

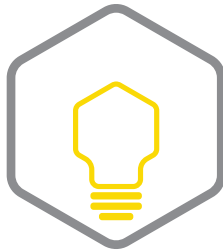
# ENABLING ENTERPRISE TRANSFORMATION WITH BLOCKCHAIN

**Interac and Its Bold Plan to Change the World,  
One Ecosystem at a Time**

Anthony D. Williams, Ricardo Viana Vargas, Edivandro Carlos Conforto,  
and Tahirou Assane Oumarou  
DEEP Centre and Brightline Initiative

March 2020





## Realizing the new promise of the digital economy

In 1994, Don Tapscott coined the phrase, “the digital economy,” with his book of that title. It discussed how the Web and the Internet of information would bring important changes in business and society. Today the Internet of value creates profound new possibilities.

In 2017, Don and Alex Tapscott launched the Blockchain Research Institute to help realize the new promise of the digital economy. We research the strategic implications of blockchain technology and produce practical insights to contribute global blockchain knowledge and help our members navigate this revolution.

Our findings, conclusions, and recommendations are initially proprietary to our members and ultimately released to the public in support of our mission. To find out more, please visit [www.blockchainresearchinstitute.org](http://www.blockchainresearchinstitute.org).



**Blockchain Research Institute, 2020**

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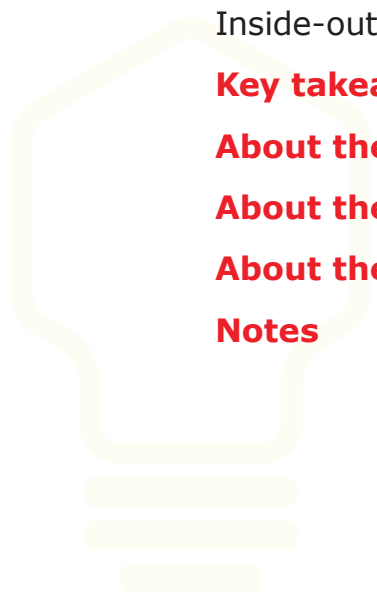
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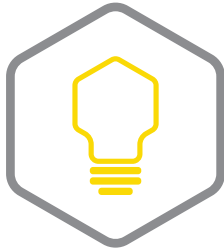
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## Foreword

In one way or another, all our work at the Blockchain Research Institute highlights how blockchain technology transforms enterprises whether they are private or public sector. The stakes have never been higher, and the potential for improvements are legion. Our brilliant colleagues at the DEEP Centre and the Brightline Initiative present best practices for simplifying complex ecosystems while building trust between parties.

While outlining important recommendations for the private sector, this project extends well beyond the boardroom—covering compelling case studies in areas such as healthcare, climate change, and humanitarian relief. It also describes how tokenization can work as a “carrot” approach to improving behavior—with case studies relating to energy use and heart health. In both examples, users are incented toward good behavior via gamification and financial reward—all measured using blockchain technology.

*Our brilliant colleagues at the DEEP Centre and the Brightline Initiative present best practices for simplifying complex ecosystems while building trust between parties.*

This project is one of our collaborations with the Brightline Initiative. BRI members are familiar with the authors: they wrote the ground-breaking white paper, *Blockchain and the Project Management Office: A Distributed Platform for Strategy Delivery and Organizational Transformation*. Anthony Williams is one of our most prolific researchers and my co-author on *Wikinomics* and *Macrowikinomics*. Ricardo Viana Vargas is one of the world’s leading experts in the field of project management. Dr. Edivandro Carlos Conforto is head of strategy research at Brightline Initiative and is widely published in the field of strategic initiative management and capacity building. Tahirou Assane Oumarou is the director of operations of the Brightline Initiative and was formerly the deputy director, infrastructure and project management group, in UN Office for Project Services. In this role he managed peacebuilding, humanitarian, and development projects globally.

Here they combine their insights to shed light on how blockchain will enable us to re-architect the deep structures of the enterprise for innovation, shared-value creation, and *prosperity for the many*—for customers, employees, and their communities—rather than just wealth for the few.

 DON TAPSCOTT  
*Co-Founder and Executive Chairman  
Blockchain Research Institute*



*Enterprise transformation involves fundamental changes to how an organization operates.*

*While market forces can create an imperative for enterprise transformation, disruptive technologies such as artificial intelligence and blockchain provide powerful platforms for enabling radical changes in corporate strategy and structure.*

## Idea in brief

- » Enterprise transformation involves fundamental changes to how an organization operates and can include bringing new products to market or making significant structural or operational changes to people's work, processes, and enterprise platforms and technologies.
- » In our signature case on enterprise transformation, we document how Interac, Canada's largest digital payments company, is using blockchain to seize new market opportunities in the energy and health care sectors.
- » Using Brightline's enterprise transformation compass, we show how two blockchain pilots run by Interac demonstrate the importance of leadership, collaboration, and employee engagement in executing an ambitious vision for transformation.
- » Interac collaborated with Alectra to create a blockchain-powered app that offered real-time monetary incentives to consumers for making energy-efficient consumption decisions and with the Heart and Stroke Foundation of Canada to deploy a similar incentive model for promoting healthy lifestyle choices.
- » Interac's blockchain pilots demonstrate how a vital infrastructure player in the Canadian economy can leverage blockchain to transform entire business ecosystems, even in tightly regulated sectors like energy and healthcare.
- » The enterprise transformation efforts of Interac also underscore the importance of experimenting with new approaches to accessing skills and talent and paying adequate attention to governance and organizational culture.

## Re-architecting deep structures of the enterprise

Enterprise transformation entails fundamental changes that affect how an organization conducts its core business. Transformation may include bringing brand-new products and services to market or making significant structural changes to people, processes, and technologies to bring about new efficiencies to the way an organization operates. While market forces can create an imperative for enterprise transformation, disruptive technologies such as artificial intelligence and blockchain provide powerful platforms for enabling radical changes in corporate strategy and structure.



