## **Accenture Mobility**

Part of Accenture Digital

# BLOCK CHAIN TECHNO LOGY

HOW BANKS ARE BUILDING A REAL-TIME GLOBAL PAYMENT NETWORK One of the most talked-about topics in the financial services industry today is blockchain. And for good reason: The ways in which emerging blockchain and distributed ledger technology (DLT) could transform the industry are enticing to companies constantly on the lookout for lower costs and greater efficiency. If fully adopted, it will enable banks to process payments more quickly and more accurately while reducing transaction processing costs and the requirement for exceptions.

However, to capitalize on this potential, banks need to build the infrastructure required to create and operate a true global network using solutions based on this transformative technology.

How is blockchain use progressing? What is critical to its adoption? And what can we expect in the years ahead? These are among the questions a recent Accenture survey sought to answer.

Our survey found that blockchain use is, indeed, top of mind among banking executives who lead payments businesses. It also uncovered the major benefits executives expect blockchain to generate for their bank, the use cases to drive those outcomes, and where banks are currently focusing their efforts. Perhaps most critically, the survey revealed what executives believe must happen for blockchain to gain prominence globally.

#### **ABOUT THE RESEARCH**

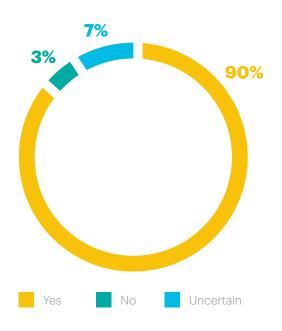
During August and early September of 2016, a research agency, working on Accenture's behalf, interviewed 32 commercial banking professionals to learn about the evolution of the global transaction banking markets. Interviews were conducted via telephone with respondents at large or global banks in the United States, Canada and Europe. Respondents were asked a series of questions about the potential of blockchain/distributed ledger technology to transform the payments business.

### **INTEREST IN**

# BLOCKCHAIN **IS HIGH**

Banks are most definitely interested in blockchain. In fact, nine in 10 participating executives said their bank is currently exploring the use of blockchain in payments (Figure 1)—largely because of the myriad compelling benefits blockchain offers.

Figure 1: Are you currently exploring the use of blockchain/distributed ledger technology in payments?



Most banks we surveyed are still in the early stages of adoption, with about three-quarters either involved in a proof-of-concept, formulating their blockchain strategy, or just beginning to look into it (Figure 2). In other words, despite their enthusiasm for and interest in blockchain, many banks are still considering where to use it.

"We don't even have enough information to have an opinion," said an executive at a Canadian bank. A US bank executive described his bank's situation as being "bewildered" but "in learning mode."

These and other banks said they are actively investigating various use cases to determine how they can use blockchain to achieve cost benefits and drive new revenue. They're also trying to determine where they should focus time and resources, whether the technology and the industry's perception of it are ready for a commitment to it, and which sectors or products they should target to get the best return on investment.

"We are exploring right now, not experimenting," one executive indicated.

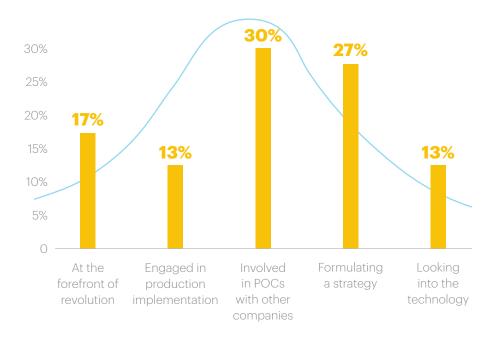


Figure 2: Banks' current stage in blockchain adoption

The Blue Curve represents the standard new Technology Adoption Distribution Curve

Some, though, have progressed beyond the educational phase. "It's not an option to replace every transaction, so we are working to create proofs-of-concepts and use cases to demonstrate value," reported a Canadian bank executive.

Another bank that currently has proof-of-concept initiatives under way is approaching blockchain with what its executive described as cautious optimism.

### "Reactions are generally a desire to learn more and a belief that we are on to something."

Regardless of progress, the most prevalent use cases banks are studying involve intra-bank cross-border transfers (Figure 3). Cross-border remittances, corporate payments, and inter-bank cross-border transfers are a secondary focus. But wherever they hope to deploy blockchain, executives expect a wide range of benefits, including lower costs, quicker settlement, fewer errors and exceptions, and new revenue opportunities (Figure 4).

Figure 3: Leading use cases for blockchain being explored



Figure 4: Major anticipated blockchain benefits



### IT'S ALL ABOUT THE **NETWORK**

#### Considerable interest in blockchain is clearly brewing at participating banks.

However, a lot hinges on the extent to which a formal network emerges to facilitate global accessing and clearing of payments. This network is critical to helping banks use blockchain to help transform payments at scale and help reduce risk of failure. The most effective network should have two defining characteristics: It should include the necessary defined rights, obligations, controls and standards; and it should offer a quick and efficient onboarding process that enables banks to essentially "plug and play" into the network for both existing and future corridors.

