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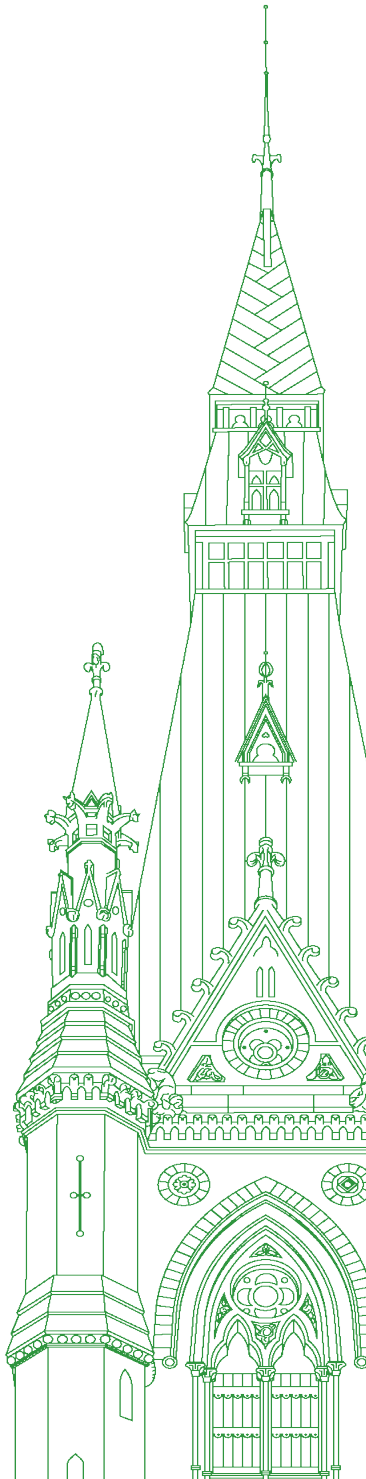

Chair: Ben Carr

Standing Committee on Industry and Technology

Thursday, April 30, 2026

● (1100)

[*Translation*]

The Chair (Ben Carr (Winnipeg South Centre, Lib.)): Good morning, everyone.

[*English*]

We have a full room in here today, which is nice to see.

We are back to our conversation on artificial intelligence. We've had a really useful set of meetings over the course of the past month or so, helping inform us from a variety of different perspectives about where things are, where they're going and where we want them to be. We very much appreciate the witnesses' being here today to help us in the continuation of that.

As a reminder to witnesses who are in the room, if you are using your earpiece and it's plugged in but not on your ear, please make sure that it's placed on the sticker in front of you to protect the health and well-being of our interpreters. If you're not using it, it's not plugged in, of course. That's not relevant. If you have questions about how to use the interpretation devices, just let us know.

[*Translation*]

We have a number of witnesses with us this morning.

I would like to welcome Mr. Garon, who is participating in the meeting by videoconference.

[*English*]

We have appearing with us, as an individual, Professor Barry Sanders. From the Canadian Telecommunications Workers Alliance, we have Nathalie Blais, who is the research representative from the Canadian Union of Public Employees; Roch Leblanc, who is the telecommunications director for Unifor; and Corey Mandryk, who is the lead organizer of United Steelworkers national local 1944. From Qu Data Centres Ltd., we have James Beer, the chief executive officer.

Witnesses, you will each have up to five minutes for your introductory remarks, save for the Canadian Telecommunications Workers Alliance. I believe it's Monsieur Leblanc who will speak for you.

You, sir, will have up to five minutes. Since I'm on you, why don't I hand the floor over?

[*Translation*]

You have five minutes for your presentation.

[*English*]

Roch Leblanc (Telecommunications Director, Unifor, Canadian Telecommunications Workers Alliance): Thank you, Mr. Chair.

Good morning. I'm Roch Leblanc from Unifor. I'm joined today by Corey Mandryk with the United Steelworkers and Nathalie Blais from the Canadian Union of Public Employees.

Together, our organizations form the Canadian Telecommunications Workers Alliance. This alliance of three of the largest unions in Canada represents over 32,000 workers in the telecom sector, including those at the big three: Bell, Rogers and Telus. We look forward to sharing our views with you today. Through our collective expertise in connecting Canadians and our experience in artificial intelligence within the telco context, we are well positioned to contribute to this study in order to help protect Canadian privacy and digital sovereignty and to mitigate potential harmful impacts of AI on telco workers and customers.

Telecommunications is a strategic industry that underpins almost all other economic sectors and many aspects of our lives. In this context, Canada must be able to assert its autonomy over the telecommunications and digital infrastructure to guarantee the digital sovereignty of our country.

The federal government must not compromise Canadian national security and privacy rights by allowing foreign influence or operational control over any part of our telecommunications networks. This involves regulating the widespread use of AI in the industry. Canada has little control over data once it leaves the country, meaning that foreign-owned AI tools and data centres outside of Canada that support AI tools pose a risk to our personal information.

[*Translation*]

Over the past year, several major data breaches have affected Telus Digital, Rogers, Fido and Freedom Mobile. Canada's telecommunications network is a data-rich target for cybercriminals, which is why Canadians' personal information must be kept on Canadian soil to protect it.

Canada must consider repatriating call centres and other critical telecom operations that have been offshored. As the sector integrates artificial intelligence, the unregulated use of AI makes all Canadians and Canadian businesses that use telecom networks vulnerable. AI regulations, whether general or sector-specific, must be put in place to protect consumers and the workforce.

Telecommunications workers face numerous AI-related challenges, the main one being workplace surveillance facilitated by this technology. For example, AI scrutinizes every single word of the calls our members handle. Among other things, the system can calculate the percentage of calls that result in successful sales pitches. AI also evaluates the time that technicians spend on repairs. In both cases, surveillance is constant and oppressive and pushes employees to meet unrealistic expectations.

The use of AI-based surveillance systems should be restricted because they lead to increased psychological distress and make work more intense, two elements that have been identified as occupational health and safety risks.

Federal legislation must also better protect employees by strengthening their rights in relation to algorithmic management, technological change and training.

● (1105)

[*English*]

AI is being used as well for deceptive purposes in the telecom sector. We're aware of at least one “big three” telco using AI to mask the accents of offshore agents, altering how customers perceive who they are talking to. Our members have had overseas agents demonstrate the technology on agent-to-agent calls. The use of AI technology to deceive Canadians in any way should be prohibited.

The expanding use of AI chatbots may seem to provide a cheap alternative to Canadian labour, but these systems don’t always fulfill their promises. AI is a tool that may enhance a worker’s productivity, but should not be used at the expense of workers and customers. Canadians should know when AI is being used and have the right to talk to a human based in Canada, regulated by Canadian standards.

Automation and offshoring of work have led to the loss of more than 20,000 telecom jobs in the past 10 to 15 years, and AI is now intensifying this trend steadily with exit package offerings every year.

The federal government must establish a national AI framework that protects the privacy, data and rights of customers and workers, as well as good Canadians jobs. We cannot rely only on the voice of the industry to guide the deployment and governance of AI. A comprehensive social dialogue and consensus is required.

The CTWA calls on the government to establish a permanent tripartite working group on AI—including employers, labour and civil society representatives—to work with government to that end.

Thank you for your interest. We look forward to your questions.

The Chair: Thank you, Mr. Leblanc.

Mr. Beer, I'll now turn to you.

The floor is yours for five minutes, sir.

James Beer (Chief Executive Officer, Qu Data Centres Ltd.): Thank you, everyone, and good morning. I'm James Beer, CEO of Qu Data Centres.

Thank you, Mr. Chair and members of the committee, for the opportunity to contribute to your timely study on the opportunities, risks and regulation of AI in Canada's strategic industries.

To begin with, let me introduce Qu Data Centres. Qu Data Centres is a Canadian-incorporated entity headquartered in Canada, backed by Canadian and international investors and managed by InfraRed Capital Partners, a Sun Life company. Our corporate structure is anchored in Canadian jurisdiction, and I'm proud to say that we have one of the only fully Canadian management teams in the industry.

Every facility is operated here on Canadian soil and by Canadian hands. We are sovereign by design and serve clients from across strategic sectors, including financial institutions, energy companies, health care providers and government agencies. Our nine facilities are strategically located across Ontario and Alberta with proven infrastructure and available capacity. We are poised to invest and drive growth domestically, and ready to scale our operations, deploy new workloads and support long-term growth.

We firmly believe that collaboration between government and industry is vital to building Canada's next generation of AI and data infrastructure. Qu is here to power Canadian innovation into the future. We are well positioned to contribute to a cohesive, sovereign nation-building strategy for AI infrastructure.

Qu shares the vision of the federal government for its next AI strategy to “accelerate the development of nation-building AI and data infrastructure, drive economy-wide adoption and help build the strongest economy in the G7.” To help achieve this vision, Qu is pleased to provide the following input and recommendations for consideration by the committee as part of its study.

First—and very importantly—safe AI systems begin with the data centres powering those AI services. Like in all strategic sectors, prioritizing domestic capacity will be key. How the federal government defines sovereign AI is one of the most crucial elements of the forthcoming strategy and legislative framework.

Qu Data Centres recommends that the federal government define sovereign AI to mean that the corporation or entity has the following attributes: data centres on Canadian soil; Canadian employees; a fully Canadian management team; and is an entity that utilizes Canadian networks, adheres to cybersecurity practices that protect its data, prioritizes Canadian partners for the delivery of services, and recognizes and acknowledges Canadian values in assessing industry participants.

Qu's position is that AI data centres are emerging as strategic and critical domestic infrastructure that already is or will be crucial to all operations of all sectors and services. The current global geopolitical context has heightened awareness about the importance of domestic capacity across core sectors.

With respect to the federal government's forthcoming strategy, Qu strongly encourages the government to prioritize the Canadian sector, aligning with this definition of sovereign AI, over foreign-controlled or foreign-located entities. A critical component of Canada's next AI strategy must be enabling the building and scaling of our domestic sovereign AI data centre capacity and infrastructure.

To this end, Qu recommends two key components as part of the next strategy and legislative framework. The first is that strategic sectors such as banking, energy, health care and defence be required to utilize sovereign data centre infrastructure and services. The second component is the delivery of new funding and tax incentives that are specifically designed to attract investment that will scale Canada's domestic sovereign AI infrastructure.

Finally, strengthening the federal government's leadership through the renewal of Canada's AI strategy will be a crucial step in scaling Canadian champions and attracting new investment.

In closing, these recommendations support aligning the sector with the federal government's priorities on digital sovereignty, security and economic growth.

Qu Data Centres appreciates the opportunity to contribute to the committee's important and timely study on AI, and would be pleased to respond to any questions to support this work.

● (1110)

Thank you.

The Chair: Thanks very much, Mr. Beer.

Mr. Sanders, the floor is yours for up to five minutes, sir.

