



Business challenge

Dan.com wanted to bring more transparency into the domain name marketplace and make it easier for businesses and individuals to find, buy and transfer domains with flexible domain purchase options, such as lease to own.

Transformation

To bring greater efficiency and process automation into the domain name marketplace, Dan.com partnered with IBM and IBM Business Partner Unchain to use IBM® Blockchain technology to automate previously manual processes, such as transferring a domain name from one registrar and registrant to another.

Results

900% increase in processing capacity

through blockchain automation, from 300 to 3,000 transactions per month

Supports new services

for users, such as allowing users to rent domain names directly through their preferred domain name registrar

Supports 600,000 transactions

every half hour

Dan.com

Blockchain transforms the domain name marketplace

Founded in 2014, [Dan.com](https://dan.com) is on a mission to inspire open and transparent practices in domain trading, and to make unused domains accessible to everyone. The business is headquartered in Amsterdam, Netherlands.

“We believe that we can upgrade the infrastructure used for domain transactions and make it easier for domains to change hands.”

—Reza Sardeha, Chief Executive Officer, Dan.com

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A fragmented and outdated industry

Finding the right domain or brand can be difficult. “Every single domain name that contains a dictionary word, or that’s brandable and pronounceable, is already taken,” says Reza Sardeha, Chief Executive Officer at Dan.com. Existing processes for finding and buying a domain name were established in the 1990s, and they no longer work in today’s market. “The old market is inefficient because it is run by a handful of companies that don’t grow through innovation but rather through consolidation of competitors,” says Sardeha. Meanwhile, many new businesses want to create an online presence but struggle to find an appropriate domain name.

One primary problem is that while around 330 million domain names are registered, about 44 percent of those, or 145 million, are not being used. But only about 25 million of the 145 million unused names are available through resellers, brokers and marketplaces. It’s relatively cheap to keep a domain, so instead of dropping them, many organizations simply hang on to unused domains. Further, the unused domain inventory is also scattered among registrars that don’t engage with the secondary market, making millions of high-quality unused domains even harder to find and acquire. Dan.com wanted to

bring more transparency and flexibility into the domain market, allowing new concepts such as lease to own.

Scalable process automation with blockchain

Dan.com began by creating an unused domain pool to make it easier for users to find available domain names. “We bring inventory and supply from all possible sources together via our unused domain pool API, so we can have a shared inventory of unused and available domain names that can be distributed,” says Sardeha.

However, Dan.com still needed to solve the problems involved with transferring domain names from one user and registrar to another. In the primary market, there are thousands of registrars that manage domains, each of which have their own processes and lock-ins, which made these transactions complicated, expensive and time-consuming. To accomplish its goals, Dan.com realized it needed to use blockchain technology. “We realized blockchain could help us with, for example, smart contract capabilities and a public ledger so we could automate and scale processes that were previously manual, ranging from legal contract creation to actual domain transfer to delivery,” says Sardeha.

Dan.com worked with IBM and Unchain to create a blockchain solution. “We very easily got the blockchain running on IBM’s services. I don’t even want to think about what kind of hassle we would have had to go through if we had to set up our own servers,” says Sardeha. Using IBM Blockchain technology, Dan.com automated the process for changing the ownership of a domain without the involvement of intermediary brokers. “This automation gives us new opportunities because domain transactions don’t have to take weeks to complete and we can offer more complex transaction types, like leasing or renting a domain, in a scalable way,” says Sardeha. The solution can also automatically accommodate situations such as the end of a domain name lease or rent period, and the return of the domain back to the seller.

Dan.com uses the blockchain solution’s public domain transaction verification ledger to replace the outdated WHOIS database. Users can access the Dan.com public blockchain explorer to check if a domain is under an agreement and see how many owners a domain has. With this information, users can avoid the legal challenges associated with offering rentals and domain leases, since the ledger acts as the irrefutable notary that tracks who owns which domain and who should be legally liable for the content published on a domain.

A catalyst for innovation

In the past, the average domain transfer specialist could process 300 domain transactions or escrow transactions per escrow agent per month. With the Dan.com blockchain solution, it’s possible to process over 3,000 transactions per month per escrow agent. In total, the IBM Blockchain solution can handle 600,000 transactions every half hour, which makes it future-proof in terms of scalability.

Dan.com is planning to open up access to its core technology using a simple API. Registrars and other domain marketplaces will therefore be able to come together to create the biggest pool of unused domains, increasing the efficiency of the entire domain market and delivering more value to end users. “We’re bringing the back-end technology to all the store fronts where developers and businesses go to find a domain name,” says Sardeha. “So we’re not exclusively keeping all that at Dan.com, but we’re letting it spread across the entire market to deliver the biggest impact.”

Dan.com credits support from IBM for helping it jumpstart its solutions. “Without IBM, we wouldn’t have been able to launch our blockchain network because it would have required too many resources,” says Sardeha. “So we’re very grateful for the whole infrastructure that IBM sets up and also with their backing for the open source blockchain technology Hyperledger.”

Solution component

- IBM® Blockchain

Take the next step

To learn more about the IBM solutions featured in this story, please contact your IBM representative or IBM Business Partner.

About Unchain

Unchain is an IBM Business Partner based in Amsterdam, Netherlands. Founded in 2016, the business develops enterprise blockchain projects for multiple industries.

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