*In sector after sector, blockchain is simplifying complex ecosystems, creating trusted repositories of data and new opportunities to leverage complementary technologies such as smart contracts and artificial intelligence.*

Having enabled the rise of cryptocurrencies, blockchain is one of the most disruptive forces of the past decade. Yet, its disruptive potential is reaching far beyond the realm of bitcoin. From global financial markets to healthcare delivery, blockchain is not only changing how we collect, manage, and record information, but also surfacing powerful new opportunities for organizational transformation.<sup>1</sup> In sector after sector, blockchain is simplifying complex ecosystems, creating trusted and secure repositories of data, and introducing new opportunities to leverage complementary technologies, such as smart contracts and artificial intelligence.

## World Food Programme's Building Blocks platform

In the humanitarian relief sector, the World Food Programme (WFP) is rolling out blockchain technology to provide refugees with improved choice in how they access and spend their cash assistance.<sup>2</sup> The ability to distribute funds has traditionally depended on both relief agencies and refugee populations' having access to local financial institutions. In many emergencies, however, the local financial infrastructure is often insufficient or unreliable, and refugees frequently face restrictions in opening bank accounts. In 2017, the WFP built a blockchain solution for authenticating and registering transactions between the WFP and its beneficiaries, without requiring a financial intermediary.<sup>3</sup>

After running a successful proof of concept in Pakistan, the WFP made some refinements and is now using its "Building Blocks" platform to deliver more effective food assistance to 106,000 Syrian refugees in Jordan. According to the WFP, more than 100,000 people



*"Syrian refugee children playing football near the Azraq camp in northern Jordan," by Russell Watkins/UK Department for International Development, 2017, used under CC BY 2.0.*



living in the Jordanian camps are using an iris scanner to purchase groceries at local markets.<sup>4</sup> The Building Blocks app stores the cash value provided to beneficiaries in a beneficiary “account” maintained on the blockchain and compensates retailers with fiat currency using a financial service provider. The WFP reported that the Building Blocks platform is making cash transfers more secure, efficient, and transparent.

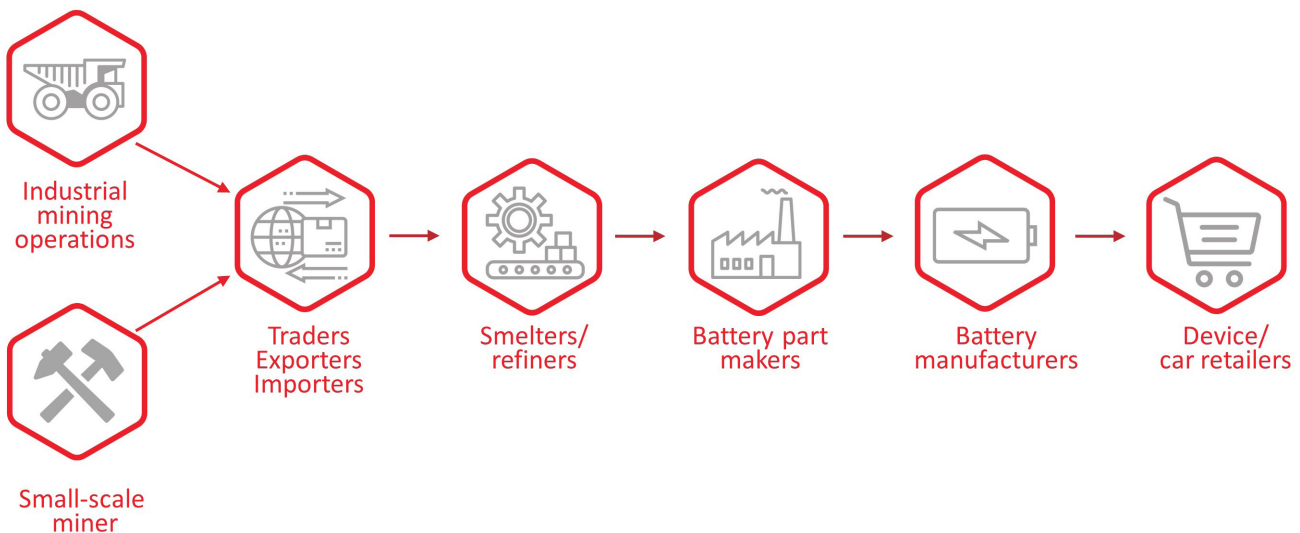
*The global climate ledger paves the way for proactive investment into climate projects, technologies, and policies by creating a financial pathway for incentivizing emissions reductions and increased ambition.*

In the global efforts to combat climate change, the Blockchain for Climate Foundation, an international nongovernmental organization, is putting the Paris Agreement on a blockchain. The organization claims that blockchain technologies are uniquely positioned to enable global collaboration on reducing greenhouse gas emissions.<sup>5</sup> Specifically, the group operates a distributed ledger for national climate accounting that records international transfers in emissions reductions, enables transparency, and creates clear accountability on who is doing what for the climate. The global climate ledger, in turn, paves the way for proactive investment into climate projects, technologies, and policies by creating a financial pathway for incentivizing emissions reductions and increased ambition.

### Circular’s solution for tracking raw materials

In the automotive and electronics sector, UK-based company Circular has developed a suite of blockchain-enabled tools for supply participants to document the provenance of the natural resources that end up in their products. The Circular system allows suppliers and buyers—including brand-name original equipment manufacturers like BMW and Volvo—to track raw materials through the production process, creating an immutable audit trail that provides all parties with a nearly real-time view of the supply chain (Figure 1).

**Figure 1: Circulator's supply-chain traceability**



Source of data: “This Is What We Die For’: Human Rights Abuses in the Democratic Republic of the Congo Power The Global Trade In Cobalt,” Amnesty International (AFR 62/3183/2016), 15 Jan. 2016.



*When combined with machine learning, augmented reality, and other emerging technologies, the applications for blockchain across sectors will be profound, even mind-boggling, in their potential.*

*A key lesson from leading practitioners is that meaningful and sustainable achievements in enterprise transformation require a bold, integrated, and sustainable approach to blockchain.*

While the founders established the company to address the environmental and human rights challenges surrounding cobalt production (a key component in the lithium-ion batteries that power electric vehicles), clients are using the platform to track the provenance of a variety of materials, from palm oil to beef.<sup>6</sup>

These examples suggest that the opportunities for blockchain-enabled innovation and transformation are limited only by our imagination. When combined with machine learning, augmented reality, and other emerging technologies, the applications for blockchain across sectors will be profound, even mind-boggling, in their potential.