Dr. Barry C. Sanders (Professor, Institute for Quantum Science and Technology, University of Calgary, As an Individual): Chair and honourable members of the committee, thanks for the invitation to appear before the House of Commons Standing Committee on Industry and Technology.

My name is Barry Sanders. I'm a professor at the University of Calgary specializing in quantum science and technology, including the pillars of sensing, communication and computing. I'm also scientific director of Quantum City at the University of Calgary and a senior fellow of the Centre for International Governance Innovation in Waterloo, where I focus on analysis and policy for emerging dual-use technologies, with quantum and AI being important examples.

I'd like to make three points about the relationship between AI and quantum technologies and why that relationship matters for public policy.

The first is AI for quantum. AI is helping advance quantum technologies. Quantum computing faces engineering challenges, especially noise, instability and scaling up the size. AI can help design better devices, improve system control and reduce errors. In quantum sensing, AI helps extract weak signals from noisy data. In quantum communication, AI can support network management and anomaly detection. In short, AI is becoming an enabling tool that can make quantum technologies more practical, more scalable and more useful.

The second is quantum for AI. Quantum computing could eventually offer new ways to perform certain computations relevant to AI, including optimization and sampling. These possibilities remain experimental today. Timelines are uncertain. That means policy should be balanced. Canada should monitor developments closely, invest in research capacity and prepare strategically while avoiding exaggerated claims that could distort near-term priorities. At the same time, AI and quantum could create parallel risks before they converge. AI is changing cyber-offence and cyber-defence. Quantum computing could threaten current encryption systems. Together, these trends strengthen the case for timely action on cybersecurity and cryptographic resilience.

The third is what this means for policy. The co-evolution of AI and quantum technologies is faster than regulatory systems are designed to respond. Both are dual-use technologies. Advances in civilian applications can also carry security implications. This creates a classic governance challenge. Regulate too early and you constrain innovation. Regulate too late and the technology becomes difficult to shape.

Canada needs, therefore, adaptive governance—a mix of legislation, standards and technical oversight that can evolve with the technology. Canada also needs coherence across government—innovation, economic development, export controls, research security and national defence, which are often handled through separate mandates. Without coordination, policies can work against each other. For example, if export controls are poorly designed for emerging quantum technologies, that could limit access to talent, supply chains or collaboration with trusted allies. Because these technologies are global, Canada should coordinate with key partners, including NATO and the G7, to reduce fragmentation and align approaches where possible.

In conclusion, AI is becoming part of the technical foundation of quantum technologies, while quantum computing could eventually influence some future AI systems. At the same time, both technologies may independently reshape cybersecurity, economic competitiveness and strategic power. This matters for Canada's long-term prosperity and security. It calls for careful, evidence-based policy grounded in realism rather than speculation.

Thank you. I look forward to your questions.

● (1115)

The Chair: Thanks very much, Mr. Sanders.

Colleagues and witnesses, we'll now enter into the first round of questions.

Mr. Guglielmin, the floor is yours for six minutes, sir.

Michael Guglielmin (Vaughan—Woodbridge, CPC): Thank you, Chair.

I'd like to thank our witnesses for their opening testimony.

I think I'll begin by highlighting the fact that artificial intelligence clearly has some enormous potential. This committee is no stranger to some of the major productivity issues facing this country. Adopting and deploying AI can certainly help companies become more competitive. It can help us with our productivity issues. In telecommunications, AI could help with outages, improve network reliability and strengthen cybersecurity, something that will be very important as we go forward. The question for this committee is not whether we should be adopting AI, because that's obviously the case. The question is whether we're going to harness AI for our strategic capabilities and our strategic industries, or whether it's going to become another tool for offshoring Canadian jobs, offshoring Canadian data and really allowing Canada to lose its control over its own infrastructure and security.

Ms. Blais, I'll start with you. CUPE has criticized the federal AI consultation process as overly relying on corporate voices and not capturing enough union voices or voices of privacy experts and researchers who study AI. In sectors like telecom, where the adoption of AI could affect jobs, personal data, personal network security and national sovereignty, what risks would you say would be created if the government designed AI policy without capturing these voices?

[*Translation*]

Nathalie Blais (Research Representative, Canadian Union of Public Employees, Canadian Telecommunications Workers Alliance): That's a very good question. It's a big one.

Many AI-related risks are not necessarily linked to the telecommunications network. Since I am here representing the Canadian Telecommunications Workers Alliance, I will stick to talking about these risks.

As you said, jobs may be lost. The number of jobs at telecommunications companies is declining rapidly. Over the past 10 to 15 years, between 15,000 and 20,000 jobs have been lost.

There are also may other risks relating to the personal information we transmit through telecommunications networks. The generative AI systems currently in use are mainly housed south of the border. When we use them, our data is transmitted through telecommunications networks that are not Canadian. When data is not on our networks, it is not on our territory, so it is subject to the laws of the other jurisdictions. Currently, 25% of Internet traffic goes through the U.S., so any data we send through the U.S. is protected by American laws, which don't protect people as well as Canadian laws.

As far as I know, there hasn't been broad consultation about AI, and if we don't listen to what workers and the public have to say, we run the risk of overlooking issued relating to personal data and discrimination because we know that AI systems are prone to bias.

Here's another risk: If AI systems aren't designed and trained here, with our data, we may receive responses from them that aren't suited to our reality. CUPE's criticism is valid because the government seems to be focusing solely on a commercial strategy to deal with AI, not on a strategy to ensure the well-being of the population.

● (1120)

[*English*]

Michael Guglielmin: Would it be fair to say at this point, from the perspective of telecom companies, that the government has focused too heavily on how quickly we can adopt and deploy AI and not enough on whether Canadians are protected from the consequences of that deployment?

[*Translation*]

Nathalie Blais: Yes, I think you could say that. What is plan B? We don't know exactly how AI will evolve. The experts don't agree with each other, and neither do the economists.

If significant job losses were to occur, would the employment insurance system be able to cope? We don't know. There has to be broad consultation. Right now, all the government's advisory committees seem to be focusing more on science and business development than on social development.

[*English*]

Michael Guglielmin: Thank you.

Mr. Mandryk, Minister Solomon said Canada's refreshed AI strategy would come in the first quarter of this year, but as we know, that deadline has passed. The government says it's coming soon.

From the perspective of telecom workers, what's the cost of Ottawa's delaying a clear AI framework?

Corey Mandryk (Lead Organizer, United Steelworkers National Local 1944, Canadian Telecommunications Workers Alliance): That's a good question. I'm proud to represent the voices of telecom workers, tech workers and pretty much all workers in Canada when it comes to AI.

You can't have a conversation about AI without it eventually leading to, “Yes, but it's going to take away my job.” It is important to adopt a proper AI framework from the government and the regulations that will come with it quickly. Canadians are worried about AI adoption and AI replacing their work. We've always stood behind innovation and automation, as these are tools that will help us enhance our work. I think what needs to be part of the ongoing conversation and moving forward is how AI can be that tool.

It's great to hear from my fellow witnesses that we need to work together with the government and the industry, but a very important part of the industry is the workers, who are the lifeblood of that industry. If Canadian workers see AI as that opportunity, as my fellow witness Mr. Beer said, I think there will be some hope versus that anxiety over what's to come. That's why something from the government really needs to happen quickly to give Canadians reassurance on this emerging technology.

Michael Guglielmin: Thank you very much.

The Chair: Thanks, Mr. Guglielmin.

[*Translation*]

I'mve gotten into the habit of welcoming people, and I'm going to do it again, because we have a new member on the committee.

Mr. Ntumba, the floor is yours for six minutes.

Bienvenu-Olivier Ntumba (Mont-Saint-Bruno—L'Acadie, Lib.): Thank you, Mr. Chair.

Good morning, witnesses.

Good morning to all members of the committee. Thank you for welcoming me.

Mr. Leblanc and Ms. Blais, my team and I recently met with you in my office.

Mr. Leblanc, you represent an organization that has over 315,000 members across the country, 26,400 of whom work in telecommunications.

Today, we're talking about AI, but if we look back at the history of humanity to the present, we can see that there have been a lot of challenges. Humans have always bounced back and taken control of things.

My question is this: Can you compare the current AI commercialization landscape in Canada to that of the international market?

Roch Leblanc: That's a great question. Thank you for that, Mr. Ntumba.

Telecommunications workers have control over information and the ability to transfer it. AI cannot exist without a highway, and that highway is the Internet. The Internet in Canada is largely controlled by the three major telecommunications companies we're all familiar with.

What workers are currently experiencing is quite bleak because old employment models are quickly disappearing. This week, the news and the media are documenting the transformation that is currently under way. A massive transformation is taking place, but public education is lacking and Canada's major industries aren't necessarily adjusting their strategy. Instead, workers across the industry are being sidelined. People in the telecommunications sector are experiencing major upheaval. The next logical step would be to invest in retraining these workers as AI specialists because there's a high level of expertise closely tied to the existing models. However, that's not happening, and the sector is going through a major transformation.

AI is transforming things. Obviously, the Alliance agrees that AI exists. It is here and it has a lot to offer. However, we are also aware of the impact of automation and AI on our industry because we've been through this kind of thing many times over the past few decades. Our workers are very apprehensive about what's happening and the development of AI because they don't see how our industry will transition into the new era.

● (1125)

Bienvenu-Olivier Ntumba: Thank you.

Ms. Blais, your organization represents about 70,000 members.

I'll repeat my question: What should the federal government prioritize right now to support the responsible adoption of AI within the government, and across the country?

Nathalie Blais: There are several possibilities to consider. Some of the things the government is putting in place seem to be heading in the right direction. Talking about data sovereignty and sovereign AI is very positive.

Social dialogue is lacking, however. Workers and the general public should be sharing information. There's also the public education piece. Often, people think they're having a conversation with a person when they're using an AI system, but they're not. How do these systems work? They're probabilistic systems that use probabilities to come up with answers. If people don't know that, they assume the systems are telling them the truth, when that's not the case. That's why the public needs to be educated.

We also have to think about what will be done with AI. Knowing how this tool will be used is extremely important. Right now, the conversation is only about commercialization, not the common good. How can this tool be used to make good things happen, rather than, say, job losses that won't be offset by a sufficiently robust social safety net because we didn't anticipate what's coming?

Bienvenu-Olivier Ntumba: Earlier, you talked about social dialogue.

Can you expand on that? What did you mean by social dialogue?

The Chair: Please keep your answer brief, Ms. Blais. You only have 20 seconds.

Nathalie Blais: Okay.

We would like the government to hold consultations that include stakeholders other than researchers and entrepreneurs. We would like them to include civil society organizations, unions and workers.

The Chair: Thank you very much.

Thank you very much, Mr. Ntumba.

Good morning, Mr. Ste-Marie. You have the floor for six minutes.

Gabriel Ste-Marie (Joliette—Manawan, BQ): Thank you, Mr. Chair.

I want to welcome the witnesses and thank them for being here. Their presence here is important.

I would also like to welcome Ms. Begum and Mr. Ntumba to the committee.

