Shortlisted for the FT/McKinsey
Business Book of the Year Award 2015

LOSING THE SIGNAL



THE UNTOLD STORY BEHIND THE
EXTRAORDINARY RISE AND
SPECTACULAR FALL OF BLACKBERRY

///CONTENTS

ABOUT THE BOOK
ABOUT THE AUTHORS
TITLE PAGE
DEDICATION
PROLOGUE

- 1 / REACH FOR THE TOP
- 2 / ENCHANTED FOREST
- 3 / STAYING ALIVE
- 4 / LEAP
- 5 / SPREADING THE GOSPEL
- 6 / TOP THIS
- 7 / EL CAMINO
- 8 / GAME OF PHONES
- 9 / ROCKET DOCKET
- 10 / THE JESUS PHONE
- 11 / STORM
- 12 / OFFSIDE
- 13 / DISCONNECT
- 14 / GOAT RODEO
- 15 / FAULT LINES
- 16 / WATERLOO SPRING
- 17 / HANGING UP

EPILOGUE
ACKNOWLEDGMENTS
NOTES
INDEX
COPYRIGHT

/// ABOUT THE BOOK

In 2009, BlackBerry controlled half of the US smartphone market.

Today that number is less than one per cent.

What went so wrong?

Losing the Signal is the riveting story of a company that toppled global giants before succumbing to the ruthlessly competitive forces of Silicon Valley. This is not a conventional tale of modern business failure by fraud and greed; instead, the rise and fall of BlackBerry reveals the dangerous speed at which innovators race along the information superhighway.

With unprecedented access to key players, senior executives, directors, and competitors, *Losing the Signal* unveils the remarkable rise of a company that started above a bagel store in a small Canadian city and went on to control half of the US smartphone market. However, at the very moment BlackBerry was ranked the world's fastest-growing company, internal feuds and chaotic growth crippled the company as it faced its gravest test: the entry of Apple and Google into the mobile phone market.

Expertly told by acclaimed journalists Jacquie McNish and Sean Silcoff, this is an entertaining, whirlwind narrative that goes behind the scenes to reveal one of the most compelling business stories of the new century.

/// ABOUT THE AUTHORS

Jacquie McNish is a senior writer with *The Globe and Mail* and before that *The Wall Street Journal*. She has won seven National Newspaper Awards and is the author of three bestselling books, two of which won the National Business Book award. She lives in Toronto with her husband and two sons.

Sean Silcoff is a business writer with *The Globe and Mail* and before that the *National Post* and *Canadian Business* magazine. He is a two-time National Newspaper Award winner. He lives near Ottawa with his wife and three children.

LOSING THE SIGNAL

THE UNTOLD STORY BEHIND THE

EXTRAORDINARY RISE AND

SPECTACULAR FALL OF BLACKBERRY

JACQUIE McNISH / / / SEAN SILCOFF



FOR STEPHEN

—JACQUIE McNISH

FOR ERIN, CLARA, BEN, AND JACK

—SEAN SILCOFF

///PROLOGUE

Jim Balsillie fidgeted with his phone as his Dassault Falcon jet touched down at Dubai's international airport. It had been several hours since the co-chief executive and relentless global pitchman for Research In Motion Ltd. (RIM) powered off his BlackBerry when the plane left the company's Canadian hometown in Waterloo, Ontario. The man who convinced the world it could not operate without BlackBerry phones was itching to read his e-mails.

A restless forty-nine-year-old who kept in shape biking more than one hundred miles a week, Balsillie faced an uphill cycle in Dubai. After peaking two years earlier in 2009 as the world's biggest seller of smartphones and falling just shy of \$20 billion in revenues, BlackBerry's sales were tumbling; its stock price was down more than 50 percent. Rivals Apple and Samsung had moved into the lead with a new generation of smartphones that expanded demand for wireless devices beyond the professional classes to fun-seeking consumers. The once addictive lure of BlackBerry's miniature keyboard and secure e-mail and message services was now being eclipsed by touch-screen iPhones and Androids that put Angry Birds games and YouTube videos into people's palms.

Nearly 1 billion people—a seventh of the world's population—owned smartphones, devices that hadn't existed a decade earlier. Not since the advent of network television in the late 1940s had a new technology been embraced so quickly by consumers. The race for market dominance was rapid and brutish. A few industry sovereigns, Motorola and Nokia, had already toppled. Some

figured RIM would be the next casualty. The latest sign was a botched launch of a PlayBook tablet to compete with Apple's spectacularly successful iPad. The PlayBook had a tiny fraction of the apps that made the iPad popular and, in its rush to market, RIM had introduced the tablet without its trademark e-mail service.

