

Transcendent Technology:
Wireless Paths to a Better Future

Notes for remarks
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Check Against Delivery



Good afternoon, ladies and gentlemen.

I am very pleased to be here and I'm especially glad to have Rahim Khalisa here.

He is an outstanding representative of whatever we call the generation after Generation X, . . . someone who will see, touch and feel many of the incredible developments of the 21st century that we can only dream about today.

I'm so pleased to have you join us, Rahim. For while I may look like I'm talking to those people out there, I'm really thinking about you.

The last time I spoke in this room was about three years ago.

That happened to be a week before the last referendum in Quebec.

Today, we meet on the very day of the provincial election in Quebec.

From that coincidence, I conclude two things:

First of all, if anyone wants to send the people of Quebec to the polling stations, just ask Ferchat to speak at the Royal York.

And second? Well, second is really at the heart of some ideas I want to talk about today.

In terms of the driving political issue in Quebec, the last three years might just as well never have happened. Sovereignty continues to dominate the political debate and media coverage. Plus ca change, plus ca reste la meme chose.

I don't want to underestimate the importance of that issue for millions of people, both within Quebec and in the rest of Canada.

But I can't help hoping that we can move beyond a debate that is -- in many respects -- being overtaken by events outside of the political arena.

In those same three years, for instance:

- Asia has been transformed from the world's economic powerhouse into the planet's primary economic anchor

- In those same three years, the world's population has grown by enough people to re-populate the United States and then some
- In those same three years, the Canadian dollar has fallen from the mid-70s to the mid-60 cent range
- The Argos have won the Grey Cup twice
- and the technology industry – in particular the wireless sector – has gone through at least one and perhaps two generations of significant change.

In the wireless industry, our familiar landmarks have been obliterated by a flood of new technology, new deregulation and new competition.

Borders and barriers are being eliminated not just on a provincial basis, but globally. Now, if we were engaged in making candy bars or one of my favourites single malt scotch, that might not be all that important.

But I suggest to you that the high-tech industries in general, and the communications sector in particular, are creating products and services that will change the way people live and work, as surely as the automobile altered the face of the earth.

What's more, these technology-driven changes – because they eliminate old concepts like time, space and even borders – will place extraordinary new pressures on our centuries-old institutions – whether those are institutions of government, of business, even of the family.

Life will be different, . . . and it's started already.

One of my grandsons put together a school project on Japan that includes written material, graphics, and audio and video clips, all taken from the Internet sites he's found.

And he was only in Grade 4.

In that one project, he's used more technology in two weeks than his grandfather did in his lifetime. And he's putting various media together in ways I probably will never do.

Business, too, is changing in fundamental ways, not only how we sell but – in fact – what we sell.

I just returned from a trip to New Zealand and then a separate hop out to the West Coast.

What I noticed was that hotels are no longer selling the softness of their beds.

Rather, they shout about the electronic reach of the equipment in the room, from faxes . . . to e-mail . . . to Internet access.

These vignettes are just ripples in the flood tide of change that is starting to flow.

Given the opportunity they represent, my hope is that Canadians everywhere will shift their focus to issues that will affect the generations to come, not perpetuate conflicts rooted in the past.

Let me make it crystal clear that I am not talking only about the situation in Quebec. I mention it because the election coincides with our meeting today.

There are many other conflicts to be resolved in this country and indeed around the world.

I could cite the debate over school closures in this province, discussions that have been going on in some communities for those same three years, at least.

Or health care and the closing of hospital beds.

As we move farther into the age of knowledge, should we not be shifting the focus from bricks-and-mortar to entirely new ways of organizing ourselves, built expressly to exploit the power of emerging technologies.

Let me give you two examples of what I'm talking about.

At Bell Mobility, we're quite proud of our website, which includes the first virtual store in our industry. This enables people to order products and services from us, on-line, whenever they want.

I'm prepared to compare our website to the best in the business – up against, for instance, John Cleghorn's at the Royal Bank.

And I can tell you that if my son were here, he'd say the same about his company's website.

With our sophisticated, interactive websites, we all present a thoroughly professional, customer-friendly face to customers.

And those customers can get to all of us with the same convenience whether they live in Mississauga, Mississippi or Misanello, Italy.

But clearly, our companies could not be more different.

John has more than 50,000 employees, spread across more than fifteen hundred locations in 35 countries . . . and his bank had revenues in excess of \$10 billion in the last fiscal year.

