

BLOCKCHAIN IS CHANGING HOW COMPANIES CAN ENGAGE WITH CUSTOMERS

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Disruptive technologies like blockchain and artificial intelligence are powerful catalysts for change — they can change not just how a company works, but what it's possible for it to do. Consider the case of Interac Corp., Canada's largest digital payments company, which partnered with an energy company to change consumer habits through a blockchain-powered incentive program that saved the energy company money and created more efficiency throughout the system. This case offers a few lessons for leaders: 1) tech like blockchain can transform sectors, 2) collaboration is an efficient way to experiment, 3) enterprise-wide engagement builds momentum for innovation, and 4) social purpose is a powerful driver of change

Changing how an organization conducts its core business — such as launching new services or reorganizing for greater efficiency — is really hard. During the first era of the internet, we saw the tremendous strain transformation placed on companies, industries, and entire economies. Today, employees often don't want change because they've grown accustomed to certain norms. Executives often don't want change, because they're weary of the costs and risks associated with embracing innovation. Yet, despite the obstacles, transformation is important for any company looking to survive and thrive in this era of digital disruption.

While market forces may compel companies to transform themselves, disruptive technologies like blockchain and artificial intelligence provide a powerful catalyst for change. Just as leading organizations integrated the web into the fabric of their businesses during the internet era, modern companies need to adapt with today's emerging technologies in mind.

We're both particularly interested in blockchain, and in understanding its opportunities. Don is the co-founder and executive chairman of the Blockchain Research Institute, a global think tank with more than 100 member organizations committed to exploring blockchain strategy and reimagining enterprise architecture. Ricardo is the executive director of the Brightline Initiative — a founding member of the Blockchain Research Institute — where he works with global decision makers to understand emerging technologies like blockchain.

Interac, another founding (and, for the record, dues paying) member of the Blockchain Research Institute, is Canada's largest digital payments company. It has rapidly adopted emerging technologies to expand into new industries and spearhead digital transformation. Interac was founded almost 40 years ago as a nonprofit association responsible for running Canada's interbank network. But in early 2018, as the revolution in digital banking accelerated, it made a strategic

shift to for-profit status, freeing the company to innovate and invest in new ways. Specifically, its embrace of blockchain — which allows assets to be exchanged with real-time settlement as certain conditions are met — is helping Interac to transform entire industries, and itself in the process.

Sparking an Energy Revolution

Formed in 1985, Interac's network is today used by more than 16 million Canadians for everything from consumer payments to inter-bank transfers. Competition for market share is fierce. To expand its value proposition, Interac has started to diversify its business practices, looking for opportunities to step into an emerging market and lead industry transformations.

It recognized one such opportunity in the energy sector, where the growing popularity of electric vehicles (EVs) is creating a new surge problem.

In normal times, peak demand for electric vehicle chargers is typically between 5 p.m. and 7 p.m., says Oscar Roque, associate vice president of innovation, research, and emerging solutions at Interac. Commuters in Toronto, for example, get home from work around the same time and all set their cars to charge, putting a significant strain on grid capacity. As EV ownership grows, peak demand from energy-hungry EV chargers could outstrip supply, forcing utilities to invest in upgrading capacity — at significant cost. Distributing the same load over time would solve the problem, but utility companies lacked a means to incentivize consumers to change behavior.

That's where Interac came in. Working with Alectra Utilities and IBM, the company designed a blockchain-based solution for optimizing energy consumption. The pilot invited customers — all of whom were chosen because they owned solar panels, electric home batteries, or electric vehicles — to download an app that offered real-time monetary incentives for making energy-efficient choices.

The app addressed both the supply and demand sides of the surge problem. First, it incentivized customers to schedule charging at off-peak hours — sometime in the middle of the night — by rewarding those consumers with digital tokens called "sparks" that they could convert into Canadian dollars through Interac's network. Second, in times of peak energy demand, Alectra could also harness its customers' "virtual power plant" capabilities, and pay residential homeowners for feeding power into the grid directly from their rooftop solar installations and lithium-ion storage batteries. For both processes, the blockchain infrastructure created an auditable trail of verifiable data for each kilowatt of energy saved or delivered and every token awarded. It also ensured that homeowners could redeem their tokens.

The concept is a game-changer for both Interac and Alectra — and one that illustrates how blockchains enable powerful incentive structures that promote collaborative behaviors. “We are going through a generational change, and the utility sector is being fundamentally disrupted,” says Neetika Sathe, vice president of Alectra’s Green Energy and Technology Centre. “Consumers are no longer passive consumer of electricity,” says Sathe. “They want to be prosumers — producing, selling, and buying electricity according to their preferences.”

The success of the Alectra program is evidence that real-time monetary incentives are potent drivers of changes in consumer behavior. According to Roque, “It’s like a loyalty program with social and environmental benefits.”

Leadership and Engagement for Enterprise Transformation

Enterprise transformation is not just about modernizing an organization’s technology and tools (though the Interac partnership with Alectra did require that, too). It requires profound organizational commitment to changing how work gets done — how teams collaborate, how a company relates to its customers, how it innovates. At Interac, that meant building new teams, creating new opportunities for internal collaboration, and fostering a culture comfortable with the tumultuous environment of emerging tech.

For example, to drive its blockchain projects forward, Interac built a lean internal team that focuses on emerging technologies and solutions, and rapidly prototypes and tests new ideas and business models. “We concentrate on research, strategy, and new product development,” says Roque, who leads the team. It also has clearly defined limits — when it comes to building the technology components, it sources external consultants and vendors to help.

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. “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 that are advocates for the success of the project.” 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.

Key Takeaways for Enterprise Leaders

Industries are facing disruption, spurred on by new digital technologies like

blockchain. For company executives who see the necessity of transformation, there are a few key insights we can draw from companies like Interac and Aletra.

Blockchain has the power to transform whole business ecosystems. Interac's work with blockchain to create platforms and applications that incentivize certain behaviors weren't confined to energy — it also started new pilots in the health and wellness sector. Partnering with the Heart & Stroke Foundation, Interac developed a program in which participants are rewarded with vouchers to redeem at major Canadian stores when health milestones are met or maintained. Using blockchain, business ecosystems can embed incentive mechanisms within themselves to promote more sustainable behaviors.

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 and stakeholders like Aletra. By collaborating on an industry level, companies can also split the costs and reduce the risks of innovation, while remaining party to the insights and benefits.

Enterprise-wide engagement creates momentum for innovation. With the world of digital payments evolving at a breakneck pace, Roque recognized that he had to play an active, positive role in Interac's transformation. Top-down leadership alone, however, was not enough. The ability of team members to self-select for strategic change projects helped to keep them focused on their performance as a team.

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 must be driven by these three angles." As the modern generation becomes more concerned with issues like climate change, market forces will start to select and favor more sustainable companies. Building modern business ecosystems with incentive structures that promote sustainability will ensure long-term market success.