Balsillie was in Dubai to deliver the keynote speech at the Persian Gulf's premier consumer electronics trade show. He knew he had to project confidence if he was going to reshape the industry narrative that RIM had lost its way. Offstage he faced an even bigger challenge. He had days of back-to-back meetings lined up with RIM's top local customers: ultrawealthy Middle East clients and telecom executives obsessed with BlackBerry's secure instant messaging service, BBM. He had to convince them that RIM's planned launch of the second generation of BlackBerry smartphones, already delayed by several months, would be better than Steve Jobs' iPhones.

As his jet taxied along the steaming tarmac, passing large patches of bleached sand and desert scrub, a bead of ticklish sweat traced down Balsillie's temple. He stared with disbelief at the device that revolutionized communication. Seconds earlier, tiny white bars formed a digital staircase in the upper right-hand screen of his BlackBerry Bold, indicating the phone was receiving a strong signal from a local wireless carrier. Good, good. But where were the four white dots indicating a connection to the BlackBerry network? Or the red flashing light announcing the arrival of e-mails in his in-box? Balsillie clicked the envelope icon on his screen to see if his in-box was filling up. *Nothing*. No new e-mails? After so many hours? Impossible. He closed his eyes. Shortly before the most important sales pitch of the year, the turnaround moment the company needed to bounce back, the product he was championing wasn't working.

Slough, a town twenty miles west of London, England, has been little more than a historical footnote since its founding. It first enjoyed celebrity with British aristocracy in the 1660s as a resting place on the road to the therapeutic waters in Bath. In the 1930s the landscape was so fouled by smokestack factories that poet John Betjeman called for bombs to blow the town to smithereens. The BBC satire *The Office* gave the town another image problem in the early 2000s, choosing Slough (rhymes with "now") as the setting for a fictional series about the comically dysfunctional branch of a paper merchant.

On that October day in 2011, Slough would become the location of another corporate mishap. The problem began inside a nondescript gray office building. The squat facility was one of a handful of RIM's network operating centers that directed e-mail and BBM traffic for 70 million BlackBerry users. The nerve center of the Slough operation was a windowless room that was kept refrigerator-cold. Inside this brightly lit room, rows of gray steel cabinets hummed, firing millions of electronic messages every minute for customers in Europe, the Middle East, and Africa. A sister center in Waterloo, Ontario, handled the Western Hemisphere. No other phone maker operated its own in-house network, a rapid, encrypted, and tightly sealed system ensuring reliable high-speed traffic. That's why President Barack Obama refused a Secret Service missive to yield his BlackBerry after he was elected in 2008. Kings and queens, sheiks and business chieftains, were equally addicted to their "CrackBerrys."

Hours before Balsillie landed, the world's safest, most dependable wireless network responded to what should have been a minor problem. A server crashed. Normally, crashes aren't a big issue. The machines, computerized systems that briefly warehouse large packets of data such as e-mails, are so crucial to BlackBerry's network that reserve servers are continually powered up for emergencies. Known as hot backups, these stand-in machines are a primed, well-fed pony express, ready and waiting to spring forth.

RIM's recovery protocol was going according to plan within seconds of the Slough crash. The disabled server was shut off and its stalled messages began switching over to the backup. Unfortunately one component failed to do its job. A single router refused to route. The size of a suitcase, routers are computerized Rolodexes that store a database of Internet Protocol addresses to identify where incoming e-mails should be sent. When a new server takes over, routers are *supposed* to send waiting e-mails. Instead of sending addresses to the new server, the router, infected by an undetected software bug, instructed the disabled computer to restart—again and again and again. Before RIM's engineers knew what was happening, the two powerful machines were locked in a dangerous shoving match. The faulty router kept hammering the restart button on the disabled server, while the healthy machine fought back, attempting to regain control. When the slugfest was over minutes later, the servers had both been kayoed. The router was now lifeless: not only had it stopped working, but its memory was wiped clean.

///

It was two in the morning when Mike Lazaridis got the call. Research In Motion's founder was a quick draw on his BlackBerry, even when startled awake. This call was from an engineer from the control room of the Waterloo Network Operating Centre, known internally as the NOC (sounds like "knock"). After a short conversation, Lazaridis pulled himself from bed, explaining to his half-awake wife, Ophelia: "The NOC is down."

Lazaridis had been through enough outages to know the last place he needed to be was the NOC control room, located on the top floor of a low-rise RIM building. He knew from experience that stress levels rose the minute he stepped into the war room. The company's founder was an intimidating presence, and attending engineers had enough to worry about trying to resuscitate the damaged network. In his office he called into "the dial-up," an emergency conference call that customarily takes place during an outage. At the other end, Robin Bienfait, chief information officer, tried to explain what was happening. Something unusual, something bad, was going on in Slough. Nobody could explain why, but millions of e-mails had stopped moving through Slough's servers. Its systems had collapsed. Standard responses were making things worse. Stalled e-mails from Europe, the Middle East, and parts of Asia were rerouted to North America, but the cascading traffic was more than Waterloo could manage. North America was likely going down. If the situation didn't change, it looked like the entire global network would be knocked out.