At Bell Mobility, we're not small, but we have only 3,000 employees; we operate in two provinces and our revenues are about one-ninth of the Royal Bank's.

As for my son, he has just three employees, one location and revenues that are, well, let's just say modest.

On the worldwide web, size does not matter.

What does that mean for big corporations when agile small businesses can use the technology to look like a multinational?

In fact, isn't it time we revisited just exactly what we mean by multinational?

Now, my son and people like him still have to deliver like Bell Mobility.

But the technology shows every promise of enabling them to do just that.

When I look in the mirror, . . . when I talk to my counterparts in industry, . . . I'm not sure that we in big business have fully grasped the implications of this change any faster or any better than anyone else in charge of running an institution in this country.

My second example has potentially even bigger, broader implications.

In last year's San Francisco marathon, one of the runners was a young man who attended MIT.

Just before the race began, he swallowed a pill.

Now this wasn't a steroid or some mind-altering drug to help him when he hit the wall. Rather, it was a miniature wireless device packed with sensors to monitor his vital signs.

During the entire race, the pill was sending data about heart beat, respiration and blood pressure back to colleagues on the sidelines.

Think about that next time you have to wait for an appointment with a cardiologist.

Is there a better alternative to standing in line in the emergency room?

Could we save lives if, as soon as a patient walks into an ER, we give him or her an electronic pill that instantly reads the vital signs and performs what you might call wireless triage?

I don't see why not.

What if we coupled that technology with satellite positioning. . .

We could then -- for instance -- locate any person with one of these devices in his digestive system or implanted just under the skin like they do with pets today -- four million pets.

Could that sort of thing help if you're involved with, say, a parent with Alzheimer's disease, a child under threat of abduction, a parolee.

Could it help? The easy answer is yes, absolutely.

But the issue we have not even begun to debate is more complex: how do we balance the benefits of that kind of tracking with the rights of the individual to privacy and to the integrity of his person.

Ladies and gentlemen, we are at the dawning of what we call the Mobile Millennium.

The possibilities as we move ahead are enormous and they can't get here soon enough for many of us.

Never have the stresses of modern life created so many demands on people.

Millions of us are stretched in many directions, trying to juggle work and home.

On the job, the new corporate realities often mean longer hours, more travel . At home, we're often caught between nurturing our children and caring for aging parents, -- to say nothing of 25-year-olds who either never move out or keep coming back.

For many of us the expression "Get a Life" is not so much a caustic jibe as it is a fervent wish.

The good news is that technology should help us transcend those stresses, enabling us to arrange our lives as an integrated whole, not a series of compartments between which we scurry endlessly.

We have the opportunity to shape the future so that it's nothing like the past . . .
We have the opportunity to build our dream.

Not only that -- because the technology does away with issues such as economies of scale, or limits imposed by time and distance -- we as Canadians are in a position to take this country to a new level of influence and importance on the global stage.

Whenever I look at the possibilities, I think maybe Sir Wilfrid Laurier was right about the next century belonging to Canada -- he was only out by 100 years.

This is a moment on which we can build so much, so long as we're willing to make the necessary investment of energy and imagination.

There have been other moments like this.

For instance, when someone in ancient times invented the plough, suddenly human beings didn't have to hunt and gather all day, every day -- they could cultivate, settle, create villages and cities.

The plough technology changed life as people knew it.

Same thing a hundred years ago or so with Henry Ford.

He thought he was inventing a new way to mass produce cars and make a buck. What he really created was a new age of freedom . . . a car -- or two -- in every garage.

Think of how life, at least in the developed world, changed because of it:

- new directions for industries such as the petroleum sector and travel and tourism
- the emergence of suburbs that changed our urban -- and rural -- landscape
- after all, it wasn't hamburgers that built McDonald's, . . . it was the car . . .
- And let's not forget that the car created a whole new world of dating.

I could go on -- especially about dating, . . . because I can just about remember the fun you can have in a rumble seat -- but anyway, you get the point.

Massive change, driven -- if you'll excuse the phrase -- by technological innovation.

And our world will turn much more quickly than humankind has ever experienced with the plough, the printing press, the car or any other world-changing technology.

The velocity is just so much greater today.

Already we are seeing massive change in the way people buy products as more and more companies get on the Internet.

