TSWELOPELE MUNICIPALITY
INFORMATION TECHNOLOGY STRATEGIC PLAN

TABLE OF CONTENTS

1. **INTRODUCTION**

The purpose of the IT Strategic Plan is to provide the municipality with a cohesive strategy to ensure that all the IT initiatives strive towards a common goal, which in turn will ensure that optimal use is made of the IT investments of the municipality.

Another purpose of the IT Strategic Plan is to align the future direction of IT with the business objectives.

The three main components of the strategic plan are as follows:

- Information Systems [IS]

  The various software applications used by the organization to automate business processes.

- Information Technology [IT]

  The technology deployed to provide access to systems, information and people.

- Information Management [IM]

  The responsibility for IS and IT, governance, staffing, etc.
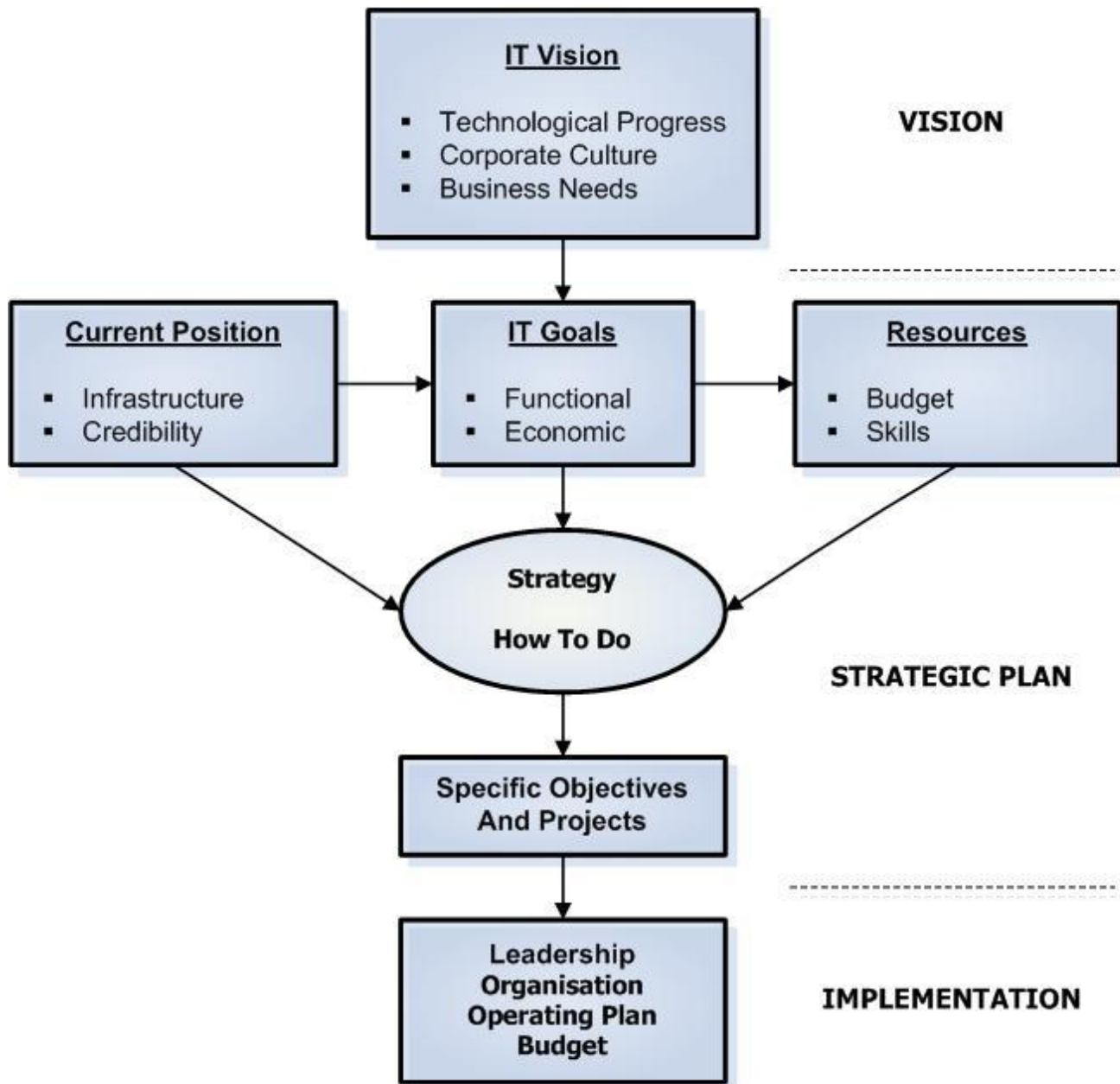
The strategic plan will be updated and revised continuously because both the technology it is based on as well as the business needs it supports, are not static. The IT steering committee will review the plan on a quarterly basis to ensure it remains current.

Terms of Reference for the Development of the Strategic Plan

- Auditor General audit report findings
- Guidelines provided by people responsible for IT at Tswelopele
- Vision and mission from the Mayor and Speaker
- Information obtained during interviews various staff members
- Tswelopele Integrated Development Plan - Review 2005
- MFMA section 75
- SITA IMST Master Systems Plan

The following diagram puts the strategic planning process into perspective:

Model for Strategic Planning

IT Vision
- Technological Progress
- Corporate Culture
- Business Needs

VISION

Current Position
- Infrastructure
- Credibility

IT Goals
- Functional
- Economic

Resources
- Budget
- Skills

Strategy

How To Do

STRATEGIC PLAN

Specific Objectives And Projects

Leadership Organisation Operating Plan Budget

IMPLEMENTATION

Source: Gartner Group

<u>SITA</u>

"The Free State Department of Local Government and Housing [LG & H] engaged the State Information Technology Agency [SITA] to develop and produce an Information Technology strategy, which is presented in the form of a Master Systems Plan, for 16 Free State municipalities. The municipalities that were selected were considered to be representative in terms of their size and location [i.e ranging from having principally an urban, rural and district profile] in the Free State. The Tswelopele municipality was one of those selected."

The development of the MSP strategy by SITA is still underway but it seems that some form of shared services centre for business systems might be established by SITA sometime in the future. That is therefore vital for the Tswelopele Municipality to accommodate this in its strategic planning.

SITA's recommendations to municipalities regarding the way forward are as follows:

- IMST function needs to be appropriately institutionalized:
    - IMST organization needs to be populated with the identified IMST resources
    - IMST policies and procedures need to be drafted and implemented
    - IMST governance structures need to be implemented
    - IMST performance / service levels need to be managed
    - IMST budget needs to be assigned and monitored
- Encourage business adoption of IMST as a service delivery enhancement / innovation initiative
- Centralization and consolidation of IMST systems, projects and budget
- IMST systems and technology should be managed by IMST function
- Knowledge management and intellectual capital preservation should be encouraged and should be a responsibility of business
- An operational plan needs to be developed for each of the identified IMST initiatives
- All future IMST spending needs to be aligned with the IMST strategy

The Tswelopele Municipality IT Strategic Plan supports these recommendations and addresses most of them directly and the rest indirectly.

Due to the fact that SITA are currently undertaking a Master Systems Plan strategy which addresses the business systems in detail it was decided to focus the attention in the Tswelopele Municipality strategy predominantly on the technology aspects. This limits the amount of overlap between the SITA MSP initiative and the Tswelopele IT strategy initiative. Only "quick hits", high priority items and isolated applications are addressed in this strategy.

By addressing the technology aspects of IT at Tswelopele this strategy supports the SITA MSP by ensuring that the various components of the IT infrastructure are targeted and improved. The result is that once SITA established the shared services centre providing a business applications the Tswelopele IT infrastructure will be in place to facilitate efficient and effective access to this resource.

2. VISION

<u>Affordable</u>

It is important to keep in mind that the Tswelopele Municipality is a relatively small organization with limited funds available to invest in IT. The strategy will strive to maximize the benefits derived from IT whilst keeping the expenditure as low as possible.

The approach is a phased approach. The desired result will be defined and will then be built in phases, as funding become available.

The overall IT infrastructure will be designed to achieve a sustainable low total cost of ownership. The principles that will be followed to achieve this are the following:

- Cetralisation
- Standradisation
- Simplification

<u>Municipality Vision & Mission</u>

Vision:
- Accountable
- Transparent
- Non-racial
- Promote economic development
- Provide sustainable services
- Improve quality of life in the community

Mission:
- Effective and transparent governance
- Promoting economic development

- Providing sustainable services
- Improving the quality of life of all people

Provincial Government

- Establish a shared services centre providing a comprehensive set of business applications to municipalities.
- Align IT in the municipalities by providing them with a technology blueprint.
- IT procurement utilizing the economies of scale of government.
- Sharing of support and other technical resources utilizing SITA.

3. CURRENT POSITION

Staffing

At present the Tswelopele Municipality does not have a dedicated IT department. The IT Management role is currently fulfilled by the Deputy Manager: Community Development. He is supported by the Accountant: Income.

The application supported is outsourced to the supplier of TurboMUNEX whilst the IT support is being provided by Eclipse Networks.

Network

The Tswelopele Municipality have 5 separate sites. They are:

- Bultfontein office
- Technical Services [Bultfontein]
- Phahameng
- Hoopstad
- Tikwana

There are no network links between these offices. Bultfontein office runs the TurboMUNEX application on a server and most PCs in that Bultfontein office have access to the software.

In Hoopstad, Tikwana and Phahameng the debtors module of the TurboMUNEX system is used.

Data transfer between these offices and Bultfontein are done manually using flash memory drives. Data is copied from Tikwana to Hoopstad on a daily basis. Data is also copied daily from Phahameng to Bultfontein. The data from Hoopstad is copied to Bultfontein on a monthly basis.

There are Local Area Networks in place in the Bultfontein as well as the Hoopstad offices.

Computer Hardware

The Tswelopele Municipality has approximately 30 personal computers at the various sites and 2 servers in Bultfontein, 1 being the mail server and 1 being the TurboMUNEX server. For more detail with regards to computer hardware installed at Tswelopele, please refer to attached hardware inventory.

Internet

The municipality has an ISDN internet connection provided by WSIGlobal. The e-mail system runs on a Linux Red hat server.

Computer Room

The municipality does not have a proper computer room with the necessary physical protection.

Telephone Systems

All sites are equipped with relatively new Samsung PABX's, all capable of being upgraded to the VoIP capable.

Helpdesk

The municipality does not have a formal helpdesk and all calls are logged on an informal basis.

Printing

There are 2 multi function printers installed, 1 in Bultfontein and 1 in Hoopstad. There are still several deskjet printers installed throughout the organization.

<u>Backups</u>

The main server in Bultfontein hosting the TurboMUNEX application is the only device with a tape streamer. A 5 day [Monday to Friday] backup cycle is being used and the tapes are being stored in the strongroom where the server is located. No backups are being stored off site.

The server in Hoopstad [Thea de Bruin's PC] is backed up daily to DVD. A 5 day cycle is in use and backups are scheduled to take place after hours.

The user data on the various workstations are not being backed up.

<u>Applications</u>

The main application to automate business processes at Tswelopele Municipality is TurboMUNEX. The system is fully installed at the Bultfontein offices and runs on a server. The system consists of the following main modules:

Module	Currently Being Used
Regional Services Council Levy	No
Financial Ledger	Yes
Receipting of cash module	Yes
Creditors and Stores	No
Payroll	Yes
Consolidated Billing	Yes
Costing	Partial
Capital Project Budgeting and Management	No
Valuation	No
Resort Reservation	N/A
Tasker	No

The system is supported by Sibata in Kimberley via a normal dialup modem link.

<u>Technical Services</u>

No computer applications are currently in use by the technical services function. All planning, scheduling and record keeping is done manually.

4. INFORMATION SYSTEMS

TurboMUNEX

All indications are that the existing TurboMUNEX is adequate for the municipality with the exception of human resources.

The municipality purchased the full licence of the software package and are therefore entitled to use all modules. However, several business processes covered by the software are still done on a manual basis.

It is recommended that the municipality investigate the feasibility of implementing the other modules not currently in use. This could assist in improving efficiency and effectiveness of the municipality.

It is further envisaged that the deployment of the full functionality of the TurboMUNEX application will be made possible once a wide area network is in place linking all the Tswelopele Municipality sites. This will enable users of the system anywhere on the network to access the application hosted in Bultfontein.

Website

According to section 75 of the Municipal Finance Management Act [MFMA] all municipalities are required to have a website. The Local Government Finance Management Grant [LGFMG] can be used to fund the development.

The website will become an important tool to interface with the farmers in the municipal district should the proposed legislation be approved whereby farmers will be required to pay property tax to the municipality.

The following information is required on the website:

- The annual and adjustments budgets and all budget related documents
- All budget related policies
- Annual report
- All performance agreements required in terms of section 57 [1][b] of the Municipal Systems Act.

- All service delivery agreements
- All long-term borrowing contracts
- All supply chain management contracts above a prescribed value
- An information statement containing a list of assets over a prescribed value that have been disposed of in terms of section 14 [2] or [4] during the previous quarter
- Contract to which subsection [1] of section 33 apply, subject to subsection [3] of that section
- Public-private partnership agreements referred to in section 120
- All quarterly reports tabled in the council in terms of section 52 [d]
- Any other documents that must be placed on the website in terms of this act or any other applicable legislation, or as may be prescribed.