Aware of the consequences, Lazaridis tapped out a two-word text message on his BlackBerry to Balsillie: "Call me." An e-mail devotee, Lazaridis rarely bothered with text messages. But with the network outage, short text messages, relayed outside RIM's network through local carriers' wireless signals, were his only option. When his phone rang later, Lazaridis was prepared.

"Jim, everything is okay, but you should know there is a problem. Our network is down. Nothing is getting through. It is a complete outage."

"Down? How is that possible?" Balsillie asked. He had stepped off the jet in Dubai and was still fiddling with his unresponsive BlackBerry.

"We don't know why. Everyone is trying to fix it. We will fix it. We just don't know when we are going to get it back As he hung up, Balsillie's instinct was to jet back home to help manage the crisis. But fleeing Dubai would make the situation worse, he realized. BlackBerry users everywhere were going through angry withdrawal. While Lazaridis's team raced to revive the network, he had to reassure powerful corporate and government customers that a fix was on the way. He would have to tap what little reserves of energy he himself had after months of corporate defeats and this new, potentially ruinous network outage.

Between meetings he juggled calls from powerful wireless carriers and major RIM users, Fortune 500 companies, and powerful governments. Unless their service was back up soon, customers complained, their faith in the company would be irreparably damaged.

"Don't worry," Balsillie reassured everyone. "It's almost fixed, another hour or two, tops, and we'll be back up."

Hours later, he spoke to a full house at the Gulf Information Technology Exhibition, but nobody listened to his pitch on the latest Bold phone features. Everyone wanted to know how much longer they would be without email and BBM messages. His private meetings were equally grueling. The region's powerful business leaders were desperate to get back on line. "When will my BlackBerry start working again?" they begged.

Balsillie told everyone the same thing: *Hang on, any minute now*. To further placate powerful, needy clients, he doled out special editions of the company's Bold phones. To the most powerful sheiks, he presented custom-made gold or white phones. The recipients were delighted, especially when Balsillie assured them they were one of two honorary recipients of the exclusive prize. The other phone, he confided, belonged to Mohammed bin Rashid Al Maktoum,

constitutional monarch of Dubai and prime minister of the United Arab Emirates. When Balsillie left Dubai on October 13 he had handed out dozens of the "exclusive" phones. By then, however, the flashy devices were little more than paperweights, a gaudy symbol of his company's missteps in recent years. RIM's global network was still knocked out.

Until that October day, BlackBerry was an improbable success story, the winner of one of the wildest, most disruptive technology races of the past century. A pint-sized company from a small city in Mennonite country, led by two men with little in common but their outsized ambition, had changed the way the world communicated. Just as desktop computers unseated mainframes by simplifying and accelerating once laborious tasks, BlackBerrys cut through computer wires and phone lines to free workers from desks. E-mails and documents could be fired off from cars or sent before the check arrived at restaurants—all without anyone knowing the sender was out of the office.

BlackBerry changed more than the workplace. We were liberated from offices and homes. Employers, clients, family and friends too, could reach us wherever wireless radio signals traveled. Work was no longer nine to five; it never ended. The same was true of socializing—we never had to be alone with our thoughts. BlackBerrys made us fast and efficient, but a little neurotic. The handsets transformed legions of users into addicts. For three days in October 2011, RIM customers were forced to go cold turkey. No BlackBerry. Where did everybody go? Life seemed impossible. When the outage ended, users were as committed as ever to mobile messaging. For Research In Motion, however, it was a different story. RIM was losing the signal to the market it created.

PART ONE

IF AT FIRST, THE IDEA IS NOT ABSURD, THEN THERE IS NO HOPE FOR IT.

—ALBERT EINSTEIN

1 / / REACH FOR THE TOP

The students at Prince of Wales Public School had long since stopped paying attention to Reg Nicholls squeaking away on the blackboard. Every few minutes the math teacher frowned, erasing part of his work. Then: more numbers, a spiraling out-of-control formula, and that awful scraping of chalk on blackboard. Finally, the classroom fell silent. Poor Nicholls stood motionless. "Can anyone tell me where I went wrong?" he asked.

An answer came from the back of the room: "When you were born."

The room erupted. Nicholls raced to the back of the class, dragging his heckler into the hallway. The sputtering, mottle-faced instructor pinned twelve-year-old Jim Balsillie against a wall of lockers. Balsillie stared right back at Nicholls. Balsillie's real punishment came the next day when he was kicked out of math. He'd have to study on his own for the rest of term. See how far that gets you, his teacher said. Oh, and you're still going to have to join classmates for the compulsory provincewide math test in a couple of weeks.

