

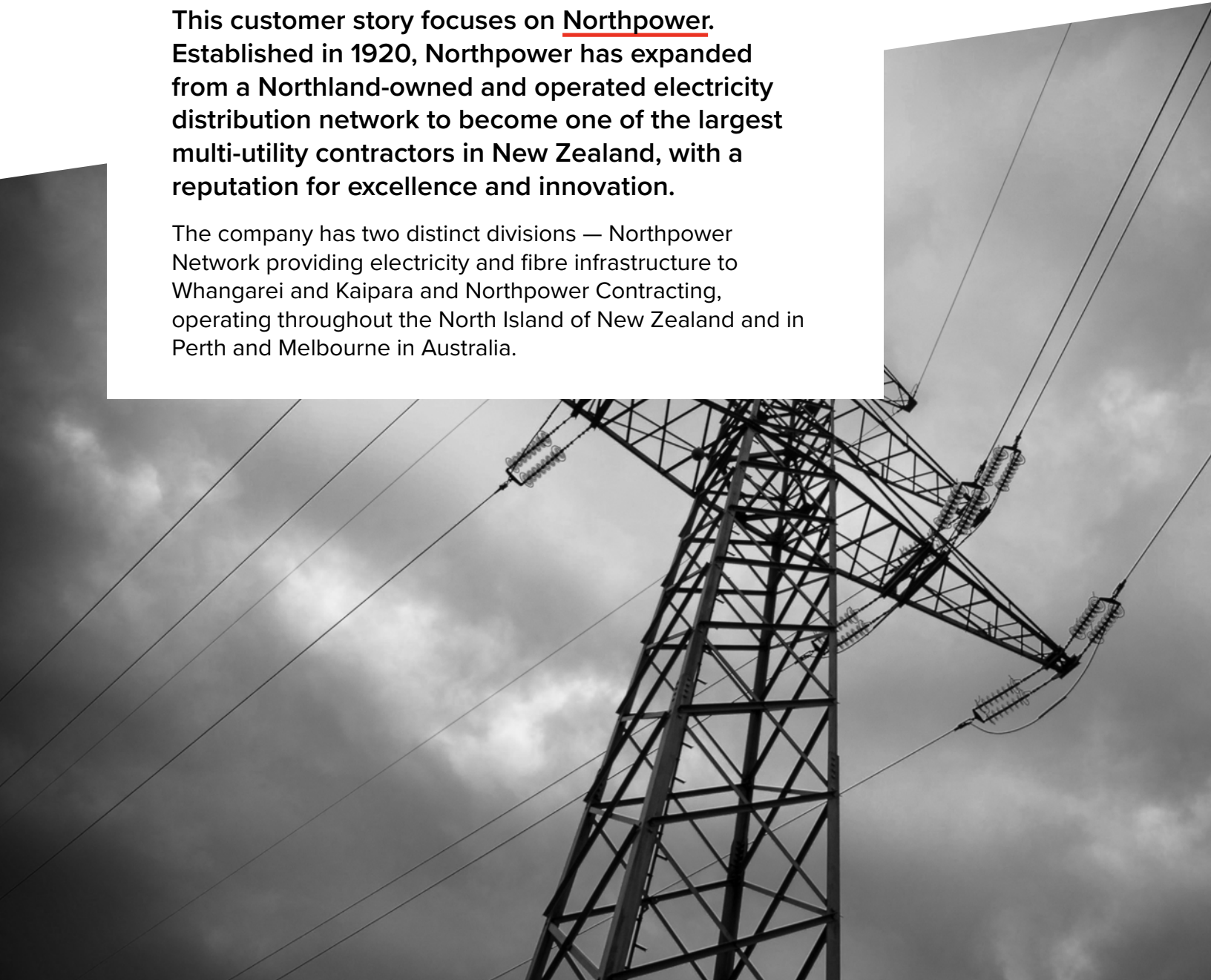


CASE STUDY

Infrastructure

This customer story focuses on Northpower. Established in 1920, Northpower has expanded from a Northland-owned and operated electricity distribution network to become one of the largest multi-utility contractors in New Zealand, with a reputation for excellence and innovation.

The company has two distinct divisions — Northpower Network providing electricity and fibre infrastructure to Whangarei and Kaipara and Northpower Contracting, operating throughout the North Island of New Zealand and in Perth and Melbourne in Australia.



Problem

Northpower performs 85,000 pillar inspections over a cycle of 3 years. Until recently, Windows Mobile-based phones with 2.8" displays were used with a forms solution to capture inspection results. Paper-based maps were used to log and navigate to each pillar to conduct inspections.

Northpower found a number of challenges with their previous process:

- ▶ Ad-hoc administrative support time was needed to upload and process the inspection results
- ▶ The form which was created by a 3rd party couldn't be easily updated or maintained.
- ▶ Windows Mobile was no longer a widely-supported platform.
- ▶ Issues in the previous application forced inspectors to hand-write inspection results before entering data; the system wasn't trusted enough to maintain data integrity.
- ▶ Without electronic maps to pinpoint pillar locations, 10% or more could be missed on a patrol.
- ▶ The interface with the back-end systems lacked validation & automation capability.

Results & Benefits

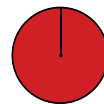
Prior to the introduction of Fulcrum on iPads, 2 full time employees and a 3rd contractor were needed to complete pillar inspections at a rate of 45 inspections per, person per day. With Fulcrum, that rate has now increased to 60 per day, and the need for the additional contractor has been removed improving bottom line margins. This savings can then be passed on to Northpower's customers.



45 Inspections
Per Day



With 3
Employees



60 Inspections
Per Day



With 2
Employees

VALUABLE LOCATION DATA IN THE FIELD

Previously, vegetation overgrowth would hide 10% of pillars, which would cause them to go uninspected. Now using fixed locations in Fulcrum with pins assigned to every pillar, these can be searched for and found the first time around. Fulcrum also allows inspectors to add newly discovered pillars dynamically and on-the-fly, avoiding the need for a separate team to visit the site to locate the pillar in the GIS system.

No more double site visits.

The use of iPads by pillar inspectors has improved the overall efficiency and accuracy of data collected in the field. One maintenance manager says “The introduction of the iPads to the field inspectors has had a dramatic impact on the business. Inspectors can plan their routes better with a map representation of all pillars to be inspected. We’re now able to visit all pillars in a patrol. Missed pillars are a thing of the past which has improved the overall safety, and we’re doing more work with fewer people.”



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