Even in these early days of development and adoption, a growing array of use cases demonstrates how organizations are using blockchain to mobilize and organize knowledge, people, resources, and capabilities in ways that boost innovation, efficiency, and competitiveness. A recent study by Harvard Business School professors found that companies that succeed with digital transformation make 26 percent more profit, grow nine percent faster, and achieve 12 percent higher market valuations than their average industry competitors.<sup>7</sup> The authors conclude that the enhanced performance of digital leaders is due to their use of digital technology and data to make smarter decisions, create new markets, and realize operational efficiencies. Examples include streamlined processes for sharing data across industry value chains or internal changes to enterprise-wide functions, such as governance, strategy execution, performance measurement, risk management, and communications.<sup>8</sup>

No matter how alluring the possibilities seem in theory, however, the inescapable truth is that achieving genuine transformation is universally challenging. A key lesson from leading practitioners is that meaningful and sustainable achievements in enterprise transformation require a bold, integrated, and sustainable approach to blockchain that creates a high-level executive mandate for innovation, aligns efforts across the organization, invests in talent, taps the skills and resources of external partners, including customers, and removes barriers to enabling transformation.

Our featured case study below highlights how Interac, Canada's largest digital payments company, uses blockchain to transform itself from a payments company to a bold new enabler of social good in the energy and healthcare sectors and beyond. The case illustrates the power of blockchain to enable businesses to reinvent themselves. It demonstrates the importance of leadership, creativity, and collaboration in executing a vision for transformation. It also underscores the importance of experimenting with new approaches to accessing skills and talent and paying adequate attention to governance and organizational culture change.





## How Interac is leveraging blockchain to incentivize changes in consumer behavior

*Used by more than 16 million Canadians daily, Interac Corp. is one of Canada's leading digital payments network.*

Used by more than 16 million Canadians daily, Interac Corp. is one of Canada's leading digital payments network. For more than three decades, Interac brought ubiquity and scale to the payments market. But the world of digital payments is evolving rapidly, and competition for market share is increasingly fierce. To expand its value proposition, Interac is exploring the potential of new technologies like blockchain to deliver real-world benefits to Interac customers and stakeholders.

Like other technology leaders, Oscar Roque, associate vice president of innovation, research, and emerging solutions at Interac, knew blockchain was a transformative force, not only in financial services but also in other industries. Rather than risk disintermediation, Roque looked to leverage blockchain to push the payments company into new frontiers. After exploring and declining several dozen opportunities, Roque worked with IBM to devise a plan to harness blockchain to enable a new model of global problem-solving that benefits society, the planet, and Interac's bottom line. "Our platforms and products already allow millions of Canadian consumers and business owners to make fast, secure financial transactions," said Roque. "In the future, we want to enable even more ways to work and transact in ways that create clear benefits for profits, people, and the planet."<sup>9</sup>

In one model of problem-solving, governments use taxes and regulations to steer consumer and corporate behavior. Carbon taxes are a quintessential example. They deter households and organizations from pursuing carbon-intensive activities (like driving gas-guzzling vehicles or drilling new oil wells) by making those activities more expensive.

*The new model of global problem-solving dangles carrots. Rather than taxes and other deterrents, institutions use micro-incentives to reward consumers for behaviors that achieve desirable outcomes.*

The new model of global problem-solving dangles carrots. Rather than taxes and other deterrents, institutions use micro-incentives (i.e., small payments) to reward consumers for behaviors that achieve desirable social or environmental outcomes. Roque thought Interac could be well placed to capitalize on this trend by fusing blockchain capabilities with its ubiquitous digital payments infrastructure. In short, he saw the potential to become the intermediary between organizations driving change through incentives and the consumers seeking to earn rewards for their good deeds. "We can help change the world," said Roque, "one incentive at a time."<sup>10</sup>

## Enabling a new energy revolution with Alectra

In its first foray into a blockchain-enabled future, Interac worked with Alectra Utilities and IBM to develop a unique solution for optimizing energy consumption using "real consumers, real solar panels, real batteries, real electric vehicles (EV), and real money," said Roque.<sup>11</sup>



Specifically, the pilot invited customers—all of whom own solar panels, electric home batteries, or EVs—to download an app that offers real-time monetary incentives for making energy-efficient choices.

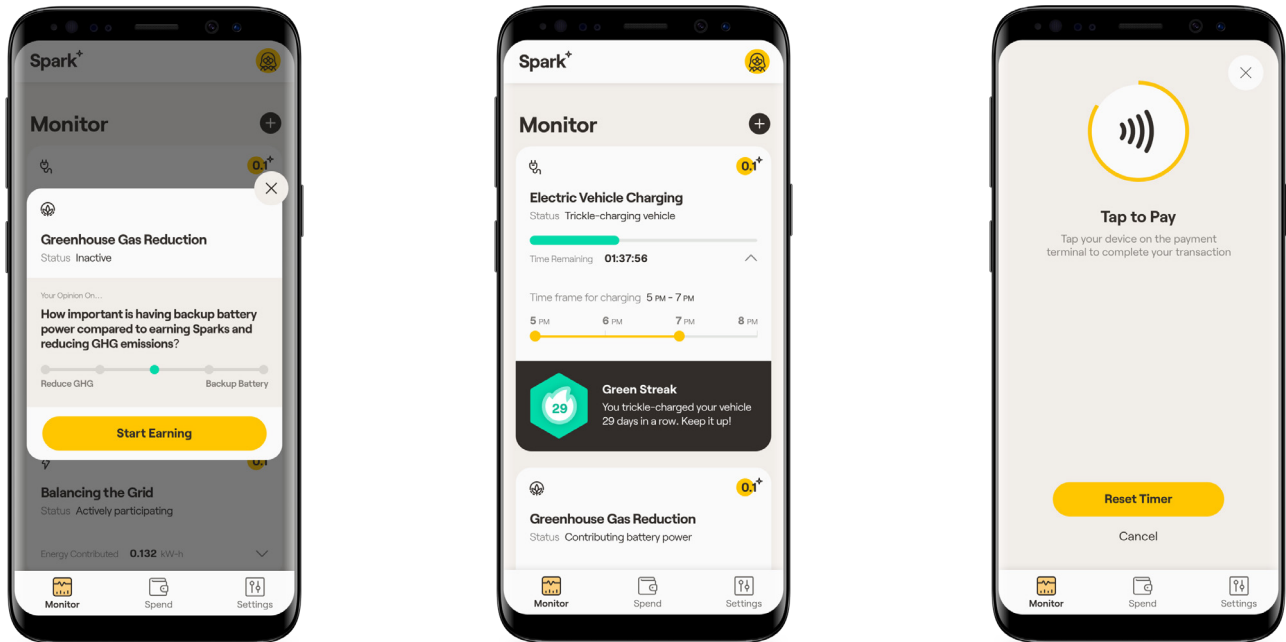
According to Rogue, peak demand for EV chargers is typically between 17:00 and 19:00, which puts a significant strain on grid capacity. As EV ownership grows, peak demand from energy-hungry EV chargers could outstrip supply, forcing utilities to make hugely expensive investments in upgrading capacity. Distributing the same load over an extended period would solve the problem. But utilities like Alectra lacked a means to incentivize consumers to change behavior.