Later that month, Balsillie rejoined his class for the big test at the Peterborough, Ontario, school. The smart-ass, it turns out, really was smart. Studying all on his own, the lippy twelve-year-old math castoff scored first in the grade 7 test, not just at Prince of Wales but in the entire province. A regional superintendent traveled to the school to bestow the 1974 math honor on him. When he raced home to tell his mom, Laurel, about winning the award, she just shook her head, laughing, repeating a line she often used to sum

up her difficult middle child: "Jim, you always fall in shit and come up smelling like roses."

Getting in trouble was relatively easy in Peterborough's working-class west end, where houses were small and ambitions were oversized; where lawns doubled as parking lots and sports games frequently ended in fights. Young Jim, the middle of three children born within three years, fit right in with the time and territory. "I was always a troublemaker," he says, "mouthy and cocky." Growing up, Balsillie played a lot of hockey and lacrosse and loved watching Peterborough Petes junior hockey games at Memorial Centre with his father, who had seasons tickets. Many Petes players made it to the NHL—including Bob Gainey and Steve Yzerman—and Balsillie dreamed of one day following them and returning to his hometown with hockey's greatest trophy, the Stanley Cup.

Even more important to Balsillie than Petes players was the team's coach. "The leading figure in my eyes was Roger Neilson—an innovative coach in so many ways." Neilson was junior hockey's infamous trickster. When pulling his goalie for an extra attacker, Roger had his net-minder leave his stick across the mouth of the crease to stop long shots. When he was managing a local baseball team, Neilson had a catcher hide a pared apple in his equipment. When a runner for the other team dangled off third base, the catcher fired the apple over his third basemen's head. The jubilant runner then dashed home, smiling, only to be touched out with the real ball by Roger Neilson's catcher at home plate.

When he wasn't pulling a fast one, Neilson fought the rules. That's how he became known as "Rule Book Roger." The establishment—referees and umpires, who were league officials—hated Rule Book Roger. Not teenage Jim Balsillie: he loved the maverick as much as he loved the game. Neilson's skirmishes mirrored the deep-rooted conflicts with authority that defined Balsillie's teenage years. He

was close to his mother and her parents, but he sparred frequently with his father; he was a bright student who alienated teachers with a razor-sharp tongue. Although suspicious of figures of power, Balsillie also aspired to join Canada's business establishment. Balsillie would struggle throughout his career to make peace with his warring two-headed demon: the positive force of ambition versus a deep-rooted distrust of authority.

Predictably, perhaps, Balsillie's trouble with those in charge first became manifest in dealings with his father, Ray Balsillie, a descendent of French Métis, Canadian aboriginals of mixed European and indigenous ancestry that trace their roots to the fur trade. The Balsillies were a complicated bunch. One wing of the family worked at Saskatchewan's fabled Cumberland House, a northern Hudson Bay Company trading post that once housed the ill-fated Franklin expedition to the Arctic—Scottish explorers who perished in the far north in the 1840s. The Balsillie clan shares both Scot and Métis blood. All of which explains Jim Balsillie's piercing blue eyes, sharp cheekbones, and olive skin.

Ray Balsillie whose family moved from Manitoba to a small town south of Waterloo when he was a boy, left the family home as a teenager to make a fresh start in Seaforth, Ontario, with the Royal Canadian Air Force. As an adult Ray Balsillie seldom spoke of his native heritage, and his two sons and daughter were discouraged from raising the subject. It was only when Jim traveled as an adult to Winnipeg that he learned that an aunt was one of that city's most notorious residents. Gladys Balsillie, who died in 1987, began her career as a pilot before opening a popular restaurant and music venue, the Swinging Gate. When the restaurant closed, she made her mark managing exotic dancers at Winnipeg hotels. At her peak, the "Queen of the Strippers" managed more than one hundred male and female performers. Ray may have tried to hide his family's

colorful past under the lush blue-green carpet of Ontario cottage country, but there was a strain of restless adventure in Balsillie blood—a history of flesh and fur traders.

Jim was born in 1961 in Seaforth, a small town near Lake Huron. Shortly after, Ray began moving the family around, accepting positions as an electrical repairman with various Ontario companies. Eventually the Balsillies settled in Peterborough, a small, conservative city in the heart of Ontario that, apart from their neighborhood, was straight as an accountant's ruler. When Jim was growing up, Peterborough was a predominantly white, churchgoing community defined by Trent University, a handful of U.S. manufacturing branch plants, and the summer influx of affluent Toronto cottagers. According to Jim, Ray Balsillie viewed himself as an outsider in the upbeat town; he gradually adopted a forlorn, Willy Loman-like air of defeat. "He grappled with insecurities," Balsillie says of his father. He and his dad's relationship "wasn't all hugs and kisses."

As Ray Balsillie withdrew from social activity, devoting his spare time to storing found objects and oddities in the family house, Jim flew in the opposite direction, growing increasingly ambitious. He cut his teeth as a salesman at age seven, selling Christmas cards door-to-door as his mother supervised from the sidewalk. Soon there were multiple paper routes, a painting business, and a job manning the lift at a nearby ski hill.

