

## **Barry's Plumbing Case Study**

Barry's Plumbing (BP) is a 24 hour emergency plumbing company for strata managed apartments.

BP provide emergency plumbing repairs of all types (sewerage, burst pipes, leaks, etc). They do not do new installations unless it is to replace an existing installation.

BP have a head office at Campsie in Sydney with branch offices at Kotara in Newcastle and Morningside in Brisbane.

BP have a fleet of 26 vehicles in Sydney, 7 in Newcastle and 12 in Brisbane. Each vehicle has only 1 tradesman with it and that tradesman must make sure that the vehicle is always fully stocked with typical repair items and consumables such as solder, gas, etc. Each branch office has a comprehensive warehouse attached to it with a warehouse manager and a complete inventory of typical repair items. Tradesmen must replenish their stock through the branch warehouse and must request these items by submitting a restock request.

Each branch warehouse manager sends these requests to the Sydney office so that they can order stock to replace the stock used. Central ordering provides a significant discount due to bulk buys. Currently there are problems with under and / or overstocking due to warehouse managers not sending the requests in a timely manner.

The Sydney head office has a 1800 phone number and is responsible for the allocation of jobs to rostered vehicles. Currently the jobs are allocated using SMS text messaging but this is often unreliable and has caused some degree of customer dissatisfaction due to late or missed calls.

BP has 105 clients (Strata Managers) which accounts for 370 apartment buildings and 38,850 apartments. BP have a contractual requirement to respond to an emergency callout with 45 minutes and have penalties which can be applied for each 15 minutes the tradesman is late.

Currently all communications within the company and with clients is by phone, SMS or fax.

The Sydney office is responsible for all billing and must have all tradesmen supply details of each call such as time on site, materials used, reason for call, cause of the problem, recommendations (if further action is required), person who logged the call. Currently there is a high level of incorrect or questioned invoices due to inaccuracies of tradesman data.

Tradesmen are paid based on timesheets submitted with the job details. Tradesmen work a 12 hour shift, however if a tradesman works longer than their 12 hour shift they receive a penalty rate of 20% above their normal rate. Tradesmen submit a list of materials used for each job completed along with their timesheet.

The materials list plus the timesheet date are used to bill the customer for the work done. Billing is done from the Sydney head office and is processed fortnightly.

Historically there are approximately 100 jobs per week with an average cost an average cost of \$500 per job.

Barry's Plumbing has contracted your organization to design a complete solution for their requirements. Your solution will be presented to the CEO of Barry's Plumbing for approval.

**You are required to submit a feasibility report.**

At a minimum level, your feasibility report should contain the following generic sections:

- Executive Summary
- Description of the problem
- Solution objectives
- Constraints
- Development plans
- Potential solutions
- Recommendations

**Feasibility Report Marking Guidelines**

Executive Summary .../2

Description of the problem .../5

Solution objectives .../4

Constraints .../1

Development plans .../4

Potential solutions .../5

Recommendations .../2

Logic and evidence of research .../2

Presentation, clarity of discussion .../5

**Total Mark .../30**