CHAINYARD

We turn blockchain into business results.

A NON-GOVERNMENTAL VOLUNTEER ORGANIZATION IN THE US

Miracle Relief Collaboration League

IMPROVING DISASTER RELIEF EFFORTS

with blockchain technology

2020

CONTEXT

Every year, the United States experiences natural disasters like hurricanes, tornadoes, wildfires, floods, snowstorms and mud slides that have varying impacts on the community and the economy.

During and after these natural disasters,

- Different volunteer organizations, relief organizations, NGOs collaborate with the local, state, and national government along with residents and corporate entities to manage the impact of the disaster.
- All these stakeholders face many operational challenges during the disaster management efforts

132 BILLION US$

ECONOMIC LOSS IN 2018 ACROSS THE WORLD

69+ BILLION US$

ECONOMIC LOSS IN 2018 IN AMERICAS (53% OF GLOBAL LOSS)

Caused by 315 natural disasters affecting over 68 million people

Centre for Research on the Epidemiology of Disasters

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CHALLENGES

- Duplicate & wasted efforts due to lack of coordination between agencies
- Under or improper utilization of funds due to wrong or unavailable information
- Inefficiencies across various workflows due to lower visibility of activities
- Lack of single channel or process for donors and agencies delaying relief work
- Lack of transparency of transactions leading to fraud and mis-use
- Overall lack of transparency and trust prohibiting right effort from the right teams

> *Rarely does a location struck by a natural disaster lack parties willing to donate aid, in the form of food, medicine, shelter and other essential supplies. The problem is one of logistics. Effective emergency response to a natural disaster requires rapid, coordinated action among multiple parties.*
>
> Robert J. Bowman, SupplyChainBrain

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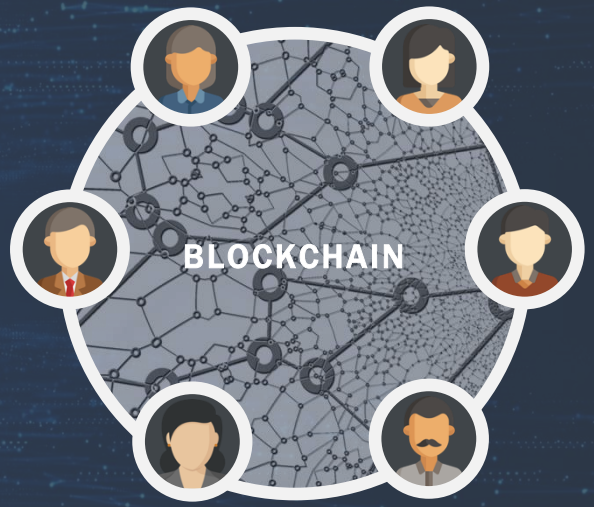
A SOLUTION

Our client, Miracle Relief Collaboration League – MRCL, a non-governmental volunteer organization in the US working for natural disaster relief efforts such as hurricanes and floods

wanted to use the power of collaboration and connection

to take their commitment to disaster response to a new level of connectedness, transparency, and trust.



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A NEW PLATFORM WITH BLOCKCHAIN

A COMMON PLATFORM
for collaboration and coordination between contributing agencies, volunteers, and residents

IMMUTABLE DATA
to ensure that the data cannot be easily changed once recorded on the platform

