



How Can a Mobile App Help Save Lives in the **Next Big Earthquake?**

HAKUSAN



© 2017 SAP SE or an SAP affiliate company. All rights reserved.

6,587 Earthquakes recorded by Japan in 2016

70% Chance of a magnitude 7-class earthquake in the Tokyo area by 2042

127M People susceptible to an earthquake disaster in Japan

“We have a common vision to make the world run better, **and SAP has the technology to make it happen.**”

Yoichi Tanaka, Chief Technical Officer, Hakusan



30M

People potentially impacted by a single earthquake in a metropolitan area



100,000

Seismometers planned to be installed across Japan in the future



4 TB

Expected annual data volume

**Hakusan Corporation**

Tokyo, Japan

<http://www.hakusan.co.jp/english/>

Industry

High Tech

Employees

80 (2016)

Line of Business

Platform and Technology

Analytics

Internet of Things

Mobile

SAP Solutions

SAP HANA®

SAP® Leonardo

SAP Cloud Platform

Innovator of Earthquake Safety

Hakusan is blending Big Data, cloud technology, and analytics to develop a mobile app that detects the structural integrity of buildings after an earthquake event. The high-tech manufacturer has the near real-time information it needs to help safeguard millions of lives from a disaster by giving government officials and first responders tremendous insight.

Before: Challenges and Opportunities

- Needed to detect the safety and resilience of Japan's building structures
- Lacked the speed to process and analyze hundreds of thousands of data points
- Required a better way to turn the mobile app prototype into a live network of data-driven insight

Why SAP

- Provide a platform that delivers a simple interface to enterprise users
- Handle data from potentially 100,000 devices on the fly with in-memory computing
- Use analytics to determine the damage caused by an earthquake event

After: Value-Driven Results

- Accelerate the processing of data generated by a network of mobile devices
- Near real-time analysis to report structural integrity quickly and accurately
- Data-driven insight to protect millions of people from an earthquake disaster

Company Purpose

Hakusan strives to prevent earthquake disasters with a seismic observation network system based on widely adopted technology.

75%

Faster data processing, delivering real-time insight into structural integrity

> 300

Mobile devices running in the Tokyo-sponsored pilot

“SAP HANA gives us unprecedented – almost unimaginable – data processing speed. It's the only way we can handle data on the fly.”

Yoichi Tanaka, Chief Technical Officer, Hakusan