*The blockchain infrastructure provided by IBM creates a verifiable, auditable data trail for each kilowatt of energy saved or delivered and every token awarded.*

With the proposed solution, Alectra encourages its customers to schedule charging to occur sometime in the middle of the night.<sup>12</sup> In exchange, Alectra rewards consumers with “sparks”—or tokens—that they can instantly convert into Canadian dollars through the Interac network. In times of peak energy demand, Alectra can also harness its “virtual power plant” capabilities to pay residential homeowners to feed power into the grid directly from their rooftop solar installations and lithium-ion storage batteries. In both cases, the blockchain infrastructure provided by IBM creates a verifiable, auditable data trail for each kilowatt of energy saved or delivered and every token awarded. It also ensures that homeowners can instantly and conveniently convert their spark tokens into fiat currency (Figure 2).<sup>13</sup>

The unique concept not only puts Interac in a valuable new intermediary role, but it’s also a game changer for Alectra.


**Figure 2: Mobile app to incentivize changes in behavior**



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*"We looked at blockchain because of its inherent capabilities, including its capacity to create trust, its immutability, and the ability for us to use blockchain to connect many different participants in a real-time incentive exchange."*

 **DEBBIE GAMBLE**  
Chief Officer  
Innovation Labs and New  
Ventures  
Interac Corp.

"We are going through a generational change, and the utility sector is being fundamentally disrupted," said Neetika Sathe, vice president of Alectra's Green Energy and Technology Centre.<sup>14</sup> "Consumers are no longer passive consumer of electricity," said Sathe. "They want to be prosumers—producing, selling, and buying electricity according to their preferences."<sup>15</sup> As the shift to electric vehicles places a more significant load on today's energy grids, utilities such as Alectra recognize the importance of engaging directly with energy consumers. "We wanted a social energy network platform to help us better distribute the pattern of energy consumption," said Sathe. "To do that, we needed partners like IBM and Interac to create a seamless incentive solution for our customers."<sup>16</sup>

Debbie Gamble, chief officer of innovation labs and new ventures at Interac, argued that blockchain was essential to creating a seamless experience: "We looked at blockchain because of its inherent capabilities, including its capacity to create trust, its immutability, and the ability for us to use blockchain to connect many different participants in a real-time incentive exchange."<sup>17</sup>

According to Roque, the pilot program with Alectra proves that real-time monetary incentives are potent drivers of changes in consumer behavior. Instead of having to spend money to earn points, like a traditional loyalty program, people can make positive behavior changes to earn money. "It's like a loyalty program with social and environmental benefits," said Roque.<sup>18</sup>

Gamble agreed: "This is about incenting consumers and business to create and exchange energy on a large scale."<sup>19</sup> Indeed, if the Alectra pilot scaled up across North America, it would have massive implications for energy efficiency and the ability to address global challenges like climate change. Meanwhile, utilities like Alectra would enhance their ability to manage the peaks and valleys of energy demand. Participating customers across the continent, in turn, could quickly and easily earn money from relatively straightforward and painless changes in behavior.

## Promoting health and wellness with the Heart and Stroke Foundation of Canada

According to Hypertension Canada, adverse health outcomes from high blood pressure affects 7.5 million Canadians and costs the healthcare system more than \$13 billion a year.<sup>20</sup> Measures to encourage healthy lifestyles could cost a fraction of that amount and deliver substantial societal and economic benefits.

Interac is working with the Heart and Stroke Foundation of Canada (HSFC) to encourage such healthy lifestyle choices in a second blockchain pilot project, launched in November 2019. Using an incentive model similar to that of Alectra, HSFC is rewarding people for enrolling in its Activate wellness program to help change their diets and exercise routines.





Yoga Posture Women Wellness Exercise Body Stretch by Sara Jobling, 2017, used under Pixabay License of 3 Feb. 2020.

To qualify for the program, people with elevated blood pressure must be at least 40 years of age and not on medication for hypertension. Those who complete enrollment receive the following:

- » Ten Canadian dollars via the Interac e-Transfer platform
- » Online health platform with curated content and health trackers for logging their diets, daily exercise, and regular blood pressure readings
- » Support from a personal health coach and a Loblaw in-store dietitian at participating stores
- » PC Optimum points for healthy behaviors
- » Two-month free membership to YMCA or YWCA (for non-Y members) and a free personal training session<sup>21</sup>

*Interac is working with the Heart and Stroke Foundation of Canada to encourage healthy lifestyle choices in a second blockchain pilot project, launched in November 2019.*

HSFC anticipates that the six-month regime of personal coaching, diet, and exercise will help participants stabilize their blood pressure or achieve a marked reduction. In addition to the health benefits, HSFC hopes these incentives will encourage participants to stick with the program.

Both applications—in energy with Alectra and in healthcare with HSFC—leverage the Interac e-Transfer platform and the real-time money-moving capabilities at Interac. They also offer a glimpse of a different business model for the digital payments company. In this new model, Interac sits at the center of an ecosystem focused on incentivizing changes in consumer behavior that will benefit the well-being of people and the planet. As Roque put it:



*Enterprise transformation is not just about modernizing an organization's technology and tools.*

*Interac has the real-time payment infrastructure and a brand associated with security and trust. But our blockchain pilots are making us a central actor in a vital transformation in how we motivate social good, where we can reward people for small changes in behavior with new forms of cryptocurrency. We hope to harness these assets and experiences to create win-wins in a wide range of domains that go beyond energy and healthcare.<sup>22</sup>*

The next step, according to Roque, is to evaluate whether these pilot projects are repeatable and scalable. "Then we will see whether we can build a new commercial platform and service offering that leverages our insights and experiences," he said.<sup>23</sup>

## The enterprise transformation compass

Enterprise transformation is not just about modernizing an organization's technology and tools. It is a journey of adopting appropriate digital technologies to change how organizations work to create value in the digital economy and an increasingly connected society.

