

TECH POINTCLOUD

# Why Accenture's Plan to 'Edit' the Blockchain Is a Big Deal

by Jeff John Roberts

@jeffjohnroberts

SEPTEMBER 20, 2016, 2:04 PM EDT



## Your System Status

**WE'RE SORRY!**

You need to update your Flash Player.



**Banks will like it. Purists not so much.**

Blockchain is not just about money—it's about ideas as well. That's why a new plan to “edit” the blockchain, **announced** by Accenture on Tuesday, is causing a stir among fin-tech purists who see it as a betrayal of what the technology is all about.

A closer look at the Accenture ( **ACN ▲ 0.28%** ) news suggests the company's invention, which it is trying to patent, is a big deal but not because of any philosophic debate over whether it's okay to edit the **blockchain**. Instead, the news is significant matters because it's another sign blockchain is becoming part of mainstream banking.

## What Accenture did to blockchain

You can read technical details of what Accenture announced on Tuesday below, but first it's important to understand what the word “blockchain” means in the first place. A simple way to think of it is as a piece of software—run by a network of unrelated computers—that produces a permanent ledger of transactions with which no one can tamper. The most famous example of blockchain in action is the crypto-currency bitcoin—the people who buy and sell bitcoin rely on strangers' computers to create a series of “blocks” that record their transactions forever.

In the case of bitcoin, everyone can see and no one can modify a block once it's created. That's the beauty of the system. It's decentralized and the way it records transaction is determined by software, and not by bankers or any sort of regulator.

And that's why Accenture's announcement that it has developed a way to “edit” the blockchain caused controversy. Some people suggested on Twitter that Accenture's idea, which involves a system to allow trusted administrator to rewrite transactions, means the company is missing the whole point:

“

The actual point of a blockchain is its immutability.

Which makes me suspect perhaps Accenture skipped the orientation briefing?

— Mark Pesce (@mpesce) [September 20, 2016](#)

“

Editable [#blockchain](#)! Oxymoron or what? Accenture to unveil blockchain editing technique <https://t.co/uMf1FT32iA> via [@FT](#)

— Shwetank Verma (@shwetankv) [September 20, 2016](#)

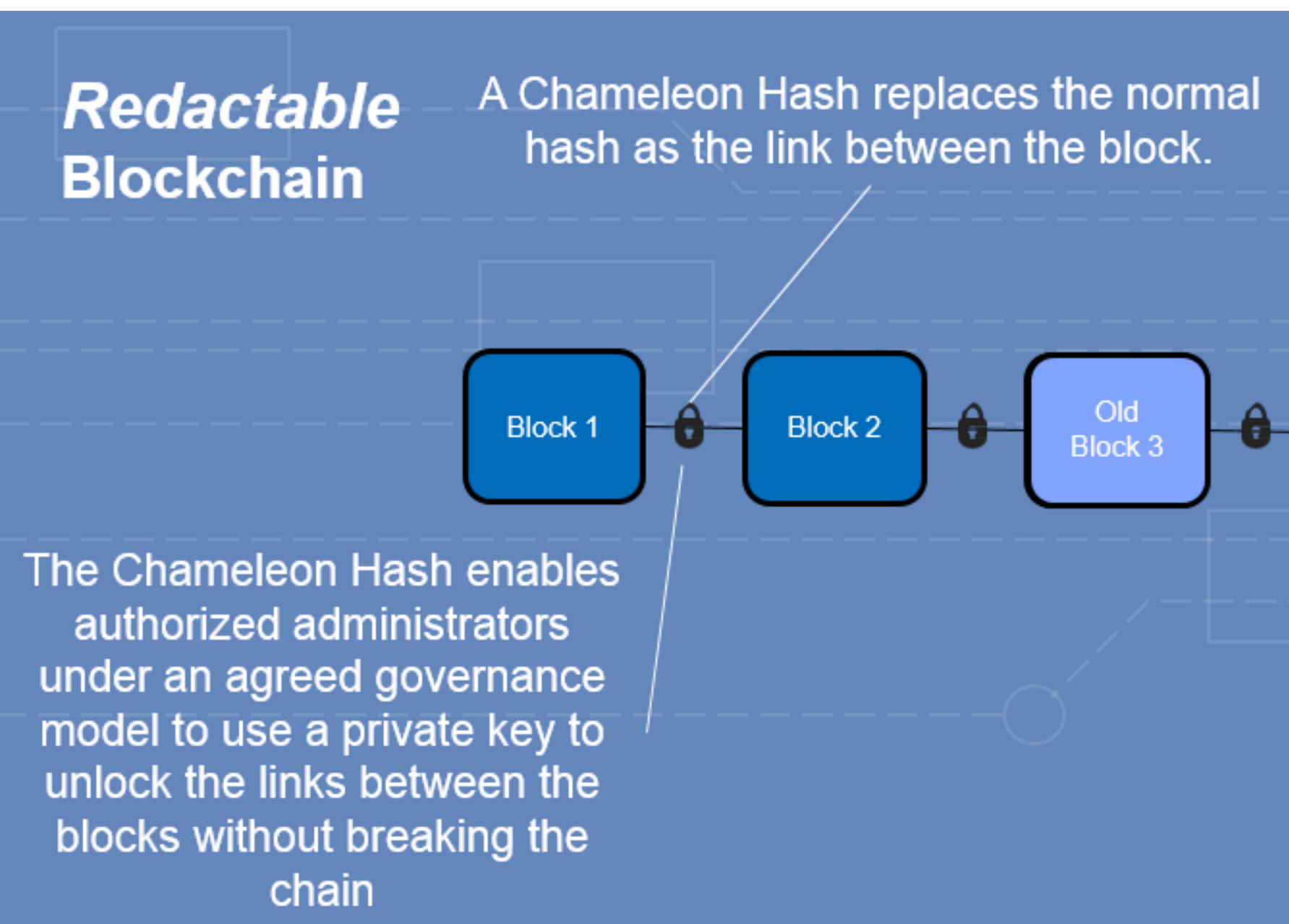
The point would be a fair one but for two things. The first is the notion of blockchain as “immutable” isn’t really true. Instead, anytime a critical number of people using a blockchain (typically a majority) want to rewrite the rules, they can agree to do so. In the case of bitcoin, if half the computers on the network agreed to alter the transaction records, the records could be modified. (This is unlikely to happen since the network is too decentralized, but that doesn’t mean there is some platonic principle that a blockchain is immutable.)

