How Blockchain Could Contain Customer Data Breaches

Want to learn more about how blockchain is the solution to preventing customer data breaches? Check out this post to learn more about blockchain and DLT security.

"Customers who had the best past experiences spend 140 percent more than those who had the poorest past experience." - Harvard Business Review

Positive customer experience wears the crown when it comes to repeat purchases. And positive customer experience essentially factors in elements, such as trust and transparency.

However, in recent times, customers' trust in businesses have been enormously shaken. The Facebook data leak incident has actually made the world sit up and seriously think about customer data security.

To gain customer trust, businesses should look into two things:

1. Seamless transaction
2. Data security

According to the Harris Reputational Quotient (RQ), data breaches negatively impact a business' reputation.

Now, the big question is: how should businesses improve customer experience and trust in an era where data breaches are becoming commonplace?

Enter Blockchain

For the uninitiated, blockchains have been labeled as trust machines. The up-and-coming technology is modeled in such a way that transactions are recorded in a common ledger, and the rights of the data lie with the customer and the customer only. No third party is involved. Meaning, the incidents of security or data breach are almost negligible.

In short, trust and transparency are the two pillars on which blockchain's digital ledger technology is built upon. The transparent nature of this technology could prove to be a game changer in the realm of customer experience.

Facts and Figures Underlining Blockchain's Unhindered Growth

- Gartner predicts that the total blockchain market is expected to cross $3 trillion by 2030.
- 90 percent of the North American and European Banks are investing in Blockchain.
- Banks can save nearly $8 to 12 billion annually if they start using blockchain.
- IBM and Comcast Ventures are funding blockchain startups.
- Microsoft has initiated a cloud-based blockchain-as-a-service. Nasdaq is piloting a blockchain-powered private market exchange. Two amazing blockchain capabilities CX teams should bet on is Distributed Ledger Technology (DLT). Blockchain's DLT shares and synchronizes digital data across independent computers (nodes). Each node saves

the same copy of the ledger — not to mention updates it independently.

The Working of DLT in a Blockchain

- Data is not maintained centrally. And, it gets stored in respective electronic ledgers or distributed ledgers.
- Updates are independently constructed and recorded by each node.
- Nodes vote on the updates made to ensure that the majority agrees with the conclusion.
- The voting and agreement on the updates are called a consensus, and it's conducted by a consensus algorithm.
- Once a consensus between nodes has been reached, the ledger updates itself with the latest data.

Customer care teams can leverage either a public or private blockchain. Whichever the case may be, both blockchain types offer a peer-to-peer network, wherein each participant (node) keeps a replica of the ledger and follows the consensus protocol. This could mean, when Marks and Spencers process a bill for a shirt, the same bill gets shared with you and maybe the tax auditors as well. Simply put, DLT enables multi-functional record keeping of multiple aspects of a single transaction that could be viewed by multiple parties at any point in time.

For the CX team, blockchain technology brings on board improved data integrity, quicker reconciliations, increased audit efficiency, and, most importantly, real-time customer insights.

Long story short, CX teams, leveraging blockchain with public DLTs, could view all transactions with all parties involved in the blockchain protocol.

Smart Contract

A smart contract is basically a software application that's built on a blockchain. The contract contains terms and conditions that parties involved in the contract agree to discuss with each other. While the pre-defined terms and conditions are shared and met, the contract gets automatically enforced. The contract code verifies and even mandates the negotiation or performance of an agreement.

The Working of Smart Contract in Blockchain

According to Harris Reputation Quotient (RQ), product recalls are happening mainly due to contamination and data breaches. With smart contracts, for instance, a pharma company can enter into an online contract with a shipping company to ensure that vaccines are delivered in an uncontaminated manner.

Key Benefits of Leveraging Blockchain In the Realm of Customer Experience

Trust

Time and time again, we have come across stories of companies who've failed to keep their customer data safe. Whether it's personal information in terms of passwords, political preferences, or health records, both businesses and customers are becoming increasingly concerned about the security of customer data.

However, with **blockchain technology companies** could assure customers that no data of theirs would be leaked, as the data is secured in encrypted code, and they are free to disclose as they choose.

Transparency

The blockchain-enabled product tracking process will allow customers not only to trace the place of origin of their ordered products but even track the product, which in a way would lend clarity to the entire process.

IBM's Watson IoT blockchain offerings aid in tracking goods at each point of the supply chain. The status of the package is updated via GPS. Holding this information on the blockchain means that both parties are on the same page in terms of the delivery status of the package.

Personalized Services

With customer expectations rising with each passing year, it has become all the more important for companies to offer personalized services. This is where blockchain could help. The technology is extremely conducive for collecting and profiling of customer data, which, in turn, could be leveraged by companies to offer personalized services.

Personalized services automatically improve customer engagement, thereby aiding businesses set up targeted campaigns and driving sales.

Reward Systems

For what it's worth, blockchain maintains a purchase history of each and every customer. The organizations could rely on these records to devise reward systems and loyalty programs for regular customers. A reward system that is highly personalized could help in the customer retention process of businesses.

Wrapping Up

Blockchain adoption enables businesses to build trust and transparency in all their day to day transactions. This, in turn, builds a new type of relationship with customers. Blockchain could even herald a new era of customer expectation; the expectation that customers should be treated fairly by businesses — no matter what. And, blockchain could guarantee this sort of just treatment.