Standards are seen as especially critical. "The lack of a universal standard could prove deleterious," observed one executive. "There could end up being bilateral agreements and altered processes between banks, which would severely diminish any network effect."

Importantly, many executives also noted that the network should not be an exclusive club. "The network should be open to banks and non-banks to create a level playing field," said one executive at a global bank. Potential non-bank network participants could include fintech companies and technology firms (such as Google and Apple), as well as other corporations across the supply chain.

"Ultimately, ubiquity is the most important thing from a payments perspective," said a Canadian bank executive. "We need to be able to pay anyone anywhere. Sending payments between two banks has no value."

However, such a network is still in its infancy. Much work remains to define the rules of engagement and help create the basics of the network before banks can move past a discussion of the technology itself and begin exploring how to actually use it to improve their business. Some of this heavy lifting could be handled by a consortium, possibly owned not only by banks but also technology companies and other players. When banks look to join a consortium, they consider many factors. One of the most important is size: Is the consortium big enough to be relevant and effective? "We're already part of a payments network, so until any consortium has the scale of our current membership, it's not that interesting," said a European bank executive.

Regardless of who's creating and driving the network, banks roundly agree that without a robust one, blockchain has little chance for success.



"We need to be able to pay anyone anywhere."

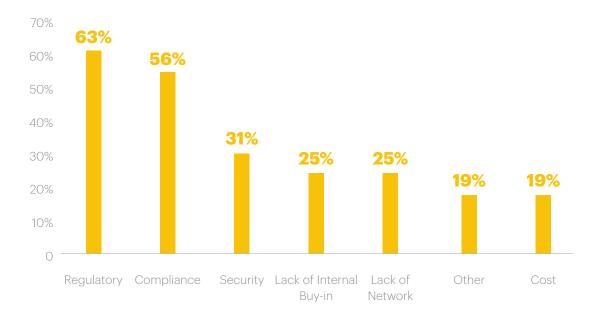
### **OTHER KEYS TO ADOPTION**

#### The network is a critical success factor in blockchain adoption, and arguably the biggest one. But there are others.

Another important one is generating internal momentum for blockchain integration and implementation—something that half of the banks in our survey said they currently struggle to do. According to executives surveyed, kick-starting blockchain initiatives will require addressing key regulatory and compliance issues—the two biggest factors executives said contribute to internal resistance to blockchain (Figure 5).

Security is another reason banks could be hesitant to embrace blockchain, and understandably so. "Innovation in technology has to have security at the forefront," observed an executive at a US bank. "Implied trust is great, but how impenetrable will this be? That's a worry."

Figure 5: Reasons for internal resistance to blockchain



Beyond these factors is something more fundamental: the need to educate key stakeholders within the organization on blockchain's enormous potential benefits and positive impacts. As one executive put it, "The value proposition is not perfectly clear."

"Some folks in the bank get it right away while others need to have it thoroughly explained to them, particularly executives who are making the important decisions," added another. "We need to answer the question, 'What is distributed ledger technology?' for people and executives alike before it can be fully implemented."

Banks are pursuing a variety of approaches to educating their employees about blockchain.

The largest percentage (77 percent) are using internal experts, but nearly the same percentage (73 percent) are relying on outside consultants.

> Both types of experts often are used to inform the efforts of special teams that banks have formed to explore blockchain possibilities.

Finally, executives said actually applying blockchain successfully to payments will require fostering an uncommon coordination among banks—which is vital to generating the positive network effects that make blockchain so compelling. Also key is developing the appropriate legal and regulatory frameworks. "We need regulators and legal to get involved to see the benefits," a European bank executive said. "There's no point transacting if legally it holds no weight."

### A PROMISING ROAD AHEAD

#### Blockchain and distributed ledgers have a bright future.

As real-time, open-source and trusted platforms that securely transmit data and value, they can help banks not only reduce the cost of processing payments, but also create new products and services that can generate important new revenue streams.

The biggest key to turning blockchain's potential into reality is a collaborative effort among banks to create the network necessary to support global payments. Blockchain technology itself works—there's no debate about that. Now it's time for banks to look at the bigger picture and work together—and with non-banks—to help define the backbone that can underpin a universally accepted, ubiquitous global payment system that can transform how banks execute transactions.

"[There are other banks] with whom we have good relationships and can possibly experiment, and we can experiment internally as well," said one executive. "This testing and eventual intra- and inter-banks collaboration is essential for blockchain to show value. Outside of banks, there needs to be an agreement reached with partners such as credit card firms, which provide the payment infrastructure for much of the bank's transactions. We all need to agree what a transaction should look like for the plumbing to do its job efficiently."

More succinctly, in the words of another executive we interviewed: "The technology will only work if everyone adopts it. It has to be all or nothing."

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