Last year, people spent more than four and a half billion dollars on Internet transactions, a figure that is expected to jump to close to 11 billion dollars this year and up to 3.2 trillion dollars by 2003.

Amazon.com has gone from zero to a household word in a couple of years.

But it's already old news as upstart rivals such as Books A Million in the U.S., and Chapters here at home crowd the virtual-store book market.

Other e-commerce success stories are a dime a dozen. The experience of TheGlobe.com is just the latest.

TheGlobe.com – not Roy Megarry's newspaper -- was the darling of Nasdaq last week after its initial public offering of \$9 rose to \$97 within hours before closing at 63 and a quarter.

No wonder people get breathless when they look at the technology sector. But the real change, the innovation that will transform so much of our lives comes from the power of convergence – telecommunications technology, computers, battery technology, the web, and ever-evolving software advances.

All of these and more are coming together so that this device is no longer just a cell phone. It will be our primary phone, our key Internet access device, our electronic organizer, our palmtop.

It could be the way we get the news every day, or every hour, or every minute. It could be the way we get traffic reports . . . it already is for our digital PCS customers in Toronto.

Way back in 1990, George Gilder, the high-tech guru of the digital age, predicted that the digital wireless phone will be the most common personal computer in the next decade. Looks like he was pretty accurate.

Digital may be today's key buzzword for a lot of people – but wireless is the future.

Already in Finland, . . . more people spend more time on wireless calls than they do on traditional wireline phones.

I can see a time when our great-grandchildren shake their heads in disbelief when we tell them telephones used to have wires on them and computers were stuck to a desk . . . or just fit on your laptop.

“Yeah,” they'll say. “Next, you'll be telling us that television was once black and white, and music came on vinyl discs.”

Our future is not so far off.

Think of what you can do with your wireless devices today – functions that were just theory only months ago:

- you can set it up so that your broker automatically calls you when your stock hits a certain price, so you can buy or sell when the time is right
- you can have a wireless device on your car that will automatically notify roadside assistance if you have a breakdown or if your airbags deploy
- if you lock yourself out of your vehicle, you can call a service that remotely unlocks your door before your very eyes.
- you can get e-mail messages sent to your phone because every one of our digital PCS phones comes with its own Internet address built in.
- and that Internet access will be more than just e-mail. Last month in Las Vegas, a manufacturer unveiled a digital wireless phone that has a 12-line display for text – that's practically a laptop in your hand.
- you can have voice-recognition technology and smart personal agents such as Wildfire, a product that responds to voice commands so that you can make calls, manage your messages and even track down people.
- you can have a locating service so that if you're in a strange city, an operator can guide you to where you're going . . . and even recommend a good restaurant in the neighborhood.

Complex technology making life simpler . . . and better. And that's just the tip of the iceberg.

Less than 30 years ago, we could put 2,300 transistors on a chip. Today, we can put seven and a half million in the same space. And there's no sign of that rate of progress slowing down.

The technology is literally disappearing. And that means that within a few years we will have phones no larger than our fingernails.

That pill the MIT student took before the San Francisco marathon will only get easier to swallow. That's enormous potential we hold . . . literally . . . in our hands.

We're not controlled by location any more. We control what we do and where we do it. Think of the implications.

Work at home, at the office, or at the cottage. How about on a boat like Peter Newman? Why not.

Think what that means to our quality of life, our ability to integrate the disparate elements that today cause us stress.

Think, too, of the secondary and tertiary ripple effects.

If most people start to work away from the office, do we need office buildings?

If we don't need office buildings, do we need highway networks to get to work?

If we don't need concentrations of offices, what does that mean for our first generation cities like downtown Toronto?

And what about the suburbs that are booming today with new corporate headquarters? How will the 905 area code fare when location loses its lustre.

On a more positive note, how do we do a Frank McKenna – use the technology to inject economic vitality into the have-not regions, not only of our country but of the world.

It's not a trivial matter that nearly three billion people on this planet have never made a phone call.

What does it really mean if we eliminate the barriers of distance?

If we can have our medical condition monitored on an ongoing basis remotely and wirelessly, what does that mean for hospitals?

If ambulances can send real-time images of patients to emergency rooms while they travel, can we save more lives?

It's already possible. When a vicious tornado swept through Florida earlier this year, doctors, nurses and paramedics used wireless laptops and digital phones to share medical records and create a virtual safety team on the spot.

