all your information - movies, music, tax information, a high-definition videoconference you had with your grandmother, whatever - could be accessible from anywhere, on any device.

Google apparently has similar plans. An internal memo accidentally posted online in March spoke of company efforts to "store 100 percent of user data" and mentions an unannounced Net-storage system called GDrive.

Ozzie correctly says it's too early to see much concrete impact of his efforts on Mi-crosoft. The new Windows and Office were designed long before the company changed direction; when they do come out, they'll pretty much be souped-up desk-top versions of their predecessors. And when the Ozzie effect becomes apparent,

there's no guarantee it'll all work. His experience pre- Microsoft was entirely as a developer of software for business - not consumers, who account for a big chunk of Microsoft's sales. Nor does he have experience with advertising. But if his plan succeeds, his job will look more and more like the one historically played by Gates: formulating strategy and then working in the trenches to help people implement it day in and day out.

Having Ozzie around frees Gates to attend to other things. He spends a lot of time as company ambassador, calling on CEOs and government leaders. He doesn't say so, but some who know him well say he also appears to be more engaged with the global-health work of the Bill and Melinda Gates Foundation than with Microsoft.

Does Ozzie's growing role at Microsoft mean Gates' is declining? Asked that question, Gates hesitates. "The big-picture strategy here at Microsoft isn't just a single-person job," he begins.

Then he explains that there are five people he considers responsible for it, starting with himself, with Ozzie next. (The others are David Vaskevitch and Craig Mundie, both CTOs, and Rick Rashid, who heads Microsoft Research.)

But Gates also says the strategic shift toward services "wouldn't have happened if we didn't have Ray to pull it together." He says his own job is to take the largest possible view of the company and make the biggest long-term decisions, like whether to keep investing in the tablet PC, or to move into Internet telephony.

Ballmer, when he's not promoting Vista and the new Office - which, after all, is where Microsoft will be getting almost all its profits over the short term - has been serving as ad-salesman-in-chief. He recently spent a day in L.A. meeting with marketers from companies like [Nestle](#) and [Toyota](#) ([Research](#)), talking about online ads. Microsoft is becoming a media company.

As Ozzie pushes to remake Microsoft, he does it knowing that everything the company does is examined under a microscope. He frequently recalls something a friend at another tech company told him before he started his new job.
"He gave me one piece of advice," says Ozzie, "and that was 'Keep it real.' He said, 'I don't want to see you shilling for [Microsoft] Exchange and trashing Notes.'"

Ozzie wants to transform Microsoft without sacrificing his integrity. It won't take long to find out if he can.

Reporter Associate Jia Lynn Yang contributed to this article. ∎

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