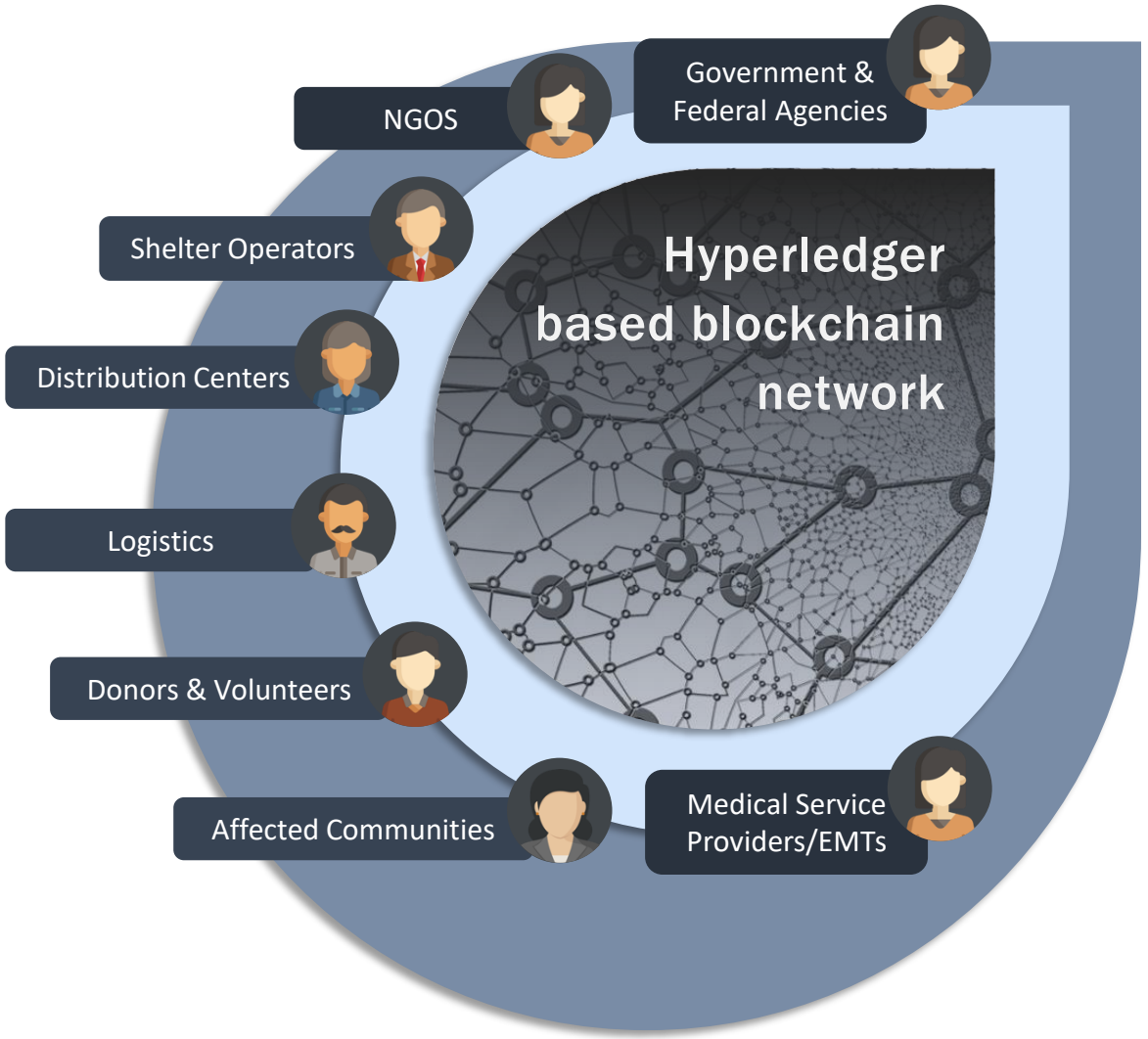
IDENTITY MANAGEMENT
of organizations and teams to ensure that the right agencies and personnel are executing the relief activities

SECURE SHARING & MANAGEMENT
of Personally Identifiable information (PII) only with need-to-know parties to comply with privacy regulations/GDPR

TRACKING & VISIBILITY
of supplies from receipt into the warehouses until delivery to the end receiver

ANYTIME, ANYWHERE ACCESS
with a smart phone to record a request for help or need from anywhere