Ms. Begum, congratulations on your decisive election win.

I thank my colleague Mr. Garon for helping me out during the first few minutes of this committee meeting.

My first question is for you, Ms. Blais.

The rest of my questions will be for the Canadian Telecommunications Workers Alliance.

When the Telus representative was here for our study on AI, he explained to us that data sovereignty involves three things. First, Canada's data protection laws must apply. Second, no foreign laws should apply to this data, especially not laws that would require the data to be shared with the government. Third, no foreign kill switch should be able to interfere with data management.

People talk a lot about data storage, but they don't talk as much about data transmission. Recently, Rogers relocated its Internet network operations to India. However, Indian law requires that all data be made available to the Indian government. Keep in mind that there have been tensions between Canada and India recently.

Should telecommunications networks be protected from offshoring that could expose us to potential foreign interference?

● (1130)

Nathalie Blais: For sure. I think the regulations are lacking in that department. Bill C-8 could address some of that, if the government were to determine that certain supply chains and services are harmful to the system.

However, I think we can be proactive and decide that certain offshoring plans should not proceed. You mentioned Rogers. Rogers' cell phone system, its cell phone control centre, is now in India. My colleague, Mr. Mandryk, can tell you more about how things work there. Indian law says that all data stored on equipment located in India can be seized by the government.

Thus, a government that is not necessarily friendly to us at the moment can access our data.

[*English*]

Corey Mandryk: For background, about this time last year, Rogers Communications let about 400 of its workers in the wireless department know that it no longer required them as employees. It still needed them to do what they were doing, but it pushed them off to become contractors with Ericsson. Ericsson Canada took them on as employees.

A few months after they were hired by Ericsson, the folks who worked in the back end—the technicians who deal with voice quality, voice messaging and all of that stuff—doing the exact same work on the Rogers network, were told to start training workers from the Ericsson branch in India to do their work and that the work would be transferred over. Now the network operations centre is in Noida, India, as are the technicians who look after all of the components that make our cellphones work.

Our stance is that when we have operational control or operational capacity, if we're losing that stuff from within our borders, we're now dependent on workers outside of our borders to take care of our networks. That begs the question of what data sovereignty and digital sovereignty are. Sovereignty, as you mentioned, is having that kill switch. We have the ability to close our physical borders down, as we did during COVID, but what happens with the digital border? Do we have the ability to stop that traffic from leaving and/or coming in?

Those questions have yet to be really sussed out well. I'm happy to have those ongoing conversations, but those are some of the big concerns.

[*Translation*]

Gabriel Ste-Marie: Thank you very much.

My next question is for the three Alliance representatives.

Are telecommunications companies already laying people off solely because of AI?

Roch Leblanc: Major telecommunications companies are integrating automation and AI in general in a very subtle and gradual way over a long period of time, so it's hard to attribute that to AI directly.

On the other hand, we certainly are seeing the repercussions more often. When one big company lays off 3,500 workers, as we heard recently, and another lays off 10,000, we're left with major questions about how the work is going to be done.

As I often say, in telecommunications, the work will get done one way or another. Imagine squeezing one end of a big balloon: it just gets bigger on the other end.

We have serious concerns about this.

● (1135)

Gabriel Ste-Marie: Okay. Thank you.

I'm going to ask one last question. I only have a minute left, but I'll have another two and a half minutes later.

Does the Canada Labour Code include protection against technological change? Is AI considered a technological change?

Nathalie Blais: Yes, there is protection in the Canada Labour Code, which contains a provision on technological changes.

However, this provision dates back to the time when you could knock a hole in a factory wall to bring in a machine. You could see it coming, which is no longer the case. Employers get around this provision by using voluntary departure offers rather than layoffs. It kind of goes unnoticed.

AI is harder to see. It shows up on a computer and you don't see it coming. In many cases, everything is already set up and deployed before the union gets wind of it, so it's hard to have a conversation about how we're going to do the work with AI.

There are also risks to workers' mental health. We would like to have these conversations to keep the work interesting and use AI as a tool to improve our work, but that's not what's happening right now.

Gabriel Ste-Marie: Thank you.

The Chair: Thank you very much, Mr. Ste-Marie.

Mr. Falk, you have the floor for five minutes.

[*English*]

Ted Falk (Provencher, CPC): Thank you, Mr. Chairman.

Thank you to all of our witnesses for coming here and for their presentations.

Mr. Sanders, I would like to begin with you. You previously attended this committee and spoke about quantum computing. Can you very quickly, in layman's language, tell people watching these committee proceedings what you mean by quantum computing?

Dr. Barry C. Sanders: Quantum computing is really just computing. It just has a better engine. If you think about building a computer, nowadays we hear about GPUs from Nvidia, so there's a way of doing certain kinds of math better. Quantum computing is really about inserting a chip that is not about speeding up computing but about making certain hard problems easy to solve. That's what we're aiming for.

Ted Falk: Thank you. I'm sure that will help folks understand what we're talking about.

In your previous presentations to committee, you talked about the importance of working internationally. Our focus in the last year or two has been on data sovereignty and keeping things domestic. Are you still of the opinion that we need to be focused internationally?

Dr. Barry C. Sanders: Yes, and I'll elaborate.

I'm very aware of the tension between open and digital sovereignty. I just spent three months at CERN, involved with the Open Quantum Institute and dealing with exactly that kind of tension. Yes, we need to work internationally, because Canada alone can't do great things, but it doesn't mean that we have to work closely with every country. Like NATO, we need to—

Ted Falk: We need to choose our dance partners wisely.

Dr. Barry C. Sanders: That's correct—well said.

NATO and the G7 are very good examples of how we can build international partnerships.

Ted Falk: Okay. Thank you.

Mr. Beer, thank you for your presentation and thank you for your domestic focus. I found it very intriguing that they sat you beside each other.

You've indicated very strongly that you feel we very much need to have a domestic solution for AI and data centres that are domestically owned, domestically located and domestically managed. How important is it that the workforce is also domestic?

James Beer: I think it's absolutely critical. Canadian companies have relied on Canadian workers to drive the economy and support critical health care initiatives, education and energy services, so yes, the Canadian labour piece is absolutely critical. I think Canadians have a unique set of values that we honour together. There's an element of closeness and understanding with our fellow companies that we work with. Yes, I think it's absolutely critical.

The bottom line is that we have some incredibly skilled folks in Canada domestically, whether they're electricians or mechanical folks, or they're in construction companies or professional services companies. We have all the labour to deliver these services today, and there's no reason whatsoever why we ought to be relying on international companies, particularly those that are disguising themselves as Canadian companies—and there's quite a bit of that going on right now.

Ted Falk: You've answered some of my other questions already by indicating that we have the talent here in Canada to operate and manage these systems. Twice now, you've said, “Canadian values”. Can you briefly describe what you mean by Canadian values? It can mean different things to different people.

I have a second question, if you could answer that as well. Our other panellists have indicated that our telecoms provide the majority of communication and transportation highways for AI. Do our telecoms provide sufficient and secure enough services to meet the requirements, for example, of the data centres?

● (1140)

James Beer: First, on values, I think Canadians are well known to be fair, high-integrity people. We operate transparently with one another. There's a very unique set of those values that isn't shared by the global sphere these days. Primarily, it's being transparent with one another. Sure, it's focusing on building and growing, but it's doing it in a fair and open manner.

Second, on the network piece, our Canadian networks are well equipped to handle AI workloads, whether it's the capacity or the security, and that isn't the case with all international carriers. I'm quite proud of our Canadian carriers, whether it's Bell, Rogers or Telus. They have good security protocols and good capacity management. That isn't the case for all telecommunication carriers globally.

Ted Falk: Thank you. I think I'm out of time, but I'm not out of questions.

The Chair: Thanks very much, Mr. Falk.

Ms. O'Rourke, the floor is yours for five minutes.

Dominique O'Rourke (Guelph, Lib.): Thank you very much, Chair Carr.

[*Translation*]

Mr. Leblanc, thank you very much for your presentation. I think we need to revisit this in greater depth to look at the job losses in recent years and the potential of AI in the years to come. We're all taking note.

Ms. Blais, I'd like to talk more about the importance of the conversation within society about how AI can improve everyday life, because there's enormous potential. Thank you for your comments.

[*English*]

Mr. Beer and Mr. Sanders, I have many questions for you.

The Munk school put out a document called “Sovereign by Design: Strategic Options for Canadian AI Sovereignty”. It argues that “sovereignty in the AI era means freedom from coercion, not digital isolationism or technological self-sufficiency.” It maintains that there isn't a country in the world that “can achieve complete independence across the AI technology stack” and that our challenge is “how to structure [those] dependencies to preserve choice, reduce foreign leverage, and ensure that [our] Canadian data and infrastructure remain governed by Canadian laws and values.”

Mr. Sanders and Mr. Beer, you seem to be on opposite sides of the spectrum. However, what this recommendation looks at is that in Europe there's a way to have “coalition-building and hybrid strategies”. What do you think of that approach, Mr. Sanders?

Dr. Barry C. Sanders: I support the message of that Munk document. Some things we can do by ourselves, but the future is coming faster than we expected, and I think we need to work together.

I don't think I'm disagreeing with my colleague at all. I understand the need for jobs. However, if we're going to keep up with the race and stay ahead, we need to work through good governance regulations and standards, etc., and not cut off fast-moving tech.

Dominique O'Rourke: Mr. Beer, did you want to interject quickly?

James Beer: I believe we absolutely need to operate globally. We need to be very careful about whom we work with. Particularly for Canada, there are some amazing opportunities to work with the EU. We share a common set of values and a focus on the desire to build. It doesn't mean that we need to be parochial and only operate inside Canada. There's very much a global piece, but it's not everyone.

Dominique O'Rourke: That's helpful. Canada was a leader in AI. Three of the godfathers of AI are from here, so we absolutely want to keep that knowledge and these jobs here.

Mr. Beer, you said that your organization services banking, energy, health care and defence. It ties in with this report from the Munk school in that there can be a hierarchy of the sensitivity of data. There are things that need to be fully sovereign and other things that may not need to be fully sovereign. Would you agree with that conclusion?

The challenge with coming out with an AI strategy that's fully baked and has all the regs is that it will be unusable tomorrow. Things are changing so quickly. How do we navigate the protection of the really critical domestic data and the other uses?

● (1145)

James Beer: It's a data classification exercise. To your point, not all data is the same. Some data will be low risk, and it's not, for example, health care. We need to be incredibly sensitive and careful around how health care is treated.

Yes, there are other types of transactions and data that are perfectly well suited for software as service applications where geography isn't as important. However, health care has some incredibly importantly data, of course. Many of our energy companies have decades of seismic data that needs to be protected, and there's intellectual property that needs to be protected.

There's a real data classification exercise that needs to run by sector. Some of those we can push to AI services with more ease than others.

Dominique O'Rourke: That's great.

I want to go back to Mr. Sanders.

