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1 Introduction

This document consists of a set of guidelines regarding the development of Call Centres for the use, management and technical staff. This document has been produced as part of the ICT Strategic Plan for the Malaysian Public Sector, which was endorsed by the Government IT and Internet Committee (GITIC).

The content of this document was developed through the consolidation and references of materials published by various international eGovernment units, large conglomerates using Call Centres and benchmarking surveys.

1.1 Document Objectives

In the Malaysian Public Sector ICT Strategic Plan, easy access to quality Government information and services are described as an important thrust. Here, Call Centres are highlighted as one of the channels that can be used to deliver this strategic thrust. Some of the other channels include portals, mobiles, etc.

The objectives of this document are to:

- Create greater awareness of the management of Call Centres;
- Describe the various components that form the Call Centre, including the technology and people management; and
- Provide a thought process of the necessary consideration in the initial stages of establishing a Call Centre.

Agencies should understand and use these guidelines in their planning and implementation of their Call Centres.
1.2 Objectives of the Call Centre

In adopting these guidelines, agencies should be aware of the following objectives in establishing a Call Centre:

- The main objective of the Call Centre is strategic in nature and can be used to enhance the relationship between Government and the public. The key benefits provided to the public would be to provide personalised and consistent service levels, problem resolution and front line support 24 x 7;
- Call Centre should allow the Customer Service Officers (CSOs) to confirm and enhance the public’s good experience with the Government agency from a single point of contact, the Call Centre, via multiple channels;
- People are the ‘heart & soul’ of a successful Call Centre. Without the right people, all the planning, technology and collected knowledge resources will go to waste. CSOs are the primary interface for the public, and the impression they give will directly impact the public’s impression of the Government agency. The longer the tenure of a CSO, the quicker they can resolve a public caller’s problems. Hence, a low level of attrition will contribute greatly to the overall success of the Call Centre;
- Critical events that are catalysts for establishing a Call Centre can include:
  - An increasing number of public complaints, perhaps escalating to ministerial complaints, are received;
  - A departmental focus on reducing costs while increasing service levels;
  - Increasing public contacts and call volumes throughout the agency, with a growing number of agency staff required to take telephone calls;
  - The development of agency initiatives, such as specific hotlines and community campaigns, leading to expected or unexpected increases in call volumes;
  - Unpredictable crisis or emergency situations, such as contamination of drinking water, power outages, flash floods, landslides etc.;
  - Agencies with a large number of interactions with the public;
Higher level agency employees having to provide basic information to public callers; and

Recognition that the role of the agency’s switchboard is more than just connecting customers to various sections in the department and that existing facilities are not up to standard.

The Call Centre should be accessible via multiple service delivery channels such as; Phone, Fax, Email & Portals. Technologies should be able to support a Graphic User Interface to be agent friendly, maintain historical interaction data, an integrated environment across channels and it should strive to be paperless.

### 1.3 Who Should Read This Document

These guidelines should be read by:

- Agency’s management;
- Strategy & policy developers;
- Agency’s information technology managers and professionals;
- Call Centre staff and their representatives;
- Officials who wish to use Call Centres in support of service delivery or communication of information to the Public Sector;
- Those tendering for outsourced contracts for Call Centre services; and
- Subject Matter Experts/officers who are involved in the support of electronic service delivery, in particular multi-channel Call Centres.
2 Call Centre Overview

A Call Centre can provide a number of important benefits. First, an increased focus on public service is likely to lead to more efficient methods in handling significant levels of interactions with the public. This in turn, leads to a reduction in transaction costs where the majority of simple customer interactions are handled by dedicated, well-trained, frontline staff.

These internal efficiencies can then allow the agency to initiate contacts with the public and streamline the handling of incoming calls, rather than being spread across various sections throughout the agency or on a larger scale – the Government.

By replacing face-to-face events with telephone contacts, agency’s and customers’ costs can be reduced. As long as the telephone contacts are handled efficiently, members of the public who do not have the time for, or access to, face-to-face transactions will view the change positively. As such, a variety of contact channels can be used, ranging from facsimile, email, portals and Interactive Voice Response units to complement the Call Centres.

A Call Centre will also provide a single point of access for the public to communicate their complaints and have their queries answered by a dedicated and trained frontline operator. Increasingly, Call Centres are being used by the private sector to better serve their customers, regardless of whether they are Call Centres for inter-company purposes or one that serves the customer. However, the Government’s use of a Call Centre is best implemented as a centralised, one-stop Call Centre, not requiring multiple Call Centres across different agencies. Regardless of the size and scale of a Call Centre, the general requirements for all Call Centres are similar:

- A scalable operation and technology infrastructure that can change with expanding business requirements;
• A flexible and customer friendly Interactive Voice Response that will enable customers to attain the desired information or knowledgeable Call Centre operator with the least number of menu selections possible; and

• An integrated multi-channel framework within which the information communicated to the public is consistent.

2.1 Why Do We Need a Call Centre?

A Call Centre will enhance Government services to the public by accomplishing a number of outcomes that will have an impact on the public’s access and experience with the government, while lowering the cost of service for both the Government and the public. Some of the key outcomes are the need for uniformity, cost efficiencies, reducing complaints and improving the public’s access and experience with Government Agencies. Some key reasons for establishing a Call Centre include:

• An increased or new business role;
• A need to provide information and advice;
• Public education;
• Greater access to agency services including equity of access;
• A desire to raise the agency’s profile;
• Consolidation/centralisation issues – concentration of expertise;
• Achieving greater understanding of what the public wants, through feedback and comments; and
• Tracking the public’s needs and determining the marketing direction of an agency.

There are a number of improved customer service delivery outcomes that can be expected from an effective Call Centre. Call Centres improve customer access and choice while lowering the cost of service. They can provide consistent responses and improved quality of information, which leads to higher customer satisfaction. There is also less customer frustration as inquiries are directed to the proper area, reducing the common problem of caller run-around. Analyzing calls to the Call
Centre can also prevent problems by allowing early identification of customer service trouble spots and problem issues.

2.2 Service Offerings of a Call Centre

The service offerings of Call Centres include:

- Inquiries
- Transactions
- Requests
- Relationship Management

2.3 Call Centre’s Multiple Communication Channels Framework

In effectively improving the public’s access and choice of communicating with the Government, while lowering the cost of service, providing consistent responses and an improved quality of information, