Case study

Client’s Details

Company Name: Anzac Airport

Contact Name: David Edwards, IT Manager

Sharon Tate, Airport CEO

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Anzac Airport is a small private airport which provides passenger and freight services for local clients and businesses. Anzac Airport must be compliant with all commonwealth and state laws and regulations regarding airport facilities and operations. The organizational structure of Anzac Airport consists of three departments which support five areas of operational activity:

1. Office Operations – Administration (including management) and Finance

CEO, CFO, Administration Manager, 2x receptionists, 4x administration officers, Human Resource officer, WHS Officer

2. Information and Technology

IT Manager, 2x IT technicians

3. Ground Operations – Security and Airport Operations.

Operations Manager, Security Manager, 6x tarmac / baggage handlers (2x PCs), 6x security staff (3x PCs)

All staff have access to a computer, except where noted.

The Information Technology team is under the Information and Technology department. They currently spend 80% to 90% of their time dealing with a constant stream of desktop support issues.

202X IT Budget

• Staff salaries and professional development $230,000

• Hardware purchases $140,000

• Software Purchases $140,000

There is limited flexibility in this budget, but the overall budget of $510,000 for the year must adhered to.

Responsibilities of the Information Technology department

• Internet access

• Wi-Fi

• Voice over IP

• Local Area Networks

• Desktop computers in administration offices

• Video conference facilities

• Corporate information systems: Payroll, Email, Personnel, Records management

• Security – physical and systems

Current Configuration:

• There are no servers, only peer-to-peer networks in each department

• Wired LAN is 10/100 Ethernet with an ad-hoc topology

• The storage of files on staff computers is unstable and unreliable

• Calculated storage capacity across the departments is:

Department Section Mbyte

Office Operations General organisation files and template 1200

Client files 12000

Human Resources and WHS 3500

Finance 4500

Management 1800

Information and Technology Reports and general documentation 2500

Ground Operations Manager 1800

Security 25000

Tarmac operation documentation 9500

• With the industry rebounding after a difficult period, it has been noted that increase in data is larger than before and the estimate is that data will grow at 20% each 12 months.

• The desktop computers in the admin areas have several different operating systems installed

• Office Operations – Dell OptiPlex desktops 2-year-old 8GB, 250GB SSD, MS Windows 10 Home

• Information Technology – Dell OptiPlex desktops 4-year-old 8GB, 250GB SSD, MS Windows 10 Pro

• Ground Operations – Dell OptiPlex desktops 6-year-old 4GB, 200GB HDD, MS Windows 8.1 Pro

• The company pays an Internet service provider to host web services

• Staff members use email rarely; all mailboxes are at internet sites such as Gmail

• The internet works for admin staff only. Wi-Fi is used by IT staff only

• One member of the IT team has been experimenting with VOIP but no implementation yet

Business Needs:

• The CEO is concerned that the old technology is costing them money and has decided that it is time to upgrade

• The IT Manager has stated that the company wants to introduce a Microsoft LAN for administration staff and customers

• Full wireless integration

• On-site email services, FTP, and web services

• Domain services to run on a Microsoft server

• File storage and email services and to run on separate servers

• An additional $20,000 has been allocated for network improvements

• The IT team has been asked to devise a strategic plan for growth of the IT infrastructure

• The new IT infrastructure must be based on clearly defined business requirements

• Introduce Linux based servers

Technical Requirements:

• The clients are currently using a peer-to-peer network design which needs to be replaced by an up-to-date Ethernet client/server network

• Many staff members complain that the peer-to-peer network is too slow, the network needs to be more reliable

• The CEO has stated that she wants ‘State-of-the-art’ technology on every desk

• Error messages on desktop workstations suggest that memory and disk upgrades are needed

• All Microsoft operating systems on both servers and workstations need to be upgraded to current versions where required

• The proposed server & network must be agile and redundant (easily recoverable – think server clustering)

• Single sign on authentication must be configured so that anyone logging on to the network will be able to access all resources

• The CEO has heard about virtual server platforms and stated that he is interested in exploring this option as well

• At least one of mail, WEB or FTP services run on Linux based server and proxy and NTP run on Linux based servers

• File sharing between Linux and Windows server

Company Policies:

1. Anzac Airport’s commitment to professionalism, ethical practices, equity, and social accountability implies a duty of care in relation to the use of information resources. Finite resources are applied to information facilities, and their use for business purposes must not be diminished by use for other purposes. Anzac Airport also values its reputation, including that which is conveyed on information networks. Therefore, we are committed to procedures which:

a) monitor the quality of information on computer networks

b) make users aware of company policy on the use of information resources

c) lead to action arising from such monitoring through as appropriate. Misuse is dealt with through performance management and/or staff misconduct processes, depending on the nature of the breach in question

d) routinely logs network activity and may use this information to investigate faults, security breaches and unlawful activity

2. Members of the Information Technology team are responsible for:

a) data quality - accuracy, integrity, cleanliness, correctness, completeness, consistency, and timeliness.

b) data security - control of access to data sets to known individuals and monitoring of the data's subsequent exposure as it flows through corporate systems and records.

c) data standards - ensuring compliance with relevant laws, government and regulatory standards and any policies and standards imposed internally.

d) data management - definition of the authoritative source of data and of the data to be provided from that source and ensuring that duplication of data is kept to a minimum.

3. Members of the Information Technology team are to monitor and evaluate business processes to ensure that these are consistent with best practice principles for data management and are responsible for approval of the 'rules' which are used to determine user access to information resources and services (though this approval can be delegated to another officer in the business area).

4. The company will endeavour to align IT operations with specific business goals and objectives, company vision, and long-term strategies.

5. The company will apply standards in their use of technology to assure ease of support and the effective application of hardware and software to core systems.

6. The procurement of technology will be based on a comprehensive assessment of vendor offerings. All purchases in excess of $2000 must have at least 3 separate vendor quotes.

Your Role

The Anzac Airport Information Technology team has requested the services of Uptown IT due to the depth of knowledge and experience your organisation has. As a senior IT consultant with Uptown IT, management has requested that you take a lead role in helping the client meet their goals.