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## Trust, transparency and technology

Linda Morris Kelley

Mankind are not held together by lies. Trust is the foundation of society. Where there is no truth, and where there is no trust, there can be no society. Where there is society, there is trust, and where there is trust, there is something upon which it is supported.

Fredrick Douglass (1869)

Trust has re-emerged as a critical issue of our time. Trust is essential to cooperation, to community, and to doing business sustainably. Fruitful collaboration that produces mutual benefits hinges on the abilities of participants, many of whom may never meet face-to-face, to be able to trust one another, to share information among the group, to respect each other and appreciate contributions made while valuing differences. The need to trust is built into the fabric of our being. Designed to live in groups and raise our offspring from initial dependency to adulthood, we must trust every step of the way. As we discussed earlier in this Chapter though, trust has broken down between key partners, particularly between business and municipalities, citizens and government, and customers and business. Sustainability needs us to repair and rebuild broken trust. Thriveability demands it.

Powerful forces are reshaping the work we do, our workplaces, and our societies. Technological disruptions are rapidly filling the space between where we are today and the future we want. Navigating, harnessing, adapting, and creating with these new technologies will be indispensable skills for every professional. If blockchain technology isn't on your radar, it should be. The disruptive potential of Artificial Intelligence (AI) and robotics jump into our newsfeeds every week. Will they change how we live and work? Absolutely! Do we know how, or to what extent? Not really, not yet. Robots attract our interest and scare us at the same time. They're coming but they won't sneak up on us. Some of the other new technologies on the horizon might catch us unaware. Blockchain has that potential.

If blockchain technology isn't on your radar, it should be. If you have heard of blockchain, it's probably in relation to Bitcoin or something about cryptocurrency. Its reach will be much greater than a novelty for financial speculation or microtrading. While those may be interesting developments, they're not even the half of it.

Blockchain and any similar types of open source technologies have the potential to disrupt just about everything from the way we think about things to our expectations of personal and business interactions. If we're not paying attention, we may find ourselves cut out of the loop before we realize what has happened. This is a bold and radical statement to make. There is a chance it won't happen but that chance is slim. Here's what some of the potential of this technology is, what likely areas of disruption are, and some changes that will come of them.

Blockchain technology makes Bitcoin and other cryptocurrencies a reliable medium for exchange because in essence it is a technology for tracking commitments and promises that is verified multiple times by multiple sources so going back and changing what was registered as a previous commitment or entry is almost impossible, and it's all traceable. Think digital ledger. Start with someone requesting a transaction. The request is broadcast through the network and picked up by a number of nodes that validate the request and attach their own digital identification to the resulting block of information. That verified transaction block gets combined with other transaction blocks to create a new combination block that is then added in the chain or already existing blocks. That transaction is completed when picked up by the designated receiver. Here is where the reliability comes in. In order to change the original transaction request, someone would have to be able to change everything that occurred all through the validation and chaining processes and that is so complex in aggregate to make it virtually impossible. While the process is complex, it's also transparent in that many people can see it. This elegant complexity makes blockchain work very well as a medium of exchange of commitments and promises. This kind of exchange is a fundamentally important way of thinking about currency, even now. Money is not really a thing. We no longer exchange salt, or cowry shells, or gold, or silver. Seventy years ago people exchanged paper, promissory notes that represented...promises of exchange of something of value with the exchange delayed by time and physical distance. In recent decades, we moved to electronic representations of promissory notes, so while some of us still hang on to dollar bills and debit or credit cards, the real currency is electronic transactions and transfers mediated by central banks. From here, it isn't a huge jump to cryptocurrency, except blockchain transactions do not require mediation from a central bank. It's peer-to-peer exchange. Here's a potentially huge disruption.

Thought exercise: if use of cryptocurrency outpaces central bank mediated electronic transfers, what does that do to nations? Right now central banks of nations negotiate currency exchange rates. What kind of Wild West might ensue in exchange if the use of central banks dwindled significantly? How would nations' accounting of debt and assets be affected? What about measurements of GDP?

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If blockchain is a transaction founded on promises, it will be used for contracting, and in fact already is. In February, 2018, the second Internet of Agreements Conference was held. The theme was Blockchains And World Trade. Some of the session titles were:

- Blockchain, Smart Contracts & Law
- Mattereum: Automating And Enforcing Decentralized Commercial Law For Business On The Blockchain
- Blockchain in the Manufacturing Supply Chain Implications for Trade and the Global Economy
- The Economic Impact On World Trade Of Smart Ledgers<sup>i</sup>

Cryptospace is fast becoming an indispensable new business space. So far we have blockchain disrupting banking, accounting contracting, and supply chain. It's an easy jump from those to see how natural resources monitoring (people are already electronically tagging individual fish to track ethical, sustainable catch practices), and the whole of the insurance industry will morph when responsibilities and actions are transparent. Will organizations such as OASIS, Advancing open standards for the information society, take over roles previously performed by government? Let's touch back to governments again here. If transactions take place in cryptospace, with multiple nodes and destinations, and just say credits are left in this virtual space, what happens to government's ability to levy tax? Suddenly the potential disruptions take on enormous proportions.

We need to add in one more thread here, one that has surfaced throughout this chapter. That is trust. In a very real way blockchain types of technologies are certain builders of trust. Betrayal of trust becomes not only difficult, but trackable. This could be very good for collaborations across time and distance where people never meet face-to-face. Physical presence will interact with virtual presences, avatars of people, and again, they already are. Many benefits that we are just beginning to realize will emerge. The cost of this is loss of privacy. Now privacy as people in the United States have come to cherish is a very recent development in human history, only a few hundred years old at most. But if the notion of privacy is blown apart, that will change a number of the social conventions Americans hold dear. What else might this disrupt?

Again, this is only a brief and shallow foray into one of the technology disruptions that are emerging. Use insights from this chapter and the previous ones to hone your awareness. Pay attention to the seemingly insignificant, almost like using peripheral vision used to see the Seven Sisters of the Pleiades in the star constellation of Taurus.

<sup>&</sup>lt;sup>i</sup> Internet of agreements. Retrieved February 11, 2018, from <a href="https://www.eventbrite.co.uk/e/the-second-internet-of-agreements-conference-blockchains-and-world-trade-tickets-42355788303">https://www.eventbrite.co.uk/e/the-second-internet-of-agreements-conference-blockchains-and-world-trade-tickets-42355788303</a>