You talked about AI helping to accelerate quantum. We've heard the whole range of perceptions on AI, from pausing to the jobs being gone in 18 to 24 months. I'm glad you said we need to avoid exaggerated claims. Why is it important to proceed with AI adoption with the right regulations? Why is it important to proceed at this time?

Dr. Barry C. Sanders: I think we're one part of a large world. The world is racing ahead on AI. It's going to grow and happen, wherever that happens to be. As Canadians, we have to be smart about how we engage and not hide from it.

Dominique O'Rourke: At this point—

The Chair: Ms. O'Rourke, I'm sorry—

Dominique O'Rourke: Oh no. It's every time....

The Chair: Yes.

Dominique O'Rourke: I'll have to follow up.

[*Translation*]

The Chair: Mr. Ste-Marie, you have the floor for two and a half minutes.

Gabriel Ste-Marie: Thank you, Mr. Chair.

I won't have time to ask you all my questions, so I'm going to ask the clerk to send you the list of questions I could have asked you. If you could provide an answer, we could include that in the document we'll be preparing. However, I'm going to ask you two questions one after the other.

How fast do you see AI developing in this country?

Why do we need a social dialogue focusing on AI?

Please answer in two minutes, if you can.

Nathalie Blais: We don't know exactly how fast it's going to go. However, more and more people believe that the speed at which it will develop is getting close to the way things now stand.

What was your second question?

Gabriel Ste-Marie: It was about social dialogue.

Nathalie Blais: That should be established with all civil society partners.

I'm going to pick up on a question from Ms. O'Rourke earlier. I think that, at a minimum, the 10 or 12 services that Public Safety Canada recognizes as critical should be protected. We should ensure that we have data sovereignty for all those sectors, including the telecommunications sector. The Canadian Radio-television and Telecommunications Commission, or CRTC, has already established regulations for next-generation 9-1-1. It is therefore possible for telecommunications companies to keep all their equipment on Canadian soil. Why not do so for other telecommunications services apart from emergency services?

If it can be done, let's do it.

Gabriel Ste-Marie: Do you think it would be appropriate for the House to create a special standing committee on AI, seeing as it covers many sectors?

Nathalie Blais: That could be an excellent idea, yes.

Gabriel Ste-Marie: I only have ten seconds left. I'll send you my other questions by email.

The Chair: Mr. Ste-Marie, you have 45 seconds left, so you can ask another question.

Gabriel Ste-Marie: Okay.

Can you tell me about other countries that are considering repatriating telecommunications matters within their own borders?

[*English*]

Corey Mandryk: I do know that last year, in India, they hosted the largest telecommunications conference on the continent. The theme of that conference was self-reliance. I know they're trying to create those systems in other countries while at the same time hosting work that our networks are dependent on. I think we should take note and really hammer out some domestic policies that look after not only the citizens of the country but also the workers who support those citizens.

[*Translation*]

Nathalie Blais: Last year, the United States also started working on a bill to repatriate call centres located abroad. In March, the Federal Communications Commission, which is the equivalent of the CRTC in the United States, also launched a consultation on repatriating the call centres of telecommunications companies, so that Americans can better protect their personal data and be assured that they can talk to someone on American soil.

We think we should do the same thing.

● (1150)

Gabriel Ste-Marie: Thank you very much.

The Chair: Thank you, Mr. Ste-Marie.

[*English*]

Ms. Dancho, the floor is yours for five minutes.

Raquel Dancho (Kildonan—St. Paul, CPC): Thank you, Mr. Chair.

I'd first like to thank and welcome our new committee members.

Welcome to this committee. We're very happy to have you, and we look forward to working with you today and in the studies moving forward. You're very welcome here.

Thank you to the witnesses for being with us today as well. I really appreciate your expert testimony. This is an excellent study, and we have quite a range of perspectives today.

I want to ask a few questions of Mr. Mandryk.

In the fall, we touched base and did some important work together regarding some offshoring of critical jobs. You touched on this today. They were background technician jobs that were offshored.

In the context of the conversation today, I'm wondering if you can elaborate on the confidence, or lack of confidence, that gives you on how Canada is entering this phase of cybersecurity and data protection. Where do you feel those jobs will land in terms of what should remain within our borders and what we could, perhaps, offshore, if a company chose to do so? I think you're of the opinion that for security reasons and other reasons, these jobs should not have been offshored. Is that correct?

Corey Mandryk: That is correct. Thank you for the question and thank you for the work we did together back in October in trying to keep those jobs here in Canada.

When Rogers moved these workers over to Ericsson and then a few months later Ericsson decided to offshore the work to India, my phone blew up. As an organizer, we were in the midst of organizing that group. Obviously, when a major shift like that happens to their employment.... We were there to sign cards and, hopefully, build some stability for them. My phone absolutely blew up.

If you're not listening to the technicians whose hands are on the infrastructure, who work on this infrastructure, who upload new software and who make sure everything is functioning and working so we don't have to think about it.... They were the ones who were the most concerned. I must have heard this dozens of times: “If you knew what I knew, if you did the work that I did, you would be petrified of that work going overseas.”

What concerns me—and I think concerns organized labour as well—is that the companies doing this have earned a trusted status within government to manage their networks, and they have, to a good degree, but when the work starts to expand overseas and operational control and operational capacity are given—because they weren't taken; they were willingly given by Rogers and Ericsson—to workers overseas, that's when the concern starts to happen.

This is where the voice of the workers needs to be a part of whatever dialogue we're having on the future of AI. The actual hands-on knowledge of where things are buried, and what works and why it does, is important. Those voices should be listened to, especially when it comes to national security.

Raquel Dancho: You would support, perhaps, an enhanced modernized data classification system, so that perhaps these jobs and others like them could remain sovereign and in Canada's control and not be externalized or offshored. Is that correct? Are you feeling that the government doesn't have that standard, is not meeting that standard or should revisit that standard?

Corey Mandryk: “Standards” is actually an interesting way to put it. That's true. The standards that are governed by the federal government are there for federally regulated industries like aviation, telecom and banking. What's happening, and what we've noticed with the Ericsson situation with Rogers, is that when those workers were moved over, Ericsson opposed our application at the Canada labour board, saying that they're not a telecom company and that these workers weren't federally regulated anymore—they were provincial.

All of a sudden, the accountability federally for workers who are in telecom—again, with hands on the infrastructure—is now being diluted by companies who are saying that maybe they should be governed by only the provincial laws and not the federal laws.

Raquel Dancho: Thank you.

Mr. Beer, in my last minute, I have a similar vein of questions for you.

On the data centres, do you see similar security concerns, given the amount of Canadian data that goes through foreign and particularly American data centres that are operated by Americans? It could be any country. If it were any country, should we be concerned? Do you have a similar area of concern in this?

● (1155)

James Beer: Absolutely. Whether it's network inspection, which is technically possible and you know you can intercept traffic...I think that's a very real concern.

The other element we haven't touched on much is that of foreign entities clogging up our power interconnection queues, such that we can't drive digital innovation for Canadian companies and for very legitimate Canadian services. AI is wonderful, but the foundations of technology today are the energy and health care customers and financial services customers.

We have to be very careful to ensure, from a power perspective, that we're not turning away all of our power to international companies and depriving Canadian companies of being able to digitally innovate. Whether that's traditional CPU-based applications or GPU and AI, it's an increasing risk for Canadians.

Raquel Dancho: Thank you very much.

The Chair: Thanks, Ms. Dancho.

Ms. Begum, again, I'll take the opportunity to welcome you to the committee, congratulate you on your recent election and give you the floor for the first time here at the industry committee.

You'll have five minutes.

Doly Begum (Scarborough Southwest, Lib.): Thank you very much, Chair.

Good morning, everyone.

Thank you to all of my colleagues. It's wonderful to be here. It's also a pleasant surprise to see colleagues I've worked with in the past. I know we worked together to both.... We're talking about having a nice balance. It's about digital sovereignty, worker sovereignty and making sure we stand up for a growing economy, a growing market and, of course, the growth of this nation. It's a pleasure to be here. As a provincial member, I did similar work, so it's not too new. Of course, this is a much different platform.

Mr. Mandryk, it's great to have worked with you representing workers who do the tough work of making sure people are connected across the country and the world. Thank you for everything you do.

It is great to have a study on how we move forward, because I know the government has a strong mandate to really bring the country forward and catch up with what Mr. Sanders talked about. We can't just have a pause and be behind in what's happening. At the same time, how do we do this wisely? Who do we make friendships with? How do we make sure we are representing our workers well?

One thing that is going to be a key component is.... I feel you have already answered a bit of this, but I'll give the opportunity to anyone who would like to answer: Do you feel we have digital sovereignty right now, at the stage we are? If not, what are some of the things we can do to make sure we create that nice balance to get to that point?

I know they haven't spoken as much as Mr. Beer and Mr. Sanders, so maybe I'll ask Ms. Blais or Mr. Leblanc.

I know Unifor is big on this, so go ahead.

Roch Leblanc: Yes, Unifor is big on national sovereignty. We talk a lot about auto, but when we talk about the other sectors we represent, our vision is for Canadians, by Canadians and operated by Canadians.

I think some of the examples we've heard recently from colleagues are concerning. We ought to turn our minds to what we want as a country. We believe that with the proper criteria set in place, this industry can be developed and can thrive because we are able, as Canadians, to do so. Our examples of the day concern the end-user component, but overall we cherish the thought and vision of expanding AI. We want to do so, but we want to make sure there is the right strings attached, going forward, so that it benefits Canadians and has the proper goal—a higher goal than simply capitalization. That is one of the key components for our unions.

Doly Begum: Thank you very much, Mr. Leblanc.

Mr. Mandryk.

Corey Mandryk: To expand on that, it's about the Telecommunications Act. Being governed federally is important, as it binds Canadians together. We communicate with each other across provincial borders.

Those of us in this room are probably old enough to remember, back in the day, the telephone companies owning the telephone in your house. We are at a place right now where these telecommunications companies are quickly moving towards a dumb-pipe business model that would be working at the behest of hyperscalers, most of which exist in the States. We're going to be relying on the services of the Amazons, the Googles and the ChatGPTs of the world, which are moving through the telecommunications infrastructure that Canadians built over decades. Now the jobs are being lost.

Regulation needs to keep up with what's going on. Technology is moving extremely fast. I believe one of my colleagues here mentioned that regulation is not moving fast enough, and that's just the nature of the beast. We have telecommunications companies moving from telcos to “techcos”. We need to follow that and make sure the regulations are tight enough to ensure that the infrastructure built by Canadians still serves Canadians through Canadian jobs and Canadian sovereignty.

● (1200)

Doly Begum: Thank you very much.

I believe my time was way over, so I appreciate the indulgence.

The Chair: It was not way over. You were just on the mark, Ms. Begum.

Doly Begum: That's perfect. Thank you very much.

