Before the workshop on Monday 19 December use our free Disaster Risk Assessor app to explore how you are at risk!

Agile Business Continuity Workshop - Adelaide

www.eventbookings.com

15Off – 15% off BUSINESS CONTINUITY WORKSHOP

Disaster Risk Assessor

We suggest it is useful to look through the lens of "**risk as a function of hazard x vulnerability**"

Download on the **App Store**

https://apps.apple.com/au/app/disaster-risk-assessor/id6443818654

Use the QR code below to download the free Disaster Risk Assessor app

GET IT ON **Google Play**

https://play.google.com/store/apps/details?id=com.disaster.risk&hl=en_AU&gl=US

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What hazards might you be exposed to?

Hazards

- Fire
- Explosion
- Natural hazards
- Hazardous materials spill or release
- Terrorism
- Workplace violence
- Pandemic disease
- Utility outage
- Mechanical breakdown
- Supplier failure
- Cyber attack

Probability & Magnitude

Assets at Risk

- People
- Property including buildings, critical infrastructure
- Supply chain
- Systems/equipment
- Information Technology
- Business operations
- Reputation of or confidence in entity
- Regulatory and contractual obligations
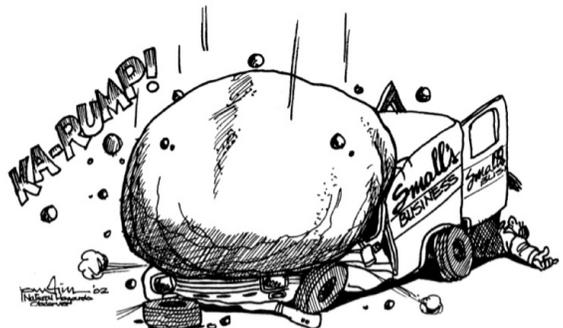- Environment

Vulnerability

Impacts

- Casualties
- Property damage
- Business interruption
- Loss of customers
- Financial loss
- Environmental contamination
- Loss of confidence in the organization
- Fines and penalties
- Lawsuits

Hazard Identification | **Vulnerability Assessment** | **Impact Analysis**

When Disasters and Small Businesses Collide

KA-RUMP!

NFPA 1600

Standard on Continuity, Emergency, and Crisis Management

Hazards

Select a hazard category (Ref NFPA 1600) – then scroll down to select a hazard to consider.

Category	Count
Geological	4
Meteorological	9
Biological	2
Human Caused	9
Technological	4
Economic/Financial	3
Strategic	7

NEXT

Hazards to be evaluated shall include the following:

(1) Geological:
- (a) Earthquake
- (b) Landslide, mudslide, subsidence
- (c) Tsunami
- (d) Volcano

(2) Meteorological:
- (a) Drought
- (b) Extreme temperatures (hot, cold)
- (c) Famine
- (d) Flood, flash flood, seiche, tidal surge
- (e) Geomagnetic storm
- (f) Lightning
- (g) Snow, ice, hail, sleet, avalanche
- (h) Wildland fire
- (i) Windstorm, tropical cyclone, hurricane, tornado, waterspout, dust storm, sandstorm

(3) Biological:
- (a) Food-borne illnesses
- (b)* Infectious/communicable/pandemic diseases

(4) Accidental human-caused:
- (a) Building/structure collapse
- (b)* Entrapment
- (c) Explosion/fire
- (d) Fuel/resource shortage
- (e)* Hazardous material spill or release
- (f) Equipment failure
- (g) Nuclear reactor incident
- (h) Radiological incident
- (i) * Transportation incident
- (j) Unavailability of essential employee(s)
- (k)* Water control structure failure
- (l) Misinformation

(5) Intentional human-caused:
- (a) Incendiary fire
- (b) Bomb threat
- (c) Demonstrations/civil disturbance/riot/insurrection
- (d) Discrimination/harassment
- (e) Disinformation (rumors, false allegations, or accusations)
- (f) Kidnapping/hostage/extortion
- (g) Geopolitical risks including acts of war, change in government, and political instability
- (h) Missing person
- (j) Product defect or contamination
- (k) Robbery/theft/fraud
- (l) Strike or labor dispute
- (m) Suspicious package
- (n)* Terrorism
- (o) Vandalism/sabotage
- (p) Workplace/school/university violence
- (q) Supply chain constraint or failure

(6) Technological:
- (a)* Hardware, software, and network connectivity interruption, disruption, or failure
- (b)* Utility interruption, disruption, or failure

(7) Economic/financial:
- (a) Foreign currency exchange rate change
- (b) Economic recession
- (c) Boycott
- (d) Theft/fraud/malfeasance/impropriety/scandal involving currency, monetary instruments, goods, and intellectual property

(8) Strategic:
- (a) Loss of senior executive
- (b) Failed acquisition/strategic initiative

(9) Humanitarian issues

Which hazards are most significant to you?