The other reason why Accenture’s “edit” plan isn’t heresy is because there are different types of blockchain out there. Some, like the one that runs bitcoin, are “permission-less” and allow anyone to be part of the ledger that records and verifies the transactions. But others are more like a private club where trusted members agree to the rules on how transactions are recorded and verified. Dozens of banks, working with a company called R3, have been experimenting with private blockchains for months and are even building features that let members [hide sensitive transactions](#) from others on the chain.

In the context of these private blockchains, members could vote to reverse a transaction if there was an error or some sort of dispute. This is technically a form of editing the chain, though one that involves writing a new transaction rather than modifying an existing one.

What Accenture announced on Tuesday is a way to do just that: to edit and modify a block of transaction in a way that wouldn’t compromise the integrity of an entire blockchain. The process relies on a “chameleon hash” that breaks the original code around a given block, but then uses an adaptable algorithm to recreate the overall blockchain, which means other computers on the chain will not sense anything is amiss.

Here is an Accenture slide that depicts part of the process:



Accenture

According to Richard Lumb, chief executive for financial services at Accenture, this will (in practice) involve a blockchain group granting a handful of individuals (“the fewer the better”) the power to use the edit feature. For extra security, Lumb says users should divide the edit “key” into three pieces among different people, and only allow the edit function to work when all three pieces are present.

## Why the Accenture “edit” matters

The idea of editing a blockchain may upset a handful of crypto-purists but the financial industry, which is studying blockchain technology closely, does not give a fig about philosophic concerns. Instead, the banks will likely welcome the idea of an “edit” button as a safety feature of sorts.

The need for a safety feature became more pronounced in June after a debacle involving a new blockchain-based system and currency called Ethereum. It involved hackers exploiting a weakness in

the Ethereum code to **steal \$60 million**, followed by certain members of the blockchain refusing to reverse the transactions and recover the money. The Ethereum community was finally able to sort out the ordeal, but the episode no doubt left bankers and investors—many of whom have only a limited understanding of blockchain—skittish about the technology.

In this sense, Accenture’s “edit” button may be a way to reassure the financial industry that blockchains are safe to use.

“ Yes Accenture's 'editable' **#blockchain** really stretches the very definition but if banks will pay for it, & they will, who cares

— Jamie Burke (@jamie247) **September 20, 2016**

Confidence in the technology is important because banks are counting on it to save them billions in record keeping and reconciliation tasks. In the last year, the sector has invested heavily in blockchain-based companies like Ripple, which raised \$55 million from Standard Charter, Accenture Venture, and others. Meanwhile, old line tech firms like **IBM** ( **IBM ▼ -0.09%** ) are betting blockchain innovation will provide them with a lucrative line of business services.

As for Accenture ( **ACN ▲ 0.28%** ), the company also announced on Tuesday that it is seeking a patent for its “chameleon hash” technique to edit a blockchain. Executives, however, said Accenture would not attempt to use a patent (assuming one is granted), to monopolize the edit feature, but would use it to try and assist its banking clients.

The bottom line is that Accenture’s “edit” announcement could add to the growing technology stack surrounding blockchain and, at the very least, serve as a marketing tool to encourage banks to embrace the technology.

Not everyone, however, is impressed by Accenture’s gambit. **Ryan Selkis**, a veteran bitcoin entrepreneur and managing director of Coindesk, is skeptical the financial industry will be capable of much blockchain innovation, though he added Ripple is a possible exception.

“In theory, all of the permissioned blockchains should have similar administrator features, so not sure technically what’s unique here,” said Selkis in a Twitter message. “Of course banks like the edit button.

That's why nothing interesting is going to happen with them and Blockchain tech for ten years."

## Sponsored Content

Sponsored Links by 



### Ken Fisher's Firm Has Come up with 99 Tips for Retirement

*(Fisher Investments)*



### White House Triggers Stock Market Collapse

*(The Sovereign Investor)*



### Millionaires Are Taking This Farmer's Warning Seriously

*(MoneyWise 411)*



### Congress Approves \$42.4 B "Cash Rebate" Claim it.

*(The Oxford Club)*