The Chair: Witnesses, thanks very much for making yourselves available to the committee today. We appreciate the input and the guidance. It's very useful in terms of the next steps we will take to provide some advice to the government on where we think we need to go, moving forward.

Colleagues, we're going to suspend briefly as we transition to the second hour.

● (1200)

_____(Pause)_____

● (1205)

The Chair: Colleagues, we are going to move forward with the second hour of testimony today.

We have one witness with us in person and two witnesses joining us virtually.

By video conference, we have Fenwick McKelvey, associate professor in information and communication technology policy at Concordia University. From Quantum Industry Canada, we have Lisa Lambert, chief executive officer. From the Centre for International Governance Innovation, we have Jim Balsillie, founder and chair.

[*Translation*]

I can confirm that all tests have been done to ensure visual and sound quality.

[*English*]

To begin, I'm going to give the floor to you, Mr. McKelvey. You'll have five minutes, followed by Ms. Lambert and Mr. Balsillie here in person

The floor is yours, Mr. McKelvey.

Fenwick McKelvey (Associate Professor, Information and Communication Technology Policy, Concordia University, As an Individual): Thank you very much for the opportunity to be here today.

I'd like to begin by acknowledging that I'm speaking from unceded indigenous lands. The Kanien'kehà:ka nation is recognized as the custodians of the lands and waters on which I speak today.

My name is Fenwick McKelvey. I'm an associate professor in information and communication technology policy at the department of communication studies at Concordia University.

My remarks today draw on over 10 years of experience in algorithmic and AI governance in Canada. In that time, I've been a lead on major national and international research projects, a co-director of an AI research institute and a frequent commentator on Canada's AI strategy. I've also been a witness, critic and occasional participant in the pan-Canadian AI strategy.

I want to begin by emphasizing that Canada has a right to regulate AI. These technologies are inherently public technologies. In the same way that railways, highways and cellphones have required public regulation, so does AI.

AI regulation should not just be economic but social as well. The production and use of AI inherently interacts with human rights. The government has a duty to protect those rights, especially the growing gender-based impacts. Canada's branch plant industrial policy on AI, so far, has moved too slowly to protect these rights. We cannot focus on productivity while ignoring quality of work, or economic opportunity without seeing the winners and losers. Such myopia puts Canadians and governments at risk. Politicians and parties need to read the room and understand the growing public sentiment against the AI industry today.

AI regulation requires new approaches to commons management and protection of public knowledge systems. AI is a commons management issue. We are already feeling the strain generative AI has put on our collective institutions, like our media systems and our public knowledge infrastructures as well. We have a history of building public media in this country and also an opportunity to build public AI. We need to define a vision for the future of this technology that works for all Canadians. Future policy must ensure we have the regulatory capacity, independence and financial means to achieve this vision.

Universities are critical to steward the knowledge commons but are in crisis. The pan-Canadian AI strategy must extend beyond its three research centres and include greater participation from the social sciences, arts and humanities. If AI is truly a problem for all of Canadian society, that challenge demands the participation of all of Canada's public institutions and facilities from coast to coast.

Canada must do better with public participation when developing its AI policy. Sprints and AI-assisted “what we heard” reports undermine the ethos of democratic participation, contributing to consistent public opinion polls reporting low trust by Canadians around AI.

By contrast, a coalition of civil society organizations launched the People's Consultation on AI last year in French and English. The consultation received over 70 submissions. My fellow researcher Joanna Redden and I are working on analyzing these comments. At first glance, we were struck by the depth and the sophistication of the responses. To build Canada's capacity to regulate AI, we need to hear more from these voices from civil society and from those most affected by AI. They need better inclusion in how Canada listens and understands the impacts of this technology, both social and economic.

Indigenous voices need special consideration in Canada's AI governance. Canada's true potential with AI can only happen through reconciliation and respect for nation-to-nation governance that understands and celebrates the distinct knowledge systems contained within our shared territories along with their influence and significance for understanding these technologies we call AI.

The challenge ahead is daunting and is exacerbated by long-term regulatory gaps. We are now trying to deal with AI empires when in the past we have struggled with social media platforms and even newspaper barons. The task is great, but now is the time to act towards a more inclusive, social approach to AI governance that meets the challenges of our time.

Thank you very much.

● (1210)

The Chair: Thanks very much, Mr. McKelvey.

Ms. Lambert, we will turn the floor over to you for up to five minutes.

[*Translation*]

Lisa Lambert (Chief Executive Officer, Quantum Industry Canada): Mr. Chair and committee members, thank you for the opportunity to appear today.

[*English*]

You're studying artificial intelligence. Let me start by clarifying something that is often blurred in policy discussions: AI and quantum are distinct technologies. Grouping them as a single category creates real risk in both policy and execution. AI is about learning from data, identifying patterns, making predictions and automating decisions using today's computing hardware. Quantum is categorically different. It's a fundamentally different way of processing information on new hardware, making certain classes of problems approachable in entirely new ways, including problems that are effectively out of reach today. Quantum also includes sensing and communications, enabling new ways to detect, navigate and secure our world.

For this discussion, I'll focus mainly on quantum computing. If AI is about extracting insight from data, quantum computing is about expanding what is computationally possible. These are distinct technologies with different capabilities, timelines, risks and policy needs. If we group them together wholesale, we risk misjudging those risks, misapplying regulations and missing the specific opportunities and vulnerabilities each presents.

They're also complementary. AI is accelerating quantum development. The future of compute is not replacement but convergence—with AI, high-performance computing and quantum computing working in concert. As AI scales, limits are emerging in energy, cost and sheer compute. Quantum computing offers, over time, potential paths through some of those constraints.

Other countries are already making coordinated investments in this convergence. Canada has the ingredients to lead—strength in AI, a world-class quantum ecosystem, deep computing expertise—but today we lack a fully integrated strategy that looks across these technologies rather than treating them in isolation and fully leverages our quantum strengths. That means integrating and scaling Canada's quantum champions as a core part of our frontier compute strategy.

Let me turn now to an issue that cuts across everything you're studying: cybersecurity. Quantum and AI are on converging timelines that already threaten the integrity of our systems today. AI is already changing the nature of cyber-attacks. At the same time, adversaries are harvesting encrypted data today—government communications, financial records, sensitive intellectual property—with the expectation of decrypting it once quantum computers mature. This is not a future threat. It's a present one.

Canada has taken an important step. In June 2025, the Canadian centre for cybersecurity released its road map for migration to post-quantum cryptography. Departmental migration plans were due this month, effectively by the end of today. High-priority government systems must be completed by 2031. The question now is execution, because this isn't just a migration. It's a generational opportunity to strengthen our cryptographic foundations, making them more agile and resilient against a rapidly evolving threat landscape.

The cyber centre's road map covers federal IT infrastructure, but Canada's economic and national security depends on a far broader ecosystem—critical infrastructure, financial systems, supply chains and the small and medium-sized enterprises across them. In an interconnected system like digital infrastructure, the weakest link defines the risk.

Government must now clearly signal, with urgency, that this transition extends across the entire economy, not just federal departments. That means using procurement already identified in the road map to pull the market forward. It means extending expectations to critical infrastructure and ensuring that Canada is equipped to execute—not just to set direction, but to build the capacity and coordination to act. If we get this right, we do more than mitigate the quantum threat. We build a foundation of trust that underpins AI adoption, quantum deployment, economic resilience and national security.

Many Canadian firms are leaders in developing the quantum-safe solutions required. This is both a security imperative and a commercial opportunity.

I have three points to leave you with.

First, AI and quantum are distinct technologies and must be treated as such in policy and regulation while recognizing their evolving convergence.

Second, the future of compute lies in the convergence of AI and quantum. Canada has the ingredients to lead if we move at pace to scale our quantum strengths so that early leadership translates into ensuring advantage.

● (1215)

Third, on cybersecurity, federal plans were due this month. The window for preparation is now. This committee can ensure that execution and accountability follow across government and the entire Canadian economy.

[*Translation*]

I look forward to your questions.

[*English*]

The Chair: Thank you very much.

Mr. Balsillie, welcome. The floor is yours for five minutes, sir.

Jim Balsillie (Founder and Chair, Centre for International Governance Innovation): Thank you very much for the invitation to appear today.

The global economy has undergone an unprecedented 40-year transformation where wealth, power and security are rooted in the ownership and control of the intangible assets of intellectual property and AI data. These assets behave differently than tangible goods do, and they require different strategies. Today, they dominate, comprising 92% of the S&P 500's $55-trillion value, as shown in figure 1 of the annex to my brief.

Canada's economic thinking remains rooted in the 1970s, which was a tangible production economy era. Due to this—as shown in figure 2—Canada has been in a structural 40-year decline, ranking last in the G7 in productivity per capita, and it is projected to remain the worst-performing advanced economy in the OECD for the next 40 years.

I illustrate in figure 3 that Canada's original sin was missing the geopolitical shift in 1994 with its highly publicized “orange book”, which reinforced policies unfit for the emerging knowledge economy. Canadians are experiencing this decline in their everyday lives, especially during the emergence of the AI data-driven economy over the last 15 years.

Figure 4 shows the trillion-dollar-per-year GDP divergence to the U.S. over this period, which is equivalent to $100,000 annually per family of four. Figure 5 shows the exfiltration through Canada's outdated FDI strategies. Figure 6 summarizes how Canada's prosperity and security—especially in the intangibles economy of IP, data and AI—are restricted due to poorly negotiated trade agreements that focus on a 1970s economy.

My remarks today focus on three linked strategies that Canada must employ for its data and AI policy. Number one is fit-for-purpose privacy legislation. Number two is expertise to perform economic statecraft via regulatory frameworks. Number three is sovereign commercial alternatives.

Privacy and AI governance is a human rights issue. Figure 7 illustrates how inadequate governance in Canada of AI and data enabled a surveillance economy that caused a litany of harms to Canadians. They manipulate economic outcomes, enabling algorithmic pricing and wage suppression, which raises costs while lowering incomes, as my recent op-ed explains, which is in figure 8. Surveillance models also circumvent the knowledge rights I list in figure 9, which I map in figure 10 to failing Canada's commitments under the ICCPR. Figure 11 summarizes the big-tech capture and ensuing failure of the two recent attempts to upgrade PIPEDA. Canada cannot afford a third such misfire.

Canada’s policy-thinking never understood the central role of economic statecraft that created the intangibles economy for AI and more. The ensuing appendices briefly summarize examples from the last year where the U.S. deployed sophisticated capacity and strategies to utilize legal frameworks of economic statecraft to advance its prosperity and security.

Figure 12 shows that Canada is essentially absent in the three million AI patents issued globally, despite our taxpayers' funding foundational research. The resulting large and growing deficit on IP payments and receipts would be much larger if data flows were included.