TO HELP ALL CONTRIBUTING PARTIES



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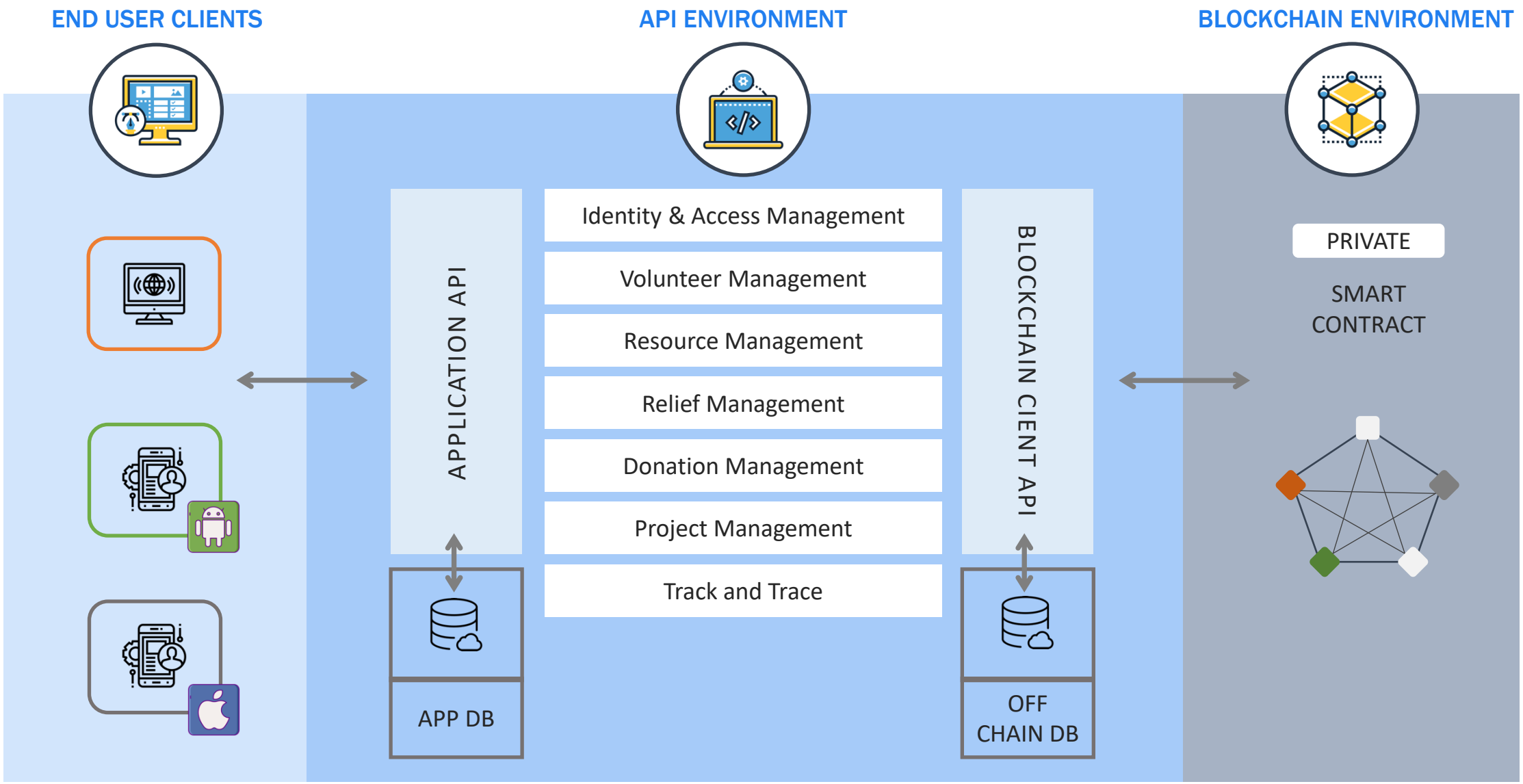
MODULAR SCLABLE ARCHITECTURE



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KEY BENEFITS FOR EACH CONTRIBUTING TEAM

Government & Federal Agencies

Oversee timely availability of funds for rescue operations

Residents

Speedy assistance for rescue, supplies, transportation

NGOs

Ensure right distribution of funds and rescue activities

Medical Service Providers / EMTs

Help medical practitioners reach shelters in time

Shelter Operations

Ensure right status of shelters shared to all parties

Volunteers

Ensure right incentives and activity tracking/audit

Logistics

Provide complete visibility of the supply chain

Distribution Centers

Enable timely delivery of supplies to residents

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Blockchain can significantly transform disaster management efforts