Select Hazard +

Meteorological
When attributing a level of significance to the "Hazard", consider

Hazard Significance 9 ⌄

Drought
0 ——————●8—— 10

Extreme temperatures
0 ———————10— 10

Famine
0 ———●4———— 10

Flood, flash flood, seiche, tidal surge
0 ———●5———— 10

Reference: Hazard Significance - Criteria

Past recurrence intervals
how many events have occurred in your context in the last 100 years

Future likelihood of occurrence
is frequency increasing

Speed of onset
how quickly might it be upon us

Magnitude
how big will it be

Duration
how long will it stay

Timing
does significance vary at different times of the day/month/year

Intensity
how much energy is released

Potential area of coverage
extent of spatial impact

Perception
level of fear or dread invoked

Reference: Risk Algorithm

Before Impact Risk - the interface between hazards and vulnerability of thing(s) we care about.
After Impact Risk - the interface between hazard events and impact on thing(s) we care about.

Hazard
Significance

(a)

Before Impact

Vulnerability
(b)

After Impact

Impact
(c)

If (a) x (b) is greater than or equal to 1 or less than or equal to 24 then Risk Gauge is Green

If (a) x (b) is greater than or equal to 25 or less than or equal to 59 then Risk Gauge is Yellow

If (a) x (b) is greater than or equal to 60 or less than or equal to 100 then Risk Gauge is Red

If (a) x (c) is greater than or equal to 1 or less than or equal to 24 then Risk Gauge is Green

If (a) x (c) is greater than or equal to 25 or less than or equal to 59 then Risk Gauge is Yellow

If (a) x (c) is greater than or equal to 60 or less than or equal to 100 then Risk Gauge is Red