Figure 13 shows the U.S. advancing its interests through coordinated policy instruments, including the AI white paper, the GENIUS Act, IEEPA tariffs and IP march-in rights. Figure 14 shows the U.S. push toward unified digital asset frameworks to control and capitalize on emerging tokenization opportunities. Figure 15 shows how the U.S. national security strategy integrates standards, IP and resource security into a single doctrine. Figure 16 summarizes how the USPTO established a working group that embeds U.S. patents into global standards bodies to convert IP into market power.

Figure 17 shows that when the U.S. exited multiple organizations, it deepened participation in three key standards bodies to drive more control over value chains. Figures 18 and 19 show how the U.S. and EU use standards setting to embed value capture and condition market access, especially for AI. Figure 20 details the recently released U.S. AI legislative framework. Figure 21 shows how the USPTO patent adjudication has been updated to favour domestic interests.

● (1220)

Figure 22 shows how the U.S. advisory structures integrated industry feedback into USMCA negotiations and how restrictions on Canada were a feature, not a bug. Canada is not participating in any of this statecraft, which is technical and requires expertise and capacity. This urgently needs to change.

In closing, we cannot do developing economy strategies and expect developed economy outcomes. In Figure 23, I list examples of sovereign commercial alternatives the government can and should support to ensure that AI delivers more sovereign prosperity, security and public good. This includes sovereign compute, national digital rails and unified ledger, a sovereign ad stack and a sovereign job board.

Thank you, and I look forward to your questions.

● (1225)

The Chair: Thank you very much, Mr. Balsillie.

Ms. Dancho, the floor is yours for six minutes.

Raquel Dancho: Thank you, Mr. Chair.

Thank you to the witnesses for your excellent testimony.

Mr. Balsillie, I have questions for you. I appreciate your considerable expertise in this area and also the evaluation of what Canada needs to do to really catch up so that we can even hope to compete in this space and ensure that we're protecting our IP for the benefit of generations.

My first question for you is a simple one. If you were to evaluate the federal government's performance over the last year on AI, what grade would you give them?

Jim Balsillie: I would score that it did not attend. You have to understand this is a race, and we haven't gotten out of the locker room. The only thing that I've seen is giving $240 million to a foreign company under a sovereign compute program, which is kind of like giving cigarettes out to a school health program. It's the opposite. It takes our scarce money away from this urgent objective.

Raquel Dancho: I believe you were talking about CoreWeave and the interaction that Cohere sort of hired or did hire CoreWeave to build their data centre and operate it. Can you give us a bit more detail? What are some of the consequences to Canadian IP, if any, amongst other issues with that?

Jim Balsillie: That contract could have been a company maker for half a dozen great potential Canadian companies in sovereign compute, and now the wealth effects and the IP all flow to CoreWeave and its shareholders. Plus, it's governed under the U.S. CLOUD Act so that we don't have sovereignty over the data that's there. That's not inattention; that's an own goal of the most severe proportions.

Raquel Dancho: What do you think some of the core issues are? You did outline them in your in your opening remarks, and thank you for the detailed report that you provided to the committee. There are some excellent tables and figures in here that I think are very pertinent to the AI study, especially where the issue is our lack of capitalizing on our inherent success of having some of the fathers and founders of AI.

Why do you think that the performance, in your estimation and frankly in others', has been has been so weak on AI?

Jim Balsillie: All the thinking is from the 1970s, and I don't say that pejoratively. It behaves differently. It behaves opposite. I gave a keynote in November, and some very senior people were there, on the future of work and so on, and I was pleading to praise the budget. I was pleading to praise this spring update, to just show some signal.

Sometimes when people have a stroke, they deny that they have a right arm. It's called an agnosia. We have agnosia on the policy of intangibles. So many very smart, thoughtful people come to me and ask what's going wrong. I just say, “They're stuck; they're blind”. No conscientious person—and I do believe there are many conscientious people—would behave like this if they were cognizant of the consequences of inattention.

I was severely disappointed in the spring economic statement. We were involved deeply prior to the budget. This trillion-dollar divergence is going to get worse. The harms are going to get worse until we update our approaches and start attending to the real battle lines of the 21st century.

Raquel Dancho: From a number of the tables and data that you provided, it looks like the U.S. is moving, at least recently, quite aggressively to modernize, you could say, their approach to capitalizing on AI and and other emerging and influential technologies.

Are they a leader in this? Who's doing well, and where could we be looking for examples? Is it the EU or China? Who is bringing in policy that's helping them?

Jim Balsillie: Many nations in Southeast Asia, Europe, South America and elsewhere, and the U.S., understand that the intangible economy is not a production economy of co-operative trade. It's a rentier economy wherein somebody is the landlord and somebody is the tenant. Nobody's going to look after Canada. Nobody's going to be our economic partner, because nobody is anybody's economic partner in this system. It has to be us looking after ourselves. I've not seen a country with more potential pay less attention to this than Canada. The South Koreans are doing sovereign compute. All the Europeans are doing it. They're doing the AI governance. South Americans are doing their own payment rails and systems. There's a big contention on the compute and digital sovereignty the Mexicans are doing. The U.S. of course....

I'm really concerned about our lack of attention to this as a country. It's moving fast, and we're putting negative points on the board, not even a positive point.

● (1230)

Raquel Dancho: What would be one of the first steps to take to put us in the right direction?

Jim Balsillie: The first thing we have to do is orient to the fact that this stuff matters. We don't participate in any of these standards bodies. There's a war going on in standards bodies. What's happened is this: Basically, CEN, CENELEC and IEEE are the European ones. They booted out ISO because it's too U.S.-centric. The U.S. doubled down on ISO and IEC, as I talked about when those structures.... It exited 66 global organizations. ISO and IEC are joint in AI governance. We're not there. We don't understand that the rules and structures, and winners or losers, are happening on these committees right now, every single day.

What would I do? I'd build capacity. I'd demand orientation, and I'd map out implementation plans on all these specific things I've outlined. I'm just giving examples from the last year. I could double this list if you want me to, but I only have five minutes.

Raquel Dancho: Thank you very much. I'm out of time.

The Chair: Thanks, Ms. Dancho.

Mr. Ma, the floor is yours for six minutes.

Michael Ma (Markham—Unionville, Lib.): Thank you, Mr. Chair.

Thank you to the witnesses. My first question is for Ms. Lambert.

You mentioned that AI and quantum are on converging timelines and that Canada has the room to lead. Even though you wish AI and quantum were treated separately, how would you recommend the government incorporate quantum into our AI strategy?

Lisa Lambert: Thank you for the question.

I think it's really important to understand the nuance between the two. A lot of the time, emerging tech is treated as a broad bucket. They are different platforms with different considerations, and they're also at a different stage of development right now, where AI is further along and quantum is a bit more nascent.

Here in Canada, we have a number of world-leading quantum computing hardware players competing at the highest levels, with diligence. Three of the 11 companies in stage B of DARPA's quantum benchmarking initiative, or QBI, are Canadian companies, which is a great testament to our strength in this. It was also Canada, through 1QBit, that founded the global quantum software industry. We have a number of significant assets here.

Canada is really at a key point right now. We may have overlooked some policy considerations in terms of AI. Mr. Balsillie pointed out a number of those. I would argue that quantum is the canary in the coal mine for a number of the decisions we make going forward and for seeing what the path will be for commercializing this technology.

Canada has a history. It's been commented on already. I've said it before in this committee as well. We do very well in the early innings. We're great pioneers of these emerging technologies. Then, when it comes to commercialization, we give the value capture away. For quantum, we're at this decision point right now. Looking at this very seriously, it is a bit of a different path than it is for AI. With AI and compute infrastructure, we want to be skating to where the puck is going with this, rather than looking at one class of compute in isolation.

These really are going to be orchestrated systems, going forward. That's how we work with compute today. We use GPUs and CPUs. This all happens seamlessly behind the scenes. It will be similar with frontier compute and the different systems we're talking about. We need to make a concerted effort to work on developing these systems, ensuring that we have companies at the forefront of this space and understanding that orchestration, because we can't be sovereign over what we don't understand.

Michael Ma: Thank you.

Ms. Lambert, you co-wrote an article last November entitled “Cyber Resilience: The Cornerstone of Canada's Digital, AI, and Quantum Future”. In the article, you stressed the importance of treating the intersection of AI and quantum computing as central to Canada's digital future and ensuring that cybersecurity remains at the forefront of the discussion.

Can you share with us what you see as the largest vulnerability Canada faces if cybersecurity does not keep pace with development in AI and quantum computing?

● (1235)

Lisa Lambert: Our entire economy is built primarily on a digital backbone. What we're talking about is vulnerability to the foundational cryptographic systems that keep that backbone secure. If we're not looking at updating those systems.... A lot of the cryptographic layer that's protecting our systems right now goes back to the 1970s. It's due for a refresh, to say the least.

With the opportunity right now with the quantum threat, which we've known about since 1994, there have been a number of Canadians advocating for the need to prepare for this and leading the development of solutions that are now standardized in this space and ready for deployment. We have truly a generational opportunity to be not just migrating over to quantum-safe solutions, but to be fundamentally refreshing our cryptographic layer and ensuring we have that protection over the digital backbone that is going to underpin our entire economy, national security systems, government systems and pretty much everything that we transact over now.

The potential risk for this is quite frankly catastrophic. It's something that we know about. We need to take action and move forward with urgency and ensure it's not just the government that's protected, but all of society.

Michael Ma: Thank you.

What concrete steps should the Government of Canada take to ensure our cybersecurity keeps pace with these emerging technologies?

Lisa Lambert: Engaging with the developers of this, both of the technologies and of the countermeasures, is really key. It's moving very quickly right now. You can only be at that forefront by having engagement as the first piece.

I did mention that the cyber centre released their post-quantum migration road map back in June 2025, which is a good first step with that. I think the government should look at department plans. They are due by end of day today. Are those department plans filed? Are they credible? Do we have an inventory of our assets? It's very hard to protect your cyber-assets if you don't actually know what they are and where they are.

Getting the inventory layer in place is a key piece for that. I think government has a role to play and a responsibility. Government knows about this threat. To be able to convey that to Canadians, Canadian businesses and Canadian public institutions and ensure they have the support and the coordination needed to migrate over is a key piece as well.

Michael Ma: Ms. Lambert, you also wrote an op-ed in The Globe and Mail, entitled "The future is quantum. Canada must seize...it", in which you stated that quantum technologies are the future. In particular, since quantum computing is the future, how can Canada position itself to be the leader at the intersection of AI and quantum?

You also talked about how "Canada led groundbreaking AI research" and said, "But too often we've stopped short of translating scientific leadership into lasting economic and strategic advantage." In your view, how did Canada fall short in fully commercializing and scaling its AI advantage?

The Chair: Answer quite concisely, please, Ms. Lambert, because we're over time.

Lisa Lambert: I think we lost sight that we were in a race. We continued to treat AI as a research project and not as a foundational technology platform that was moving forward and moving into commercialization and industry, and our policy tools were completely mismatched for that.

The Chair: Thank you, Mr. Ma.

[*Translation*]

Mr. Ste-Marie, you have the floor for six minutes.

