

GLOBAL SEISMIC DATA BUILDING SEISMIC INSIGHTS

Earthquakes are a global fact of life. There are a myriad of fault lines around our world, any of which could pose a threat to life and cause significant financial and social upheaval. Recent events are a sharp reminder that complacency is not an option in the event of a major earthquake.

Earthquakes are also now well recognised as a workplace hazard. It is therefore vital that you can access rapid accurate information on your building status to improve decision makings affecting life safety outcomes.

While the above is very true Global Seismic Data is not just about earthquakes.

Global Seismic Data is Software as a Service (SaaS) company providing building movement and behaviour data that allows informed decisions to be made in near to real-time for: Life safety, building structural health, reductions in business interruption and business continuity.

Our Structural Health Monitoring System (SHMS) provides the continuous monitoring of a building or infrastructure frequency, ambient noise, movement and behaviour essentially giving the building a measurable pulse with SeismicDataSensors tuned to a building via engineers.

Allowing informed decisions around seismic events or degradation over time, the continuous real-time monitoring of your building or infrastructure may allow you to identify and respond to defects before they have a serious impact on your operation or finances.



How Structural Health Monitoring System (SHMS) Works



GSD's strategically-located sensors constantly monitor a building's movement and behaviour. These sensors measure any changes in its orientation, safety and capacity to keep people safe.

Among the measured elements are ground speed acceleration, twist, subsidence, movement and changes in the structure itself. These and other elements make up an ever-changing building frequency. The data from the sensor is wirelessly transmitted to the cloud and is available in real-time.

The data from the Structural Health Monitoring (SHMS) is considered to be a building's ECG (electrocardiogram) providing quantified information which allows multiple stakeholders to improve their role in making people and buildings safer, and ensure business and life continuity following a seismic event.

Global Seismic Data

We are a big data analytics company offering affordable cloud service that continuously monitors and logs building movement and behaviour from any level of seismic event.

Our shareholder mix includes technology, engineering and natural hazards sector experts. Locally owned and globally operated we are heavily invested in research and development and future AI applications.

Working with government authorities, property owners, engineering companies and the insurance industry we provide a valid risk matrix, and building usability assessment tools.

This increases the quantity of assessable data to a much wider footprint, with significantly less hassle than legacy systems permit.



Connecting people with process

We provide:

- SeismicDataSensor seismic sensoring units with multiprocessor capability and multi-axis measurement to USGS standards
- · 3G/4G wireless communications layer
- Enterprise-class data monitoring capability with rules engine and risk-scored alerting
- Cloud-based data management and storage with detailed analytics reporting via the Global Seismic Data web portal
- Implementation, configuration and system support
- A system that is quick to implement and priced to be affordable for all.

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Structural Health Monitoring System Benefits

Our Structural Health Monitoring System (SHMS) provides valuable data and information on the movement and behaviour of buildings and infrastructure. By understanding the movement and behaviour of buildings and infrastructure, stakeholders can better prepare for and manage seismic events across the resilience index:



The interlinked and interdependent stakeholders in Structural Health Monitoring Systems (SHMS) resilience are:

- Global Seismic Data has a three-pillared approach to improving resilience in building seismic insights.
- Minimise the risks faced and limit the impacts to be managed by helping build the capability and capacity in emergencies through Structural Health Monitoring Systems (SHMS).
- Strengthen wider societal resilience through the introduction of digital analytics and use of big data and AI in key infrastructure, building and emergency management and evacuation routes.

By knowing what is occurring within and to a building, or what has happened, the living and operating environment of a community is significantly enhanced.

Better Trust

- The use of objective numbers as a decisionmaking aid.
- Clarity around the best courses of action following a seismic event.
- The certainty that everyone is 'singing off the same hymn sheet' in structures' health.

Removal of Fear and Uncertainty

- Real-time information leading to informed 'next steps'.
- The elimination of guesswork.
- 'What you measure, you can manage'.

Better Ways of Protecting Life and Business

- Improved emergency management planning and execution.
- Improved buildings and other infrastructure.
- Improved communication and outcomes within and across shared stakeholder interests.

Structural Health Monitoring System (SHMS)



A key consequence of monitoring and measuring a building's frequency is it allows engineers and building owners to 'surgically repair and modify' a structure to make it safer and more resilient to seismic events.







Global Seismic Data

- Affordable Seismic monitoring for building movement and behaviour
- Near real-time alerting
- Cost effective OPEX solution
- Monitoring of building movement and behaviour for any level of seismic event
- Mobile phone app
- Customisable data reporting system tuned to each building by engineers
- Enables rapid engineer assessments
- Facilitates rapid occupancy decisions
- Building signature tests
- Rotation around the vertical measure (RAV)
- Sensors have been calibrated by an independent and impartial testing agency

Contact Us

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Recent events are a sharp reminder that complacency is not an option in the event of major earthquakes.

Ensure your buildings are risk assessed based on real data and don't leave occupant safety to chance!



Offices:

New Zealand | Japan| Nepal | India | Italy | Liberia | Haiti | Colombia | Costa Rica | Mexico | Washington, D.C. | Reno | San Diego | Orange County | Los Angeles | San Jose | San Francisco | Sacramento | Turkey

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