"I wanted the independence. I wanted nice things. If you wanted books, records, a car, athletic gear, you had to go earn it," he says.

What Balsillie really wanted was to be someone. Upon reading Peter C. Newman's seminal 1975 study of Canada's cozy business aristocracy, *The Canadian Establishment*, the tradesman's son decided that he had to join the country's most inbred club. Tracing the education and early career paths of powerful corporate chieftains mapped out in

Newman's book, Balsillie realized he needed to take three giant steps: first, be accepted by an elite undergraduate school; second, land an accounting job at the establishment firm of Clarkson Gordon; and third, graduate from Harvard Business School. Balsillie had been an indifferent student who, except for his grade 7 home run in math, earned only average marks. He threw himself into studies his final year of high school. Upon being accepted by the University of Toronto's prestigious Trinity College, Balsillie replaced his childhood dreams of professional hockey with a new yearning. "I remember deciding I was going to be the best student in the history of the University of Toronto, set every academic record imaginable, prepare for every assignment, get 100 percent on everything," Balsillie says. "I was pretty sure they were going to put up a statue of me."

///

It was deafening, like having your head next to a row of whirring propellers in an airfield. Grade 12 students at W. F. Herman Secondary School, in Windsor, Ontario, were busy in shop class, revving machines under the watchful eye of their electrical shop teacher, John Micsinszki. Students attached wires to motors, generators, instruments, and electrical panels at worktables. A bigger racket came from the back where a closet-sized power supply fed electricity to worktables. Once everything was plugged in, kids measured load factors, testing the efficiency of power coursing through machines.

The roar also tested one's ability to think. Minutes after starting, a confused student crossed wires on a motor, causing a burst of sparks. Micsinszki flew to the back of the shop to shut everything down. In his haste, he forgot students were still running generators at workstations. Within minutes, the machines routed so much electricity back to the idled power supply that it overheated, belching

plumes of acrid fire and curdling purple smoke. Now no one could see or hear. Micsinszki shouted for everyone to get out, turned off the motors, and extinguished the fire. When the smoke cleared, he knew he was staring at a financial and physical mess. Unless he figured out how to fix the fried machine, it was going to be impossible to teach electronics.

The solution to the mess arrived minutes later when a tall, broad-shouldered student with a thick hedge of dark hair returned to the shop room. Most kids spying the wreckage of Micsinszki's shop class complained of a sulfurous smell. Not Mike Lazaridis. He went right to the problem, examining the machine's wounded electrical panel. Micsinszki felt that no student at W. F. Herman had a keener grasp of applied science. A polite student with an easy smile, he was always asking permission to reassemble boxes of unwanted equipment donated by local companies. At first Micsinszki insisted Lazaridis study manuals. Soon, though, the prodigy was taking apart and assembling machines, even early, primitive computer systems, on the fly.

"Think you can fix this, Mike?" his teacher asked, nodding to the smoldering mess. After squinting at its wounded organs, Lazaridis offered a confident smile. It took months of tinkering, but Lazaridis eventually succeeded in breathing life back into the charred machine. News of his wizardry spread. Soon teachers were driving Lazaridis to their homes to repair broken TVs and stereos. His most lucrative job came from performing a favor for the school's librarian, who also coached W. F. Herman's Reach for the Top team. In the 1970s, Canadian high schools competed for a chance to shine in a nationally televised academic quiz show hosted by a young, pre-Jeopardy Alex Trebek. The key to the contest was connecting agile, well-stocked minds to gunfighter-fast buzzer hands.

W. F. Herman's practice buzzer was always breaking down—ropes of electrical wire came loose from battered hand controls. Lazaridis grew so frustrated with repair requests that he rebuilt the contraption at home, creating a simpler network built around a single thick cable connecting a control console to eight buzzer boxes, each housing a small light and electrical circuit that automatically reset the device for the next answer. Soon other schools were clamoring for the more reliable devices. By the time he graduated from high school, Lazaridis had sold enough buzzers to pay for his first year of university tuition.

It would be too easy to call Mike Lazaridis a born innovator. Better to say he excelled at the family business, which was transformation, new opportunities, and, sometimes, wholesale reinvention. Much of Mike Lazaridis's drive, the airy confidence everyone commented on, was shaped by his family's remarkable history. Born in Istanbul in 1961, Mihal Lazaridis was the first of Nick and Dorothy Lazaridis's two children. Greek transplants in a bustling Turkish city, his parents operated a women's clothing store. Like many Christians in Turkey, they found conditions difficult. Discrimination against non-Muslims was on the rise and the prospect of a compulsory military training program in a Muslim-dominated army promised further hardship. In 1964, the family of three followed Nick's brother, Paul, to Germany, where the siblings began training as tool and die makers. Dorothy Lazaridis earned extra money assembling hats from their small apartment. Four-year-old Mihal kept out of the way by making his own creations. One was a record player made out of Lego blocks, a pin, rubber bands, and a revolving tray. The creation never pulled music from his parents' records, but it did produce enough sound to convince them that their son was unusually skilled.