Gabriel Ste-Marie: Thank you, Mr. Chair.

I'd like to welcome the three witnesses and thank them for being here.

First, I have a comment for you, Ms. Lambert. Again, I repeat, the quantum industry is a really important industry. I hope the best for you. I think that, in the future, the committee could examine that industry in greater detail.

I had some questions for you, but my colleague Mr. Ma asked them all. I took note of your answers, and I thank you for them.

By the way, I want to point out that the Turing award was won by Mr. Gilles Brassard from the Université de Montréal, whose work focuses specifically on cryptography. We are following that closely.

Mr. McKelvey and Mr. Balsillie, my first question is about the AI act passed by the European Union in 2024. Should Canada draw inspiration from it? Can this framework lay a good foundation or would that be a mistake?

Mr. McKelvey, you may answer the question.

Mr. Balsillie, you may answer afterwards.

[*English*]

Fenwick McKelvey: Thank you.

Certainly, one of the key concerns of the EU AI Act is its implementation. It was first moving in the launch of a high-risk system, which is quite distinct from AIDA. I think it was something we wanted to see better implemented in Canada as a way of assessing and trying to understand where the applications of AI could be. Certainly, as an educator, the fact that AI in education was a high-risk application is a good example of how this act was developing a literacy to try to process and triage human rights risks for new AI technologies.

I think the concern has been the move towards generative AI models, which I think elude regulation strategically because they're meant to be all things at once. I think that is one of the things we need to be mindful of: both the way the EU AI Act has stalled around generative and foundational models and the way that the assessment and the techniques of assessment were largely delegated to third parties, meaning that there wasn't institutional capacity at the government or state levels to make these kinds of classifications.

I think those were two key gaps that we could learn from.

The third—to emphasize—is, in Europe, the development and proliferation of open models and the opportunity we have, in collaboration with other developed nations, to work towards more digital solidarities and stacks that allow us to take advantage of these complex technologies that one nation alone might not be able to create.

● (1240)

[*Translation*]

Gabriel Ste-Marie: Thank you very much.

Mr. Balsillie, it's your turn to answer.

[*English*]

Jim Balsillie: Thank you for the question.

It's a multi-faceted challenge. Europe's ahead of us in many respects, not the least of which, as I've mentioned, is its privacy legislation, which is rooted in human rights. It's also deeply involved in the regulations to govern AI.

Professor McKelvey is right that learning models threw everybody sideways, and there are also enormous intellectual property issues that everybody is racing to on these things.

Europe has a lot more latitude to govern itself because we got shackled under USMCA. If you noticed, the way we're trying to get ourselves out of this is through a little bit more sovereign compute, and the moment we talk about it, it's introduced as a trade irritant.

My point is that there's no silver bullet in this. We're going to have to understand the economic statecraft that's at play here. It's all very legal, and it's very technical. Europe is a full participant, including the privacy legislation and institutions to respond to that.

We're literally doing nothing. I just want us to get oriented to this and to start doing these things. Definitely, the standard setting on the AI Act, the privacy of GDPR and certainly starting to look at the governance of it and what they're doing on sovereign compute are very good places to start.

[*Translation*]

Gabriel Ste-Marie: Thank you very much.

I have a second question for you both.

We talked about generative AI.

Prior to the last election, alongside the debates about Bill C-27, the government published the voluntary code of conduct on the responsible development and management of advanced generative AI systems. Today, more than 40 businesses have signed the code.

Is that enough to properly regulate the use of AI?

Please answer in under a minute each, if you can.

Mr. McKelvey, you may go first again.

Mr. Balsillie, you'll go after.

[*English*]

Fenwick McKelvey: Briefly, no. One part, to echo Mr. Balsillie's comments, is that when I was co-director of the Applied AI Institute at Concordia University, we tried to participate in standards organizations, but we lacked resources and capacity.

There is a gap for researchers with an expertise in understanding the social impacts of digital standards to participate at these levels. I think the formation of the code of conduct is another example of a largely industry-led initiative trying to whitewash the social risks of AI with a non-binding agreement. It's more of a photo op than anything about actual lived impacts, as we've seen play out most recently in Canada.

[*Translation*]

Gabriel Ste-Marie: Thank you.

Mr. Balsillie, it's your turn to answer.

[*English*]

Jim Balsillie: Same thing.

[*Translation*]

Gabriel Ste-Marie: That's great. Thank you.

I still have 30 seconds left. Mr. Balsillie, could Bill C-27 from the previous Parliament form a good basis for legislation governing AI?

[*English*]

Jim Balsillie: Would Bill C-27 be good? Bill C-27 was written for the benefit of Silicon Valley. The idea that it wouldn't incorporate human rights into it and this spaghetti mixture of it....

I participate with the national security drafts in Washington with the GOP, and I can follow and understand it very clearly. This is a spaghetti mix of diversion. I'm quite sophisticated in these matters, and it took me three months with six experts to pull apart Bill C-27 and get my head around it. My Centre for Digital Rights wrote a 107-page critique of how you have to fix it.

If you want to do this stuff, stop the charade and let the erosion and the harms carry on: lose the culture of Quebec, hurt our children, weaken our economy and be vulnerable to security and predation. Let's stop the performance.

We all love this country, and we're all trying to make it better. As Professor McKelvey said, we have to go to substance and not performative stuff, because the world sneaks through the cracks of the performance.

● (1245)

[*Translation*]

Gabriel Ste-Marie: Thank you very much.

The Chair: Thank you, Mr. Ste-Marie.

[*English*]

Ms. DeRidder, welcome back to the committee. You have five minutes.

Kelly DeRidder (Kitchener Centre, CPC): Thank you, Chair.

Thank you to all the witnesses for being here.

Mr. Balsillie, thank you for joining us. It's great to have you again at another committee. We can ask some important questions. Your expertise is always welcome.

You mentioned that Canada has huge potential in the technological era and that our economy could really be stimulated through it. I agree completely. Innovation hubs like Canada's innovation capital, Kitchener Centre, are huge contributors to that. We also have these amazing minds coming out of our universities, who are turning into entrepreneurs and building our innovation.

Where is the government missing the mark here?

Jim Balsillie: There are two things.

Number one is that the government's thinking is rooted in the 1970s. There's no capacity for the contemporary realities. It doesn't understand how to govern this and that it works very differently. The research funding, the FDI programs and all of these things are not attuned to contemporary realities.

Since you talked about the hub here, we have to accept that over the past 10 years, for start-ups out of places like Waterloo with Canadian founders, it used to be that about 70% of them stayed in Canada. Now just over 30% of them stay in Canada. If any of you in business were losing 70% of your new customers every year, that would be a crisis. We have to start to relate to these people and talk to them and find out what's going on, why they're leaving and what the problems are.

Again, we can't do performative stuff, because the people just leave. I spend a big part of my time in philanthropy trying to encourage people to stay in Canada and build in Canada, and it's far too hard to make that case when, quite frankly, they're getting wind blown in their faces.

Kelly DeRidder: I agree completely. I'm going to circle back to that, but I want to ask a question about trade, because you did focus quite a bit on trade in your opening statement.

As we head into this CUSMA review, do you personally see the U.S.'s broader strategy as shaping the terms of this negotiation to maintain advantage over our tech and data sectors?

Jim Balsillie: One hundred per cent. We're not prepared at all, not in the slightest. It's purely performative.

I've been involved in this. The U.S. now has a thousand experts on 26 committees by law of Congress, and they've been preparing. When we got into USMCA.... Imagine 26 committees. There are a million words in the USMCA, and you will not find the words “free trade” in it. Each of them gets 40,000 words for their sector to say what they want. They've spent six or seven years preparing, and we show up with an ad hoc group saying, “Yikes.” Then we run the clock, and they say, “Either sign it, or we're pulling the plug.”

Do you remember how that all happened? I wrote a piece saying this is going to be bad, and they've weaponized ambiguity, because they can restart in six and a half years. Our economy has diverged since then. They've put us over a barrel. We weren't prepared, and there is no preparation right now. I know the people who are in it. What will our response be when they put their next million words into it?

Again, we had a 1970s conception that it's hands-off, get out of the way, let it flow, because it's all shared. In fact, it's a win-lose, landlord-tenant situation, and we had no strategies to be the landlord, so we progressively became the tenant. We have so much potential and so many blessings, but now we're vulnerable to leverage in every aspect of our sovereign, democratic nation.

Kelly DeRidder: Have you personally been in conversations with the government to sound the alarm here and say, “Get prepared because this is what we're seeing?”

Jim Balsillie: Many times.

Kelly DeRidder: Have you been listened to at all in any way?

Jim Balsillie: It's not that they're adversarial. It's that they don't understand.

Kelly DeRidder: Period...?

Jim Balsillie: Period.

Kelly DeRidder: Okay.

Jim Balsillie: I'm trying to tell you that the government is locked in a bygone era. That's why I use the metaphor of the stroke. If you've ever read books on strokes, you can try to persuade someone they have a right arm and they don't believe you. “No, I have no right arm. It's not there.”

I could go chapter and verse. It says we have the most free trade agreements in the world. If they're instruments for regulatory remote control, then we're the most shackled in the world. They're instruments of shackling, not of enabling, if you don't approach them with expertise, which it did not. It approached them with a 1970s production liberalization model, and then it gaslights by saying we're the envy of the world.

When I engage with these people.... Europe fights tooth and nail and refuses to concede to the very things Canada conceded to, because it knows it's the end of the game.

● (1250)

Kelly DeRidder: Thank you very much.

I have one question for Professor Lambert.

You mentioned that we focus a lot on research, but we've missed the mark with commercialization in the government's current strategy. I want to talk specifically about how the Minister of Digital Innovation just came out with a new program to build the world's most advanced AI supercomputer. When I went into the application screening, only non-profits and post-secondary institutions could apply for it.

Do you think that by not including industry we're again missing the mark here?

Lisa Lambert: Yes, because I think we look at it, again, as a research project. We're not looking at the long-term investment with this and how we can actually make this a tool that businesses can leverage.

It will be the same for AI and quantum. These are platform technologies that you can build new business models on top of. Having a platform and tools available that businesses can actually leverage and for them to be a part of that, we can say, for the quantum sector, that industry is incredibly far ahead. It's mind-blowing. Things can happen right now in industry that can't happen in research around the scale that they're moving up, but they're also very concerned about their IP and keeping things saddled down in how they're working, because they are in a global race for this.

If you want to be at the forefront of this, you have to have industry at the table. The pace that industry can move at is far quicker than research or a lot of non-profits, in these cases. It can add in other layers instead of having the key players within that, but again, you need to have a conversation or at least have an understanding of which industry is at the table and look at the long-term benefits for Canada.

Kelly DeRidder: Thank you so much. I'm out of time.

The Chair: Thank you.

Colleagues, we are running over time. As a reminder, we have committee business to tend to.

I'm going to have to take a minute off of your time, Monsieur St-Marie, and two and a half minutes off Mr. Falk's and Mr. Bains' time.