Calibrate
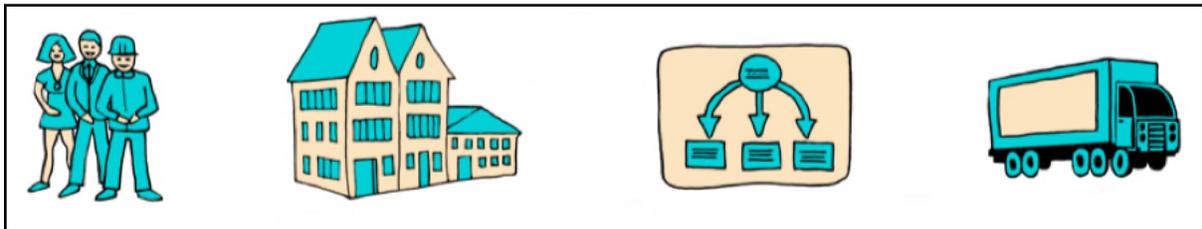100 80 60 40 20 0

Calibrate for Context
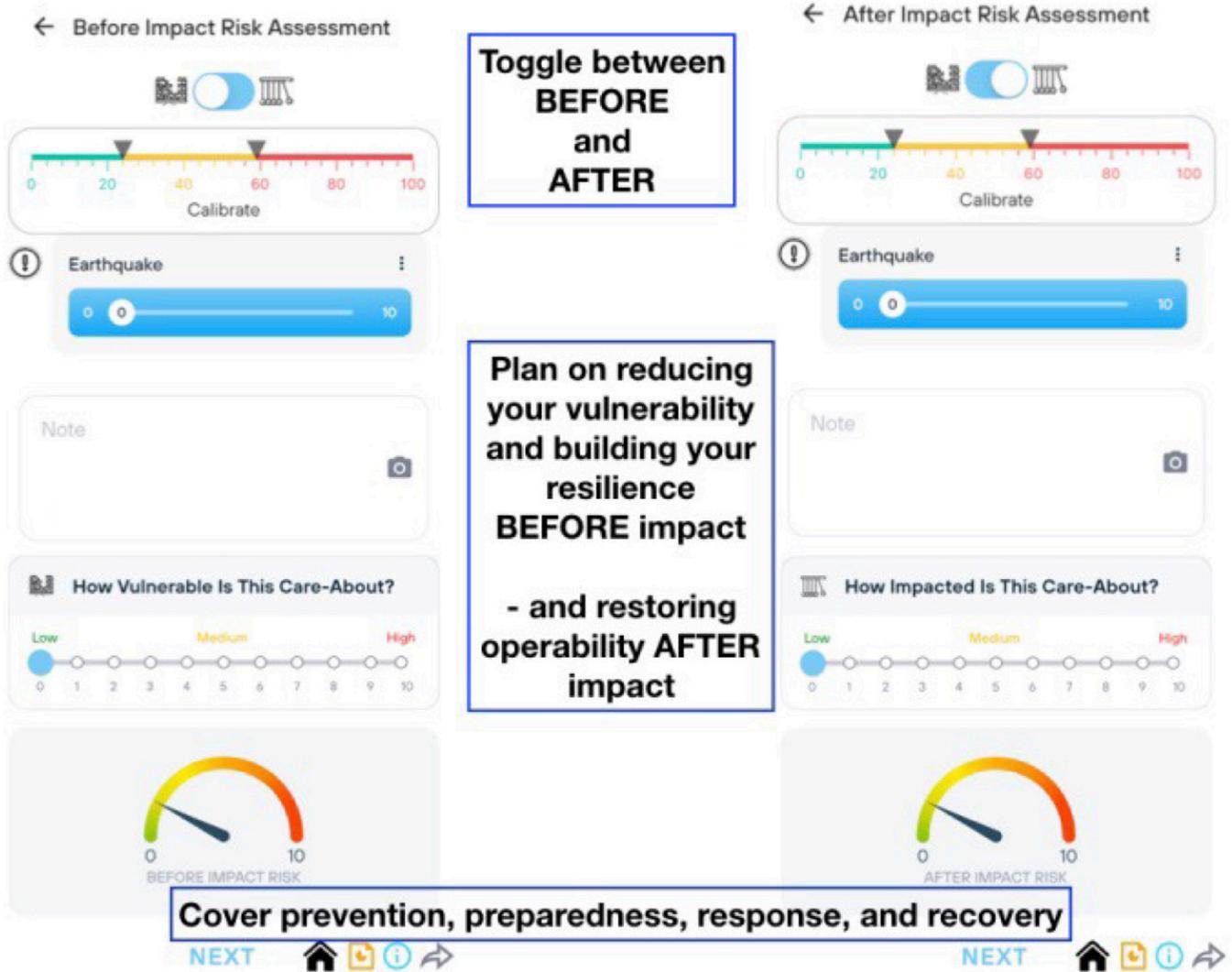Users can adjust the risk thresholds to reflect the values of their context.

What do you value?

In the "business continuity" context we value the things which we need to conduct our "prioritized activities"

4Ps - People Premises Processes Providers

Toggle between BEFORE and AFTER

Plan on reducing your vulnerability and building your resilience BEFORE impact

- and restoring operability AFTER impact

Calibrate

Calibrate

Earthquake

Earthquake

0 10

0 10

Note

Note

How Vulnerable Is This Care-About?

How Impacted Is This Care-About?

Low Medium High
0 1 2 3 4 5 6 7 8 9 10

Low Medium High
0 1 2 3 4 5 6 7 8 9 10

0 10
BEFORE IMPACT RISK

0 10
AFTER IMPACT RISK

Cover prevention, preparedness, response, and recovery

NEXT

NEXT

Reference: Vulnerability is a function of many things. It is about the characteristics and features of the thing(s) you care about, and the dependencies and interdependencies associated with it (them), which make it (them) more resilient, or more adaptable, or more fragile.

In a nutshell, vulnerability is about the "**propensity or predisposition to be adversely affected**" [1]. It may be summarised as "a measure of the extent to which 'something you care about' such as a community, structure, service or geographical area is likely to be damaged or disrupted (on account of its nature or location) by the impact of a particular event" [2]. Vulnerability encompasses a variety of concepts and elements including sensitivity or susceptibility to harm and lack of capacity to cope and adjust.

Adaptive capacity is the "ability of systems, institutions, humans, and other organisms to adjust to potential damage, to take advantage of opportunities, or to respond to consequences" [3].

[SOURCE 1: ISO 14091 Adaptation to climate change – Guidelines on vulnerability, impacts and risk assessment].

[SOURCE 2: Glossary of Environment Statistics, Studies in Methods, Series F, No. 67, The Organisation for Economic Co-operation and Development].

[SOURCE 3: ISO 14090:2019 Adaptation to climate change].