<u>Electronic Mail</u>

Implement Microsoft Exchange

<u>Intranet</u>

Investigate the implementation of Sharepoint to establish an intranet for the municipality. This can be used to publish all internal municipal documents such as policies, procedures, telephone lists, etc.

<u>GIS</u>

Long term consideration.

<u>Document Management</u>

Long term consideration.

<u>Objectives</u>

1. Investigate the feasibility of implementing the full functionality of the TurboMUNEX application.
2. Develop plans for implementing the remaining modules addressing at least the following:
   - Impact on IT infrastructure
   - Training required
   - Benefits of the implementation

- Implementation schedule

3. Website
    - Obtain costing estimates for the development, hosting and maintenance of the website.
    - Apply for funds from the LGFMG for the website
    - Contract a website developer
    - Develop website development and implementation plan

4. Electronic mail
    - Investigate the viability of implementing MS Exchange

5. Intranet
    - Investigate the viability of implementing Microsoft Sharepoint

5. INFORMATION TECHNOLOGY

The strategy will strive to establish IT infrastructure for the Tswelopele Municipality that will result in a low total cost of ownership platform. In addition it will provide people access to other people, to applications and to information. This access infrastructure strategy will be based on centralisation, standardisation, and simplification. The various components of the strategy must be prioritized and costed. The plan is for the environment to be built over a period of time. Below are the main components that will be required to build this infrastructure:

- <u>Computer Room</u>

    1. Identify most suitable location
    2. Decide on physical protection measures required

- <u>Servers meeting the availability and performance demands</u>

    1. TurboMUNEX server
    2. E-mail server
    3. File server

- <u>Backup infrastructure</u>

    1. Backup device
    2. Backup software

- <u>Access infrastructure middleware</u>

  1. Application server
  2. Middleware software [Citrix]

- <u>Network links to all sites</u>

  1. Diginet line from Telkom between Bultfontein and Hoopstad
  2. Radio or similar technology link to Phahameng and technical services to Bultfontein and Tikwana to Hoopstad [see appendix B - WAN Diagram]
  3. Routers and switches required

- <u>VoIP between Bultfontein and Hoopstad</u>

  1. Ensure network caters for VoIP between the 2 sites.
  2. Determine what the Telkom telephone call costs between the 2 sites are.
  3. Obtaining cost estimates for upgrading the 2 PABX's.
  4. Compare the potential savings and the cost to VoIP enable the PABX's to make a decision whether it is an economically viable proposition.
  5. Upgrade the PABX's at both sites.

- <u>Standardised workstations</u>

  1. Set standards for workstation
     - Mobile / Notebook computers
     - Standard workstation [possibility thin client]
     - High end workstation
  2. When workstations are replaced it is done according to the standards. A standardized environment is created gradually.

<u>Objectives</u>

1. Obtain cost estimates for the various components
2. Prioritise the components
3. Obtain funding
4. Order hardware and software required
5. Contract resources to implement

6.   Develop project plans and schedules

7.   Implement

6.   INFORMATION MANAGEMENT

Staffing and Governance

The responsibility for IT should be formally assigned to the individuals involved and their job descriptions should be amended to reflect this. The IT steering committee will play an important role in determining direction, setting goals, measuring progress, etc. The steering committee will also be responsible for ensuring that the IT strategic plan remains current and addresses the needs of the municipality.

Support agreements

Where service providers outside the municipality are utilised these agreements should be formalized specifying at least the following:

▪   Hours covered [8-5, 24 x 7, etc]
▪   Service levels such as time to respond, time to complete
▪   Penalties if any

Procurement

All IT procurement should be routed through the person responsible for IT. The purpose is to ensure that all procurement of IT related items are aligned with the organisation's IT strategy.

Training

Determine if staff are competent in the use of the modules of the applications [TurboMUNEX, MS Office, MS Outlook, etc] they use and if found to be below the required levels training should be arranged.

Objectives

1.   Ensure that the responsibility for managing IT is reflected in the relevant job descriptions.

2.   Review support agreements and ensure that services provided, service levels offered, penalties for non-compliance etc. and are included in the contracts.

3.   Perform an IT literacy assessment of IT end-users and arrange for training where needed.

4.   Determine if users of TurboMUNEX are competent in the use of the relevant modules and arrange for training where gaps are identified.

5.   Ensure that all IT related procurement is submitted to the person responsible for IT for approval. This is to ensure that purchasing is aligned with the IT strategy.

7.   APPENDICES

A - Computer hardware inventory
B - WAN diagram