Mr. Bardeesy, the floor is yours for five minutes. Go ahead.

Karim Bardeesy (Taiaiako'n—Parkdale—High Park, Lib.): Thank you, Chair.

I'm going to try to get a question in to each of the witnesses. I'll start with Mr. Balsillie.

You mentioned the sovereign AI strategies that different entities have, and one of the pillars of our forthcoming strategy for Canada will be building a Canadian sovereign AI foundation. You get the opportunity to see lots of innovators participating in the sovereign AI stack, or in the compute stack, to be precise. You mentioned the talent and the opportunities that exist within the talent in Canada.

Could you say a bit more about which parts of the stack you think Canada can be especially competitive in?

Jim Balsillie: I feel gaslit with the over-rotation on a network LLM, and that's no criticism of a company that's trying to make its way. By far, and I've been on this for a long time, the critical part is the data. You cannot separate data compute from the software stack. It's going to have to be a public utility. If you put in your health care data, are you going to give that to a corporation that can then do what it wants?

The most important thing is to think institutionally and actually put the data to work as a critical input of this. Then, whatever's in the stack for AI and compute, just make sure you have a couple of competitors. It's a vendor relationship thing.

Karim Bardeesy: To be precise, then, are there players in the AI health data space that are ready for prime time, in the way that you describe, in Canada?

Jim Balsillie: It's kind of like saying, “Do we have good athletes?” but you don't have a playing field for them to play on. If you haven't made the health data available in an environment that's properly governed to do it, you foreclose on the potential. That's part of the reason we've seen erosion; we haven't created an environment.

The U.S. uses its hyperscalers. Other countries in Europe and Asia use state structures, and so on. We're just not in the game, or we give it away to foreign multinationals, and then we don't get the benefits.

There are good companies out there, and I think they would love to work with that data. We should do the exact same thing for defence, which we're not doing right now. We just foreclose on the game and take ourselves out of the high value-added, security-enhancing stuff.

● (1255)

Karim Bardeesy: You think, specifically in health care and defence, there are good companies and good talent that is ready. Is that correct?

Jim Balsillie: There's tremendous opportunity out there, but they need an environment in which to perform.

Karim Bardeesy: I want to switch over to Ms. Lambert.

I'd like to get a bit of perspective on the labour side. You're in the position of connecting with the players in the sector. You've helped inform the quantum strategy of the government, so I'd like to understand something from a workforce perspective.

When people are considering entering a field with a bit more maturity, like AI, but they're also encountering an option in quantum computing, what do potential workers look at when you're trying to, in a sense, sell them on the opportunities in quantum computing, which is a space that isn't quite as mature as AI?

Lisa Lambert: I think there's maybe still a misunderstanding that you need a Ph.D. to work in quantum, which is very much not the case now. We run Canada's quantum job board, so we have direct insights into the positions being posted.

Companies are recruiting across all areas of business. While it is nascent, there is very much a vibrant industry. They need to look at a handful of Ph.D.s, and they're certainly always recruiting top talents in that area. They need engineers as well—those with master's degrees. There are tons of opportunities for people with go-to-market skills and with operational skills in HR, finance and the whole gamut that comes with it.

Increasingly, we're also seeing opportunities for tradespeople. There are a number of firms I work with that hire directly out of polytechnics and trade schools to bring in that talent. They're building systems. They need welders and those who are great with advanced fabrication, electronics and other pieces. There's a whole breadth of opportunities. This sector is growing incredibly quickly now.

A study quoted in "Canada's National Quantum Strategy" projects that for Canada's quantum sector, by 2045, it'll create over 200,000 jobs. This looks at direct, indirect and induced impacts from that. It's a vibrant place. We're seeing this in Canada and globally now. If people are looking to build something really vibrant, quantum is a great sector, and you don't need a Ph.D., necessarily, to be part of it.

Karim Bardeesy: Mr. McKelvey, on the previous panel, we heard from some labour unions. They expressed concern about the use of AI to displace or mask the potential presence of a customer service agent in Canada to create an appearance that the agent is in Canada when they're somewhere else, or to mask the fact that it's an AI agent rather than a human agent.

Can you speak briefly to that? What would a policy framework to respond to that type of activity look like?

Fenwick McKelvey: One of the things to highlight, especially due to many of the workers there coming from telecommunications, is how much attention there is to the ways AI is being positioned as automation in the telecommunications sector. If you read the annual reports of many of the big telco firms in Canada, that's been identified as a trend for a long time. The fact that we're catching up to this is one of the reasons I have concerns about Canada's AI strategy, so far.

Certainly, it's really important to talk about consumer protection and to make sure you have a robust Competition Bureau that's able to investigate forms of consumer malpractice and the ways that chatbots are representing companies. I think it needs to be proactive around consumer rights, rather than *ex ante*, which we saw in the Air Canada case.

Karim Bardeesy: Thank you.

The Chair: Thanks, Mr. Bardeesy.

[*Translation*]

Mr. Ste-Marie, you have the floor for one minute.

Gabriel Ste-Marie: Thank you, Mr. Chair.

My question is again for you both, Mr. Balsillie and Mr. McKelvey.

Since you both won't have time to give a full answer, I'll ask only you the question, Mr. Balsillie. However, I encourage both of you to expand on the answer by sending an email to the clerk so that it can be included in the committee's study.

Some witnesses who have appeared before us previously suggested developing an international treaty governing AI. They said that it would be a good idea to start by working with countries that share our interests on this matter.

What do you think of that, Mr. Balsillie?

[*English*]

Jim Balsillie: I think it's performative that we're not participating at the plumbing level where it's happening now. We want to be in some kind of performative thing so it appears that we're doing something, when in fact, where the real game is going on, we're AWOL. I would not call our current approach responsible.

[*Translation*]

Gabriel Ste-Marie: Thank you.

Mr. McKelvey, feel free to send us your answer by email.

The Chair: Thank you very much.

[*English*]

Mr. Falk, the next two and a half minutes go to you.

● (1300)

Ted Falk: Thank you, Chair.

Thank you to all of our witnesses.

Mr. Balsillie, I was substituting on the industry committee when you presented on Bill C-27, and you very clearly articulated what a disaster that piece of legislation was. Since then, we haven't seen this government come up with anything. Like you say, they're missing in action.

You've provided us with a lot of information. We've seen that our immigration has been double the percentage of what the Americans' has been, yet our GDP has been dropping by half a per cent a year. We don't have to do the math for too long to see where that's headed. We've completely dropped the immigration perspective as well, in that the people we're bringing in aren't adding value to the GDP.

You've provided us with a lot of information, and there are lots of trails I'd like to go down. However, in figure 8, you talk about how "the data-driven economy has ushered in a trail of social harms". When I go to figure 20, you also talk about Americans bringing in legislation for an AI framework this past March, which addresses things like parental control and protecting our children.

Can you expand on that a little more, please?

Jim Balsillie: Yes. What's so important to understand is that data and privacy are the feedstock of this system, so whatever you're going to try to do, if you don't do privacy right, your ability to do anything becomes much more difficult. The second thing is that if you don't understand how to develop a scope of action in these legal frameworks, your ability to do something is, again, much less.

What's happened is that it's become very profitable to hurt people. It's become a state-company apparatus to jackhammer that into vulnerable states where they can get away with it, so here we are.

If we want to protect our children, if we want to protect our economy, if we want to protect our communities and culture, we're going to have to say that we're strong on privacy. We're going to have to know our red lines in these negotiations. We're going to have to be much shrewder in capacity, because we're principally rule-takers not rule-makers in how we navigate these realms.

As a for instance, we've allowed a private social media network to privatize the media-serving engine, and that is a public good. We built CBC some 100 years ago because Canadian stories weren't being told, but now we let other people tell us what stories we should be hearing. They tell them in a way to addict us and hurt us because that's more profitable.

My answer lies in how to approach this. You have to get privacy right. You have to get your expert degrees of navigation and freedom expertise right. You have to create alternative approaches, because these companies do respond to competitive threats. Facebook was privacy protecting, and then when it became dominant, it became privacy exploiting.

You have to change the terrain *ex ante*, and not with very limited *ex post* tools that get into geostrategic state battles.

The Chair: Thanks very much, Mr. Falk. That was 60 seconds over.

Next, we have Mr. Ntumba,

[*Translation*]

Mr. Ntumba, you have the floor for two and a half minutes.

Bienvenu-Olivier Ntumba: Thank you, Mr. Chair.

Mr. Balsillie, as I listened to you speak, I wanted to share with you two things we've done recently.

Our government's two pillars are to empower Canadians to act and to encourage the use of AI for our shared prosperity. Our government is currently investing in two programs focused on expanding Canada's computing capacity: the Canadian sovereign AI compute strategy and the AI sovereign compute infrastructure program. Both of these programs are estimated at $700 million at least.

How do computing capacity, digital infrastructure and access to data influence Canadian businesses when it comes to AI?

[*English*]

Jim Balsillie: As I said before, there was money before for compute and it was reprofiled, the $800 million, and the first cheque for sovereign AI compute was given to a foreign firm. I think you're going to have to look... There's a mistake that's happening. There's been a lot of gaslighting going on where foreign firms are calling themselves Canadian firms. The compute and all the reports that are going out there, they're not dealing with the governance layer.

If they're not, who has the right to chew on your health data and decide who gets to see it and under what terms? I don't want that to be a private actor, so you have to look at the compute function and who does it.

You had an excellent comment on the quantum stuff saying that you need private firms to be doing this quicker. However, I do not want the governance layer to be privatized. I have not seen anything on the governance of this, the governance of the data and the governance of the compute, when you put sensitive Canadian data into the systems, yet we can't afford not to do it.

This is part of the institution of sovereign compute. I can provide much more detail on that and on how you might want to think about it. There's an expert group that's been working on this but, quite frankly, has been rejected by the government. I'm not involved in it, and that's unfortunate.

● (1305)

[*Translation*]

Bienvenu-Olivier Ntumba: Ms. Lambert, I would like to ask you the same question. Can you comment on that?

Lisa Lambert: I agree with Mr. Balsillie on this topic and on the topic of governance.

It's important that industry be at the table, but I agree that it shouldn't take control of governance. That should remain in the hands of public institutions or an entity that can serve Canadians.

Bienvenu-Olivier Ntumba: Thank you.

[*English*]

The Chair: Thank you, Mr. Ntumba.

Colleagues, that brings us to the end of the second hour here.

Thank you very much to the witnesses for making themselves available.

Colleagues, I'm going to suspend. We are going into committee business, which means I'm going to need all non-designated staff to leave the room once I hit the gavel. It's going to take us about two minutes to transition over. I know that folks like to have conversations after the fact to debrief on the meeting, but if you choose to do that and your presence is required at the table, just note that you'll have a conflict in your schedule.

We're suspended. We're going to start again in two minutes.

[*Proceedings continue in camera*]