According to digital transformation leaders, a vital part of the journey is the organizational commitment to change management. More specifically, leaders must demonstrate a commitment to creating a corporate culture that puts users and customers first, to fostering employee engagement and collaborating across silos, and to modernizing strategy delivery and governance to enable innovation and experimentation.

Brightline's transformation compass (Figure 3, next page) illustrates the critical dimensions of transformation:

- » A North Star is a crisp, inspiring articulation of the vision and strategic objectives for the transformation. It orients employees and suppliers.
- » A deep understanding of customers—the customers served today, the customers sought tomorrow—and the megatrends affecting them inform every change made and every action taken.
- » A transformation operating system—one that enables sustainable change—is a flat, adaptable, and cross-functional organizational structure, not a hierarchical and siloed one.
- » Volunteer champions are thought leaders from across the organization who are effective in engaging others to drive transformation.

*According to digital transformation leaders, a vital part of the journey is the organizational commitment to change management.*



- » To transform from the inside out, employees need a set of tools to make the transformation personal and connect their aspirations to the organization’s North Star and customers.<sup>24</sup>

See how Interac is laying the foundation for change in terms of Brightline’s transformation compass below.

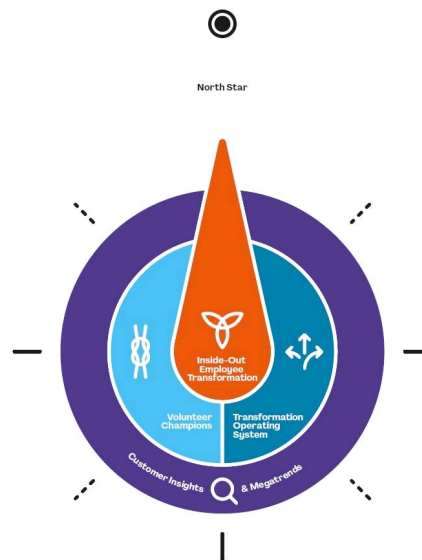
A three-step methodology—inspire, mobilize, shift—supports the transformation compass and helps organizations accelerate transformation efforts and drive tangible results as rapidly as possible.<sup>25</sup> Step one involves creating the transformation organization, including the cross-functional teams that will lead the effort. In step two, the organization defines its blueprint for change and drafts a plan for getting there. In step three, organizations implement the transformation strategy and instill the mindset and culture to support ongoing transformation.<sup>26</sup> Below we show how Interac is laying the foundation for change in terms of Brightline’s transformation compass.

### North Star at Interac

A mandate for change and innovation typically starts with clear direction from an organization’s senior leadership. In Interac’s case, that leader was Chief Officer Debbie Gamble, who called the recent work with Alectra “a leap into the future.”<sup>27</sup> “We know how to enable payments,” she said. “We do that for millions of users every day. ... This project with Alectra was about how can we leverage the capabilities and assets that we bring to Canadians in a brand-new way.”<sup>28</sup>

Employees at all levels value the kind of leadership that Gamble brings to the initiative. It orients them. “For enterprise transformation to succeed, you need the senior buy-in,” said

**Figure 3: Brightline transformation compass**



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*For consumer-facing businesses like Interac and Alectra, technology-driven transformation must also sync up with the needs and expectations of customers and the megatrends that are reshaping the world as we know it.*

*Today, we are on the threshold of a new age of green energy, beginning with the formation of an open-source energy grid for global innovation in energy production, distribution, and consumption.*

Roque. "You need to show there is an economic return, with clear strategic and economic drivers to pursue innovation."<sup>29</sup> Social and environmental leadership matter, too, said Roque, noting the corporate social responsibility (CSR) angle to their blockchain projects with Alectra and HSFC. But organizations can be both socially responsible and commercially successful. "CSR is usually a cost center or an act of philanthropy," said Roque. "We think there is a real economic model here that could open up promising new lines of business."<sup>30</sup>

## Customer insights and megatrends

For consumer-facing businesses like Interac and Alectra, technology-driven transformation must also sync up with the needs and expectations of customers and the megatrends that are reshaping the world as we know it. Brightline advises transforming organizations to build deep empathy with customers by acquiring an intimate understanding of their needs, wants, and behaviors.<sup>31</sup> At the same time, they should invite their customers to co-create new products and services. In other words, customers should be active participants in shaping enterprise transformation.

Alectra's blockchain pilot with Interac embodied this customer-centric approach. Indeed, because energy constitutes an essential fabric of modern life, Alectra could not afford any missteps that would compromise its ability to deliver dependable energy services to its customers. "We have a series of underlying principles that we need to adhere to," said Sathe. "Our customers expect us to be trustworthy, reliable, affordable, innovative, and transparent. When we looked for technologies that could help us deliver digitized energy solutions to our customers, blockchain seemed to tick all of those boxes."<sup>32</sup>

Both Interac and Alectra also recognized that they could ill afford to stand still at a time when both the energy and financial sectors are experiencing profound change. Together they are laying the groundwork for energy prosumption, where consumers produce and actively manage their consumption of energy.

Today, we are on the threshold of a new age of green energy, beginning with the formation of an open-source energy grid for global innovation in energy production, distribution, and consumption. This smarter, more dynamic grid will weave billions, and eventually trillions, of devices, substations, and power generators around the world into an intelligent and programmable planetary network.<sup>33</sup> Over time, this shift to energy prosumption will transform the ubiquitous and largely invisible infrastructure that powers every home appliance, every medical device, every light source, and virtually every industrial process, from transportation and energy to manufacturing and agriculture.<sup>34</sup> The collaboration between Interac and Alectra takes us closer to this future.



