# Case Study - Scenario

Imagine you work for a small business*, Soft Support*, which provides general computer support - hardware purchase and installation; Commercial Off-the-shelf software supply and installation; plus general troubleshooting related to both hardware and software. Alongside the CEO and the receptionist and CEO's executive assistant, the company currently employs 10 staff to service their clients' needs. Soft Support currently has a client-base of about 60 clients most of whom are small businesses like themselves. Recently the company has expanded into the market of supplying bespoke software development.

*Soft Support* has just won the tender to develop software for Husky Air to support their ‘Pilot Angels’ volunteer service.

## Background

Husky Air opened for business in January 2004 when L.T. Scully and several other investors pooled their life savings and secured a rather large loan from a Canberra bank.

Located at Cooma airport, Husky Air is a fixed base operator (FBO) facility that offers a full range of services to the growing demands for business and private aviation. Currently the company has 23 employees composed of pilots, mechanics, and office staff.

As an FBO, Husky Air provides:

* Business jet, propjet, helicopter and propeller aircraft charter
* Refuelling
* Airframe, engine, propeller, and avionics maintenance
* Aircraft rental
* Flight instruction
* Pilot supplies

Although FBOs at other airports offer similar services, Husky Air has been receiving increased attention throughout southern and western New South Wales for its charter service, maintenance, and flight instruction.

## Pilot Angels

In addition, Husky Air coordinates a charitable service called Pilot Angels. Working with hospitals, health care agencies, and organ banks, Husky Air matches volunteer private pilots, willing to donate their time and aircraft, with needy people whose health care problems require them to travel to receive diagnostic or treatment services. In addition, Pilot Angels also will provide transportation for donor organs, supplies, and medical personnel. All flights are free of charge. Volunteer pilots use their own aircraft and pay all the costs.

*Mission Statement:  
Flight Angel is a charity that co-ordinates non-emergency flights for financially and medically needy people*.

The pilots who volunteer for the Pilot Angel program need no medical training and offer no medical assistance. The planes do not carry any medical equipment and do not have to accommodate any stretchers. Patients, however, must be medically stable and able to enter and exit the aircraft with no or little assistance. The Pilot Angel passengers typically travel to or from a hospital or clinic for diagnosis, surgery, or some other treatment. Travel companions, such as a relative, friend or nurse, are common.

Currently, a pool of pilot volunteers is kept in a file folder. If a hospital or a person with a medical or financial hardship contacts Husky Air, the name of the traveller, the destination, dates/times, and the number of travel companions are requested. Because of limited weight restrictions in small aircraft, the weights of the passengers and their luggage are needed as well.

After the initial information is provided, Husky Air contacts the volunteer pilots to determine their availability. Although a volunteer pilot may be willing and available for a Pilot Angel flight, the plane may not have the range or weight-carrying requirements. This may be an inefficient use of time since many pilots may have to be contacted until a pilot and suitable plane can be found. Currently Husky Air believes that on average it takes 6 phone calls before a suitable and available pilot can be found. Husky has set an eventual objective of requiring only 1.5 telephone calls on average.

## The Project Description

Husky Air would like to have a computer-based system to keep track of all its Pilot Angel volunteers. Basic information about the pilots may include their name, address, phone number, and so forth, as well as their total hours, certifications, and ratings. Moreover, specific information about a volunteer's aircraft would be useful. Such information should include the type of plane, aircraft identification number (called the N number), whether single or multi-engine, and its capacity for carrying passengers and cargo. Some pilots own more than one plane.

Husky Air also wants to know more about the people, hospitals, clinics, and organ banks who request the Pilot Angel service. In addition, they would also like basic information about the patients, their passengers, and specific needs to help match volunteers with the request for transport. The marketing people and the managers dealing with the government (for grants and compliance issues) also want some reports, but as yet they are only vague requirements. Management would also like help in knowing when and where to seek new volunteer pilots based on Pilot Angels ability to meet the demand for its services. Finally, Husky Air wants a list of all the Pilot Angel flights in order to recognise specific volunteers for their contributions. This would include:

* The pilot who flew the flight
* The plane that was used
* The total time of the flight
* The distance and destination of the flight
* The date and time of the flight
* The total fuel used

(Scenario drawn from *Information Technology Project Management: Providing Measurable Organizational Value*, Jack T. Marchewka, 2006, John Wiley and Sons, p26)