In 1966, the family followed Nick's brother again, this time to Canada in search of a job in North America's expanding automotive sector. A 1965 bilateral agreement relaxed trade restrictions around auto manufacturing, allowing Detroit automakers to integrate production plants in Canada and the United States. Nearby Windsor was now home to factories producing duty-free car and parts factories for sales in both countries. Nick soon landed a coveted job at a Chrysler assembly plant. Dorothy took part-time jobs as a waitress and seamstress. They saved money, hoping to buy a house and allow Nick to return to his retail roots. When Mihal, now Mike, wanted a sled to negotiate his new homeland's winter, Nick taught his son how to make it out of spare parts.

The Lazaridises' journey instilled in their eldest son an enduring belief that the world was what you make it and Canada was a place where dreams could come true. "It takes a lot of guts to leave behind your country, your family, and my dad's business and move to a whole new country and learn a whole new language," Lazaridis says. "In a sense [my parents] were entrepreneurs; they were explorers. To me, [change] was an opportunity."

When Mike was eight, his family had finally saved enough for a house with a room for him and his baby sister, Cleopatra. The Lazaridises moved into a two-story, postwar brick home in an east-end Windsor neighborhood filled with European and South American immigrants. Mike's interest in science was now a passion. With his father's help, he set up a worktable in a basement room that became known as "Mike's laboratory." One of his first projects was a machine that might quicken the transformation from Mihal to Mike. After failing a spelling test at Ada C. Richards Public School, Lazaridis asked his father to purchase a cassette recorder. With a spelling book in front of him he sat in his lab reading hundreds of words out loud to the machine, pausing after each word before announcing the correct

spelling. Night after night he turned the electronic teacher on to test himself. Before long, he was competing in school spelling bees.

Basement quests grew more sophisticated after Lazaridis received a secondhand copy of *The Boy Electrician*, a chatty how-to guide for understanding and building electrical machines, radios, and other equipment. Lazaridis still cherishes the worn book like an old friend, but his early adventures with *The Boy Electrician* were frustrating. When he was able to scrape together money for needed parts, he discovered Windsor stores didn't stock items he needed, probably because his guidebook was published in 1914. Rather than discouraging Lazaridis, the setbacks deepened his determination, instilling in him a lifelong attention to thrift. If he could not afford or find materials, he would make them. There was always another way if you were smart and resourceful.

Lazaridis's best friends shared his love of science. Ken Wood's mom was a science teacher who provided ingredients for backyard experiments involving gunpowder, iodine bombs, and handmade rockets. His second pal, Doug Fregin, was a slight, painfully shy boy with thick glasses and a lazy eye who escaped teasing by building model planes. After Wood's family moved, Fregin became Lazaridis's shadow. "They were always together," says Bob Oxford, a longtime school classmate. Although neither science whiz joined other boys in daily games of hockey and football, both were welcomed into the neighborhood.

"They were accepted because everyone liked Mike," Oxford explains.

While Lazaridis read every science book at the local library, Fregin applied model-making skills to soldering circuit boards and wiring equipment. The *Boy Electrician* projects became more complex. After a neighbor, a ham radio operator, gave them some used equipment, Lazaridis and Fregin hit the big time at a grade 7 science fair.

Surrounded by tattered paper volcanoes and wobbly constellations, Lazaridis and Fregin's entry was a solar panel fashioned out of wood, tinfoil, light sensors, and a relay system attached to a small motor. A roaming TV crew showcased the impressive invention on the local news. Celebrity ensued. The school's eighth-grade yearbook featured a caricature of Lazaridis as a mad scientist with thunderbolts bursting from his head.

At W. F. Herman, Lazaridis encountered his first roadblock, a segregated world divided into two castes. The building's second floor was home to the school's elite science, math, and business classes. The first floor was devoted to electrical and machine shops. Second-floor kids went on to university, first-floor grads went to manufacturing jobs. John Micsinszki's wife, Margaret, remembers that her university-educated husband and other tech teachers "had no great love for the guidance department at Herman, where good academic students were discouraged from taking technical courses, even if the student intended to study engineering at university."

All this was initially a challenge for Lazaridis, a kid with a foot on both floors of W. F. Herman. He got around the problem by ignoring boundaries. A devoted math and science student, Lazaridis wasn't about to give up the chance to apply years of basement experiments to wellstocked machine shops. At first he was disappointed with the presumptuous second-floor teachers. "I didn't like the way they looked down at us," he says. Eventually, those instructors realized Lazaridis's electrical prowess had classroom benefits. Students struggling with math turned to Lazaridis, who would explain how complex formulas could be applied to everyday use, such as electricity. In shop, it was "Laz" that the kids turned to for help operating machines. "He basically taught everyone how to use all the equipment. He had a way of explaining it so we understood," Oxford recalls.

