



A technological hypothesis

Boston Scientific supercharges its supply chain with IBM Cloud

by Leah Valentine

3-minute read

It started with a hypothesis. The team at Boston Scientific theorized that it could use blockchain technology to provide real-time information to key players across its medical device supply chain network. Ultimately, Boston Scientific hoped to replace its manual approach to supplying and stocking its medical devices for its customers with an automated system that would enhance speed, transparency and ease-of-use for all stakeholders.



Boston Scientific operations in Colombia provide hospitals and clinics all over the country with medical devices and therapies, including stents and pacemakers. Medical personnel need these devices to be readily available at all times. Keeping stock at adequate levels is a constant balance of supply and demand.

Clinica Las Americas Auna, a 300-bed hospital in Medellín, Colombia, is one of the facilities that Boston Scientific serves. Dr. Juan Cendales, the hospital's general manager at the time, and Andrés Angel, CEO of AUNA Colombia, enthusiastically welcomed the Boston Scientific blockchain proposal.

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Fulfillment
used to
require

5 - 6 days
per order

Today it
takes just

36 hours
to fulfill new orders

Assembling the team

Boston Scientific connected with IBM Business Partner AOS International and Canadian logistics firm RoadLaunch. These two companies came together to create CORNERSTONE Blockchain Solutions in Colombia.

CORNERSTONE helped develop the pilot solution, a software as a service (SaaS) offering that resides exclusively on [IBM Cloud®](#). The solution takes data points—transactions, orders and digitized documents—and mirrors them on smart contracts. The technical team was also able to add product scanning and other key integrations to the solution because IBM Cloud uses hyperledger fabric, an open-source blockchain protocol. [The IBM Cloud Kubernetes Service](#) is among the products providing security and stability while helping to orchestrate workloads and trusted data sources.



Radical changes

The solution has radically changed the way Clinica Las Americas Auna and Boston Scientific work together. Previously, the hospital managed hundreds of manual orders, related emails and invoices each month. Today, the solution generates replacement orders automatically, eliminating that manual effort.

Furthermore, the blockchain pilot has reduced time between a new order to fulfillment from nearly a week down to an average of 36 hours.

The results of the pilot strongly support the original hypothesis—blockchain technology has radically enhanced efforts to keep essential medical



devices and therapies ready for the patients who need them at Clinica Las Americas Auna.

Note: The COVID-19 pandemic began as we were developing this solution. Fortunately, we were able to complete the pilot without issue. Because this is a touch-free solution that simplifies and speeds up delivery of key medical devices, Dr. Angel and his colleagues at Clinica Las Americas Auna practice additional COVID-19-related safety precautions as they focus on battling the pandemic and saving patients' lives.

The results are in:
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Americas Auna.



About Boston Scientific

Founded in 1979 and headquartered in Marlborough, Massachusetts, **Boston Scientific** is a multinational company devoted to transforming lives through medical solutions. Its products include implants, pacemakers, coronary stents, single-use scopes, monitoring equipment and more. The organization's revenue exceeded USD 10 billion in 2019, and it employs more than 36,000 people globally.

About CORNERSTONE Blockchain Solutions

CORNERSTONE Blockchain Solutions comprises two separate companies: IBM Business Partner AOS International and RoadLaunch. The organization provides blockchain solutions to customers in both Colombia and Canada. CORNERSTONE employs 20 people.

Solution components

- IBM Cloud®
- IBM Cloud Kubernetes Service

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