KEY OUTCOMES

CREATED

a strong sense of trust, transparency and motivation

INCREASED

Visibility, collaboration and speed of relief efforts

ELIMINATED

Duplication of efforts and misuse of privacy

DECREASED

Wastage of efforts and money

KEY OUTCOMES

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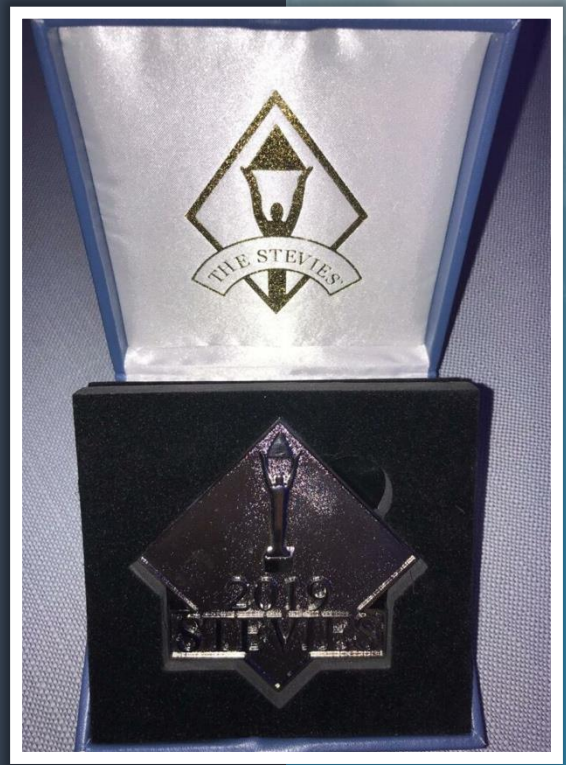
INDUSTRY RECOGNITION

The first phase of the new collaboration software platform, created in blockchain, has been honored by Stevie Awards with a 2019 Silver Medal International Business Award for Community Engagement.



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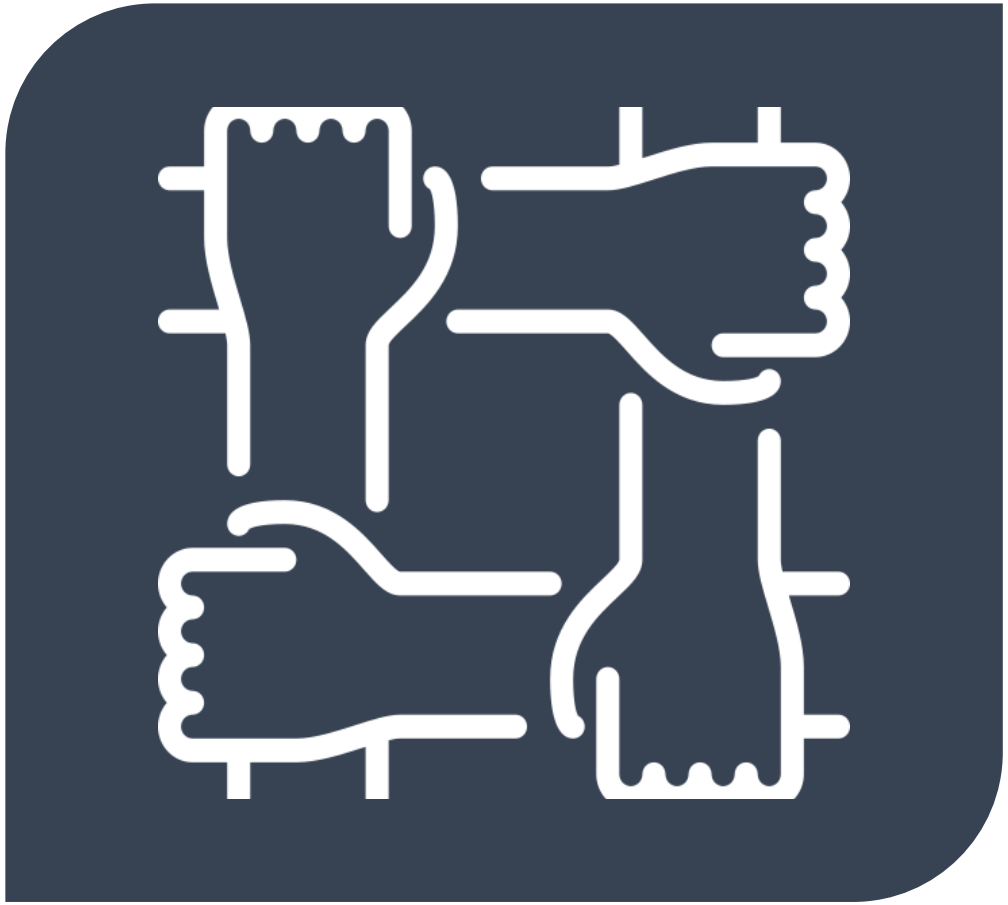
KEY TAKEAWAY

Most team efforts do not lack team-spirit but are not enabled sufficiently with systems and processes to effectively manage activities and demonstrate improvements.

Disaster management, most obviously, is a huge team effort and involves spirited members to help the needy but the results, often sadly, do not reflect the effort and commitment of various involved parties.

Our small effort with our client in building a blockchain-based platform to help disaster management efforts is an example of how transformational systems can solve under-served perennial problems.



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THANK YOU

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