The greatest lesson he learned in high school came offcampus. As an electronics teacher and president of a ham radio club, Micsinszki introduced both Lazaridis and Fregin to the world of transistors and cathode-ray tubes. Before long, Lazaridis and Fregin were dropping by the Micsinszki home to talk shop. Margaret Micsinszki, one of the city's first high school computer science teachers, introduced the boys to computing advances. Taking advantage of afterschool tutelage, Lazaridis built his own oscilloscope, Fregin perfected circuit making, and they each built computers. Margaret was convinced that computer science would lead the next wave of modern innovation. Her husband saw a bigger future. "Don't get too seduced by these computers," he warned. "The person who puts wireless communications and computers together is really going to build something special."

Lazaridis never had to write that down. "The day he said that," he says, "it never left us."

///

The men's dining hall at Trinity College was in giddy, anarchic chaos. Dinner buns were flying, tables were being thumped, and jeers were rising to the timbered rafters. Solemn chancellors from the century-old University of Toronto college looked on from their oil portraits, as they might have at Hogwarts, as a peculiar ritual unfolded. A first-year student had committed some unpardonable act and was now being "poored out." Lying prone on one of the hall's long trestle tables, holding onto the edge for dear life with the help of a few friends, the young man on trial struggled to stay put as the rest of the dining hall attempted to yank the human centerpiece onto the floor.

"Out, out," shouted dozens of jubilant men dressed in floor-length robes. Overseeing this tug-of-war was an older student eyeing his wristwatch. If the boy on trial could hang on for a full minute, he was allowed to leave the dining hall of his own volition. If not, he would be dragged from the room, shamed and ridiculed. The clock ticked, food and shouts filled the air. Then finally ...

"Done!" the student proctor exclaimed, "Balsillie may walk."

As friends cheered, the first-year student stood, breaking into a wide grin as he adjusted his disheveled robe and sauntered out of the wood-paneled hall. Few walked away once targeted in a pooring-out ritual that was as old as the dining hall's wood-paneled walls. Most were pulled from tables or chairs within seconds. The punishment was meant to discourage "poor" behavior by first-year students. At Trinity, where most students descended from political and business bluebloods, stepping out of line usually amounted to breaches of old-world British civility. Poor table manners or boasting could prompt a pooring out. The ritual would fall victim to political correctness in later years, but not soon enough for Balsillie, a frequent target in his first year at Trinity in 1980.

According to former classmates, his offense was, almost always, trying too hard. Shortly after arriving at the castle-like gray stone college to earn a commerce degree, Balsillie was elected president of his year, earned a spot on the school's lacrosse team, and began organizing hockey and football matches. "You always had the impression that he had something to prove," says Andrew Coyne, a Trinity student at the time who went on to be a leading Canadian political columnist with Toronto's *National Post*.

In his first weeks at university, Balsillie drove himself hard, closeting himself in his dorm room to study, allowing only fifteen-minute breaks every hour to check the score of televised hockey games. When friends dragged him out one night to a frat party, he got home late and in no mood to study for an exam the next day. He aced it anyway and

emerged from the experience with a new mantra: "Work hard, party hard."

Few students were as devoted to academic and social success, a relentless all-hours ambition that earned him the nickname "Balls." Balsillie organized theme parties celebrating obscure brews, like Carling Cinci lager, or the films of his favorite character, James Bond. When asked to help organize formal affairs, he displayed a unique talent for stretching a student budget by visiting funeral homes late in the business day in search of free, slightly used flowers to decorate the college's party rooms for formal dinners and dances. His vintage Volkswagen Beetle was often so stuffed with used floral arrangements that he could only see by poking his head through a thicket of ferns. He gamely agreed to grow a beard and perform in a short film about the perils of technology made by fellow Trinity student and future Oscar-nominated filmmaker Atom Egovan called *A Clockwork Trinity*.

Balsillie was equally creative about studying. After forging friendships in residence with ambitious students who, like him, arrived from small towns with few connections, he organized a study club so members could share and discuss homework. The group included Malcolm Gladwell, from Elmira, Ontario, who would become the author of several bestsellers, including *The Tipping Point*, *Blink*, and *Outliers*. Another study-clubber was Nigel Wright, from Ancaster, Ontario, who would go on to become one of Canada's leading financiers and chief of staff to Prime Minister Stephen Harper.