## Transformation operating system at Interac

*Success in enterprise transformation comes through collective work and information sharing across business units and extends to an organization's partners, suppliers, and customers.*

Success in enterprise transformation comes through collective work and information sharing across business units and extends to an organization's partners, suppliers, and customers. In other words, it comes from leveraging an organizational operating system that is dynamic, adaptable, and capable of driving continuous innovation. But who takes responsibility for leading the innovation process? According to Dr. Behnam Tabrizi, an expert in enterprise transformation, the most successful transformations are led by a flat, cross-functional team that blends organizational functions and is capable of rapid and fluid decision-making. Dr. Tabrizi had in mind "a nonhierarchical structure that applies a 'Silicon Valley culture' of bold, fast, devolved decision-making, experimentation, and continuous testing and learning."<sup>35</sup>

To drive the blockchain pilot projects forward, Interac built a lean internal team led by Roque that focuses on emerging technologies and solutions. "We concentrate on research, strategy, and new product development," said Roque. "Our job is to figure out how Interac can deliver new kinds of value in today's market by rapidly prototyping and testing new solutions and business models."<sup>36</sup> This way, Interac retains the strategy and business model innovation functions inside its enterprise walls, but sources external consultants and vendors to help build the technology components. Key collaborators for Interac included IBM and The Working Group (TWG). According to Roque, TWG played a critical role in the successful launch of its pilots. "Together, we have the complementary capabilities to fast-track the development of new solutions," he said.<sup>37</sup>

There is a multiplier effect, according to Roque, when you combine the core competencies of multiple organizations. "Collaboration generates a higher level of performance," said Roque. "We can focus on evolving our business strategy and architecture and allow the technology companies to bring new capabilities and expertise to the table. The technology development capabilities are important, but they are less strategic for us."<sup>38</sup>

*In other emerging technologies like digital payments and machine learning, Interac also engages with the local start-up ecosystem.*

With emerging technologies like blockchain, it is more expeditious and cost effective for companies such as Interac to leverage external blockchain experts like IBM and TWG than it is to build in-house capabilities. Pulling in new sources of expertise has other benefits as well. "When you bring three or more parties together you have at least three organizations to grow the network of change agents that are driving enterprise transformation," said Roque. "We can leverage the connective tissue to identify and develop new business opportunities."<sup>39</sup>

In other emerging technologies like digital payments and machine learning, Interac also engages with the local start-up ecosystem. In 2018, Interac opened an innovation outpost and accelerator in a Canada-based tech hub to work on emerging solutions for digital identities, open banking, and the future of digital payments. "Connectivity to the start-up ecosystem is highly valuable," said





Dinaro Ly, head of innovation and community partnerships at Interac. "It allows us to keep our finger on the pulse of new companies and solutions that are disrupting our industry. We get exposure to emerging technologies, to thought leaders, and to a network of peers who are working on similar challenges."<sup>40</sup>

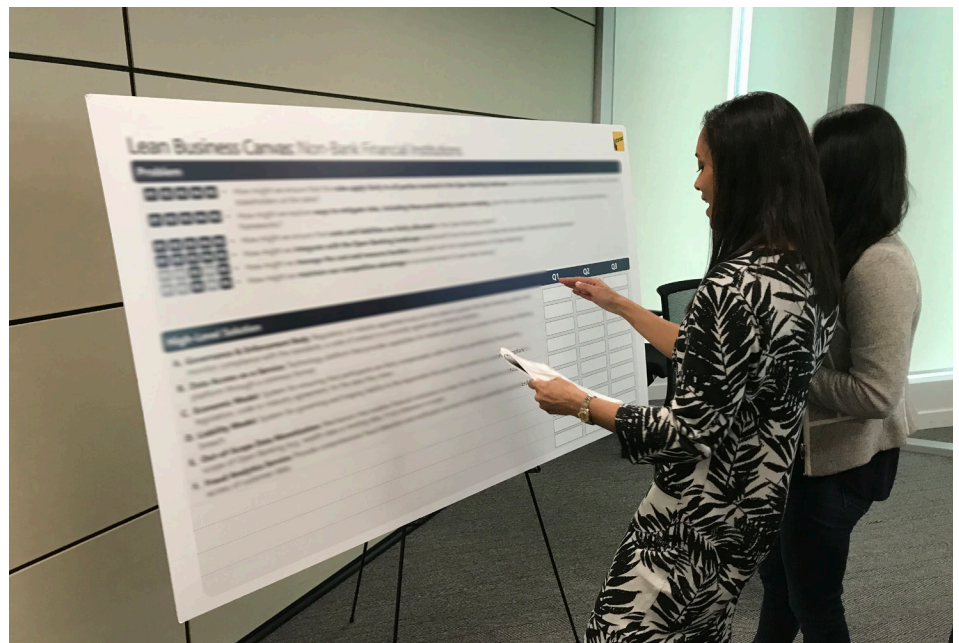
*Working with digital start-ups and new technologies like blockchain has challenged Interac and its employees to step up their innovation game.*

## Volunteer champions at Interac

A digital culture diffuses leadership and decision-making deep into the organization. Instead of receiving top-down instructions on how to execute their work, leaders give employees greater autonomy to use their judgment. Transformation means taking risks, failing fast, and learning and adapting after each successive experiment. Successful transformations also require an army of "volunteer champions," employees who are personally committed to transformation, including senior leaders, mid-level managers, and frontline staff and are willing to drive the strategy forward while continuing to deliver in their daily jobs.<sup>41</sup>

Working with digital start-ups and new technologies like blockchain has challenged Interac and its employees to step up their innovation game. "We need to learn more about how to fast-track innovations and how we can work with our business divisions to translate new technologies into real commercial products," said Ly.<sup>42</sup>

The need to keep pace with fast-moving digital realities has resulted in some fundamental changes to how Interac works, including new opportunities for employee engagement. "Our team has implemented what we call 'the Interac squad process,' which ensures we get full cross-enterprise collaboration on all of our strategic projects," said Roque. "It's like an internal form of enterprise crowdsourcing where people who are



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passionate and motivated contribute their time, effort, and intellectual capital toward transformative projects.”<sup>43</sup>

While this sounds like a recipe for chaos, inviting interested employees to volunteer and contribute in a meaningful way creates advocacy and buy-in at the onset. This is especially important in emerging domains like blockchain where the landscape remains uncertain and the commercial opportunities are fluid. “Having a group of individuals who understand the emerging technology landscape, and have a vested interest in making it work, goes a long way in ensuring success,” said Roque.<sup>44</sup>