The same sort of thing happened closer to home in last winter's ice storm. Thousands of emergency workers carried cell phones, pagers, and other wireless equipment that helped co-ordinate the recovery.

Can we change the face of medicine and emergency response? Absolutely.

What about schooling? Many people have invested a lot of time and effort to pioneer distance education in this country.

In the Mobile Millennium, wireless will take those initiatives to a whole new level, providing new access to the top minds in the world for many more people.

Communications technology offers alternative ways to learn. It should complement the teacher, helping him or her make the educational process more fun, more entertaining, . . . and ultimately more competitive with the distractions that bombard our young people.

In fact, in virtually every part of life you can name, wireless will create change . . . and as I said before, if we manage it right, it will be change for the better.

We can use it to re-establish the quality-of-life balance between work, home and recreation.

But we must engage the debate now, because wireless – combined with the web and wireline -- will challenge the status quo of our institutions, . . . most of which were designed for the horse-and-buggy world.

That includes our political institutions.

Look at just one narrow slice of the debate in the world of electronic commerce. How do you tax transactions that originate and end in the physical nowhere we call cyberspace?

What about party politics? Say what you will about the leadership race for the federal Progressive Conservatives, but the way they chose their leader will become the norm, and before we know it.

It's not that big a leap, at least in technological terms, to a world in which we no longer go to the polls but rather vote electronically from home, from the car, or from a canoe in Algonquin Park.

What, then, of our whole system of representative democracy when the technology exists to enable an entire population to vote . . . on everything?

There are no easy answers to these questions. That's why it's so important to start looking now.

We are blessed in this country with a long tradition of leadership in telecommunications, stretching back to Alexander Graham Bell. We are blessed as well with a federal government that has a very strong vision of what is possible for Canadians thanks to the power of the information age.

But we have taken only the first few tentative steps inside the “Theatre of the Possible”.

Today we have a chance to direct the play, to manage the coming change – not only, and in fact not even primarily for ourselves, but for Rahim, and the rest of our children and grandchildren.

Today in fact, children can operate computers before they can say the word.

A couple of months ago, my four-year-old grandson came and asked me to turn on the “puter” so he could play a game. So I did and showed him where the game was and how to get it started.

The next day I was out raking leaves when he came to me and asked if he could play on the ‘puter.

I said, “Sure, just give me a minute and I’ll come in and turn it on for you.”

He disappeared.

When I found him, he was at the keyboard, having figured out not only how to turn the machine on and find the game, but he was also – already – at a level in the game which I have never reached.

To me that’s not just evidence that kids can and do learn from computers – and quickly.

Much more than that, it’s a clear signal that children using computers learn differently. They don’t approach it in a sequential, serial fashion, as we do. Rather -- aided and abetted by the technology -- they take a holistic approach to the problem.

Will such a holistic model of problem-solving change the world? Will it give us a new perspective on old issue? I think so.

Clearly, in so many walks of life the incremental changes we make are ineffective . . . or too slow. What if we look for new approaches to the ideal?

Can a home office company take on the weight and market heft of a traditional multinational? Why not?

Can we find new ways to monitor health and make sure our emergency rooms treat the sickest people first? Why not?

Are bricks and mortar essential to a school?

Are bricks and mortar essential to the concept of hospital?

Are bricks and mortar essential to doing business in a community, whether we're talking about financial services or clothing?

Are bricks and mortar essential to anything any more . . . except maybe shelter . . . and I emphasize the "maybe".

As leaders of the institutions that will face the full impact of the Mobile Millennium, we have an obligation: we cannot settle for incremental change but must find the tools that will make the most of the opportunity.

The path we took through the 20th century has been anything but a straight line:

- two world wars
- the rise and fall of the Iron Curtain
- earthquakes,
- famine
- genocide
- global air travel
- man on the moon
- not to mention the hula hoop, pet rocks, tamagotchies and Jerry Springer.

If you think about it, nothing short of chaos.

When it comes to our way ahead, who knows, except to say two things:

One, the geometry of the future will not be a linear extrapolation of the jagged path we have known.

Two, the potential for progress is clearly greater. We can transcend the technology and recapture basic human values; we can reduce the stress we face daily.

And as long as I have anything to do with the technology industry, we will respond in a respectful and ethical manner to build the systems that allow people to participate more fully in society – in all regions . . .and on all levels.