At Trinity, Wright says Balsillie was "a force of nature," juggling multiple challenges with unlimited energy. He threw the best parties, excelled in sports, and ensured homework club members were prepared for exams. Study sessions were usually held in his room and snacks were plentiful. As they swapped notes, members also shared their ambitions. In Balsillie, Wright saw someone who was

determined to change a world he believed was stacked against people who shared his working-class background and lack of connections. "His basic position was that he was not going to accept the world as it was. He was determined and dogged about obtaining his objective," Wright says. In those heady days at Trinity, Wright believed Balsillie's ambition would take him to Wall Street or a Fortune 500 company.

Following the career path he had mapped out from Newman's elite business guide, *The Canadian Establishment*, Balsillie landed a job at the accounting firm Clarkson Gordon after graduating from Trinity. Unlike other ambitious new hires jockeying for positions on big corporate accounting teams, Balsillie opted to join a smaller group that represented entrepreneurial owners of rapidly growing companies. At Clarkson Gordon, Balsillie learned two lessons: first, he did not like accounting; second, new business computing tools were leverage in the hands of an adept junior manager. Balsillie's talent for managing data and financial analysis with early spreadsheet programs got him a seat at takeover tables with senior managers and clients who wanted quick financial breakdowns as negotiations and terms shifted.

"All of a sudden," Balsillie says, "[I was] a rock star, you're in all the partner meetings. They'd say, 'Just bring Jim in.'"

After two years of spreadsheets, Balsillie achieved his final academic objective—acceptance into the masters program at Harvard Business School. By now he was dating Heidi Henschel, a rehab therapist from southern Ontario, who followed him to Boston in 1987. The couple managed Harvard's staggering tuition costs with the help of a fellowship and Balsillie's part-time income from managing a student guidebook and advising for a small financial services firm in Boston. At Harvard, Balsillie found few Canadian small-town peers. Classes were filled with

ambitious, privileged students from the United States and other countries—cultured keeners competing for grades that would land them blue-chip business jobs. In his class of ninety MBA students, Balsillie says, "I felt there were eighty-nine Nobel Prize winners and one fraud."

The Canadian outsider learned to overcome his insecurity with humor. The edgy barbs that landed him in boiling water in grade school had morphed into nuanced parodies of professors, many of them aging business chiefs. He became so good at mimicking teachers that classmates captured his act on video. In one he stuffed a pillow up his shirt and waved menthol cigarettes and a can of cream soda as he ummed and ahhed through a lecture. The skewered professor delighted his class in his final lecture by airing Balsillie's parody. "This was huge," Balsillie remembers. "All of a sudden your social cachet goes to the moon."

Just as promising were Balsillie's career choices. He interviewed with a number of prestigious Wall Street firms, including Goldman Sachs, but his master plan took an unexpected turn in his final year when he met a group of business chiefs from the Young Presidents' Organization at a campus cocktail party in early 1989. When Balsillie arrived at the event, one of his classmates steered him to a tall, lean businessman with penetrating blue eyes. A fellow Canadian, Rick Brock warmed immediately to the animated student, inviting his new friend to dinner with a group of other presidents. The young entrepreneurs shared stories, offering frank advice about corporate and personal challenges. Balsillie felt like a business insider for the first time. When it was his turn to talk, Balsillie revealed his humble roots and lofty ambitions.

"I was impressed," says Brock. So impressed, he ordered a limousine and ferried Balsillie to a series of Boston bars. Near the end of the evening, Brock slapped more than a drink on the table. "Why don't you come and learn to run a business?" he asked. The business was Sutherland-Schultz, a midsized electronic equipment maker based near Waterloo, Ontario. Brock could offer only half of what Balsillie could make on Wall Street, but he convinced the student that a senior job at his plant would teach him more about operating a company than he could ever learn as a banker. When Brock woke up the next morning with a screaming headache, he reached for the phone and dialed Balsillie's number. "Remember that offer I gave you last night?" Brock asked. "I was afraid you wouldn't," came a nervous reply.

Balsillie was on his way back to Ontario. His friends were stunned by his career choice. Wall Street was the number one destination of any aspiring finance grad. It was the nerve center of what was then the biggest corporate takeover binge in history. Junk bonds, buyout barbarians, and Michael Milken were such household names that Hollywood named a blockbuster movie *Wall Street*. Balsillie's Harvard peers had never heard of Waterloo and Canadian friends knew nothing of Sutherland-Schultz. "We were astonished. It didn't seem to fit Jim's game plan," said Wright.

What they failed to grasp was that Balsillie's career vision had shifted: new spreadsheet applications at Clarkson Gordon revealed to him the power of technology. Lining up for job interviews with Fortune 500 companies, he realized he would be competing for years to make his way to the senior ranks. That prospect didn't interest him. Balsillie even sabotaged an interview with influential strategy consultant McKinsey & Company, giving wiseacre answers and accusing an interviewer of asking "stupid" questions. Brock was willing to give him an executive title immediately in a company that was just starting to automate manufacturing systems with computers. "I realized the only way I was going to make it [fast] in this