*For Interac, the vision and ethos of blockchain were not major stumbling blocks. The tougher challenge was embracing a fundamentally new way of working, to drive innovation forward.*

As one might expect, the squad process also creates some talent management challenges. But Roque said careful calibration of employee contributions is delivering excellent results. “We rightsize the work based on employee skill sets and where the employee sits in their career journey,” said Roque. Some people will research and write strategy papers. Others will work up a spreadsheet. “We try to create possibilities for everyone to get involved if they want to. Usually, everyone who wants to can contribute something,” he said.<sup>45</sup>

## Inside-out employee transformation

The Blockchain Research Institute has documented the degree to which blockchain clashes with the *modus operandi* of large enterprises. Blockchain distributes control, and the decentralized principles of blockchain are antithetical to hierarchical management systems. Members of the C-suite may labor to wrap their minds around distributed ledgers, big data, and algorithmic decision-making. However, for Interac, the vision and ethos of blockchain were not major stumbling blocks. The tougher challenge was embracing a fundamentally new way of working, to drive innovation forward.

The fast and iterative pace of the start-up world requires a higher level of transparency and collaboration than most incumbents are accustomed to. “Start-ups are motivated to move quickly and get their products to market fast,” said Ly.<sup>46</sup> Their small size and lack of bureaucracy enable them to compete with agility. Incumbents, on the other hand, are often ensconced in complex industry dynamics, burdened by the sclerotic processes and regulatory frameworks that govern their sector. Ly conceded that the new pace of work and innovation has proved challenging at times:

*Start-ups don't always appreciate or understand the inner workings of our company, the regulations that govern our commercial conduct, our processes for procurement, and the contractual obligations we have to customers, partners, and suppliers. In some cases, we have regulatory, fiduciary, and contractual obligations that haven't allowed us to move as quickly as we would like.*<sup>47</sup>

*Brightline's transformation compass emphasizes that successful transformations involve building a movement that aligns inside-out and outside-in approaches.*

Brightline's transformation compass emphasizes that successful transformations involve building a movement that aligns inside-out and outside-in approaches—a movement led by committed senior



leaders inside the organization and authored and driven by large numbers of employees, including the management and frontline team members with a stake in the organization’s success.<sup>48</sup>

*Invest in getting people engaged in the journey, and they will all become champions when it comes to project execution and delivery.*

At Interac, the ability of employees to engage with strategic projects gives team members a chance to feel ownership of the transformation process. “When you open up the process, you quickly find you’ve got a few dozen people who are passionate and committed to the journey,” said Roque. “That means you have a few dozen people who are advocates for the success of the project.”<sup>49</sup> In other words, invest in getting people engaged in the journey, and they will all become champions when it comes to project execution and delivery. “They break down silos, overcome obstacles to innovation, and help move the needle forward,” said Roque. “It builds momentum and keeps things moving at a higher clock speed.”<sup>50</sup>




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## Key takeaways

*"The whole world is participating in a profound evolution of currency as we know it. ... We are putting new forms of value to work with real projects to affect real outcomes."*

 OSCAR ROQUE  
Associate Vice President  
Innovation, Research, and  
Emerging Solutions  
Interac Corp.

### **Blockchain has the power to transform business ecosystems.**

The role Interac plays as an infrastructure player in the Canadian economy puts it in a position to help drive transformation in a wide range of sectors. "We are connected to most Canadians, and we are connected to the main financial institutions and almost every retailer across the country," said Gamble. "We saw an opportunity with blockchain to leverage our unique role in the marketplace to bring a fundamentally new service offering to our customers and our partners."<sup>51</sup> In the energy sector, the blockchain-enabled incentive exchange powered by Interac turned passive consumers into prosumers who made meaningful shifts in usage. By deploying the same incentive model in healthcare, Interac and HSFC promoted life-altering changes in behavior.

**Blockchain provides a secure platform for exchange.** None of this transformative work would be possible without blockchain technology to link the participating organizations, enabling secure transfers of information and monetary rewards. "The whole world is participating in a profound evolution of currency as we know it," said Roque. "With our partnerships, we are starting to figure out what that means, and not just in an academic sense. We are putting these new forms of value to work with real projects to affect real outcomes."<sup>52</sup>

### **Enterprise transformation is a journey, not a destination.**

Interac was founded almost 40 years ago as a nonprofit association responsible for running Canada's interbank network, with two providers—Interac Association and Acxsys Corporation—of different Interac-branded products and services. As the revolution in the payments marketplace accelerated, a strategic shift to Interac Corp. in February 2018 freed up the company to innovate and invest in new ways. The company's new executive team wasted no time exploiting emerging technologies like blockchain. Its collaborations with Alectra and the HSFC are the first steps in transforming itself.

**Collaboration is an efficient way to test emerging technologies.** Combining complementary capabilities from multiple organizations saves time and other resources. While the internal innovation team at Interac drives business strategy and architecture, it leverages blockchain expertise and capabilities from leaders like IBM. To extend its reach further, Interac has also embedded team members in innovation districts across Canada. As Roque put it:

*We participate in innovation hubs to identify and explore new partnership opportunities. We want as many people as possible to participate in our journey. The more advocates you have, the more our work becomes viral in a good way. Our work with Alectra and the Heart and Stroke Foundation is supporting important societal transformations, and people are getting engaged because of that higher purpose.<sup>53</sup>*

*Top-down leadership alone is not enough to effect deep changes in the company's internal operating system.*



*Youthful generations are driving a fundamental shift in how companies think about value creation and progress.*

**Real enterprise-wide engagement creates momentum for innovation.** With the world of digital payments evolving at a breakneck pace, Gamble and Roque have recognized that they must play an active, positive role in their company's transformation, or change will be forced upon them. Top-down leadership alone, however, is not enough to effect deep changes in the company's internal operating system. Interac recognized that leaders in strategy, human resources, legal, technology, and communications must all come to the table and participate fully. The squad process implemented by Roque was critical to breaking down organizational silos and engaging employees throughout Interac. Indeed, the ability of team members to self-select for strategic change projects made everyone feel that they were on the same journey, and it keeps employees focused on their performance as a team.

**Innovators in regulated sectors must keep on top of governance.** Companies pursuing blockchain-enabled innovation in such regulated industries as finance, utilities, and healthcare must keep a close eye on governance issues. "You have to work within the regulatory frameworks. We can't go against the existing rules and expect to stay in business," said Roque. "For the time being, we are focused on how to create and enable incentives to effect the greater good."<sup>54</sup> Even still, Interac must navigate an array of regulatory requirements as it carves out a more expansive opportunity space for itself. "We are confronting a range of tough governance challenges related to data management, data governance, and data sovereignty," said Ly. "Our success in tackling these issues is critical to our ambition to become a broader ecosystem player in the financial services world."<sup>55</sup>

**Social purpose is a powerful driver of change.** Roque argued that youthful generations are driving a fundamental shift in how companies think about value creation and progress. "People, planet, and profit are our guiding principles," he said. "Everything that we do and think about has to be driven by these three angles."<sup>56</sup> Gamble said that the recent blockchain pilots at Interac are "about us building a business for the future." She explained:

*With Alectra, we are using blockchain to create social good by providing incentives for consumers to make choices that are more energy efficient. ... More broadly, we see the incentive exchange model as a tool for driving behavior change. We see massive applicability and huge opportunities in a range of adjacent sectors.<sup>57</sup>*



## About the authors

### Anthony D. Williams

Anthony D. Williams is co-founder and president of the DEEP Centre and an internationally recognized authority on the digital revolution, innovation, and creativity in business and society. He is co-author (with Don Tapscott) of the groundbreaking bestseller, *Wikinomics: How Mass Collaboration Changes Everything*, and its sequel, *Macrowikinomics: New Solutions for a Connected Planet*. Among other current appointments, Anthony is an expert advisor to the Markle Foundation's Initiative for America's Economic Future, a senior fellow with the Lisbon Council in Brussels and the Institute on Governance in Ottawa, and chief advisor to Brazil's Free Education Project, a national strategy to equip two million young Brazilians with the skills required for a twenty-first century workforce. His work on technology and innovation has appeared in such publications as the *Huffington Post*, *Harvard Business Review*, and the *Globe and Mail*.

### Ricardo Viana Vargas

Ricardo Viana Vargas is a specialist in project management and strategy implementation. Over the past 20 years, he has been responsible for more than 80 major transformation projects in several countries, covering an investment portfolio of over \$20 billion. He is currently the executive director of the Brightline Initiative, a coalition of leading global organizations from business, government, and not-for-profit sectors. Ricardo is co-founder and managing partner of PMOtto.ai, a cutting-edge virtual assistant that uses chatbots, machine learning, and artificial intelligence to help users interact with project management software. From 2012 to 2016, Ricardo was the global director of the infrastructure and project management group with the United Nations Office for Project Services. Ricardo has written 15 books on project management and hosts the *Five Minutes Project Management* podcast, one of the most relevant podcasts in the field with more than four million plays and downloads.

### Edivandro Carlos Conforto

Dr. Edivandro Carlos Conforto is a globally recognized expert on organizational agility, agile innovation and transformation, hybrid management approaches, and strategy implementation. He has more than 10 years of experience and has worked with organizations across different sectors. He is currently the head of strategy research at Brightline Initiative, overseeing the benefit pillar of thought and practice leadership through academic and professional research. Edivandro is a sought-after speaker for conferences, workshops, and corporate events. From 2013 to 2015, Edivandro was a research associate at MIT (CEPE), co-responsible for global projects in organizational agility, agile innovation, and program management. His ideas were published in prestigious journals, such as the *Sloan*



*Management Review, Project Management Journal, International Journal of Project Management, and Journal of Engineering and Technology Management.* Edivandro also contributed to seven books. His articles and research are cited worldwide and are among the most relevant in the field of organizational agility and hybrid management models.

## Tahirou Assane Oumarou

Tahirou Assane Oumarou has more than 15 years of experience in leadership roles, civil engineering, and project management. As director of operations of the Brightline Initiative, Tahirou oversees the activities under the three benefit pillars of thought and practice leadership, networking, and capability building. From 2013 to 2017, Tahirou worked as deputy director, infrastructure and project management group, in the United Nations Office for Project Services, supporting the successful implementation of peacebuilding, humanitarian, and development projects around the world. Prior to the United Nations, Tahirou was a senior project manager with the Ministry of Transportation in Ontario where he provided technical capabilities and expertise to ensure excellence in the delivery of complex highway projects with multidisciplinary teams.

## Disclosures

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## About the Brightline Initiative

Brightline is a Project Management Institute initiative together with leading global organizations dedicated to helping executives bridge the expensive and unproductive gap between strategy design and delivery. Brightline delivers insights and solutions that empower leaders to successfully transform their organization's vision into reality through strategic initiative management. Learn more at [www.brightline.org](http://www.brightline.org).





## About the Blockchain Research Institute

Co-founded in 2017 by Don and Alex Tapscott, the Blockchain Research Institute is an independent, global think tank established to help realize the new promise of the digital economy. For several years now, we have been investigating the transformative and disruptive potential of blockchain technology on business, government, and society.

Our syndicated research program, which is funded by major corporations and government agencies, aims to fill a large gap in the global understanding of blockchain protocols, applications, and ecosystems and their strategic implications for enterprise leaders, supply chains, and industries.

Our global team of blockchain experts is dedicated to exploring, understanding, documenting, and informing leaders of the market opportunities and implementation challenges of this nascent technology. Research areas include financial services, manufacturing, retail, energy and resources, technology, media, telecommunications, healthcare, and government as well as the management of organizations, the transformation of the corporation, and the regulation of innovation. We also explore blockchain's potential role in the Internet of Things, robotics and autonomous machines, artificial intelligence, and other emerging technologies.

Our findings are initially proprietary to our members and are ultimately released under a Creative Commons license to help achieve our mission. To find out more, please visit [www.blockchainresearchinstitute.org](http://www.blockchainresearchinstitute.org).

### Research management

Don Tapscott – Co-Founder and Executive Chairman  
Kirsten Sandberg – Editor-in-Chief  
Hilary Carter – Managing Director

### Others in the BRI leadership team

Alisa Acosta – Director of Education  
Luke Bradley – Director of Communications  
Wayne Chen – Director of Business Development  
Maryantonett Flumian – Director of Client Experience  
Roya Hussaini – Director of Administration  
Jody Stevens – Director of Finance  
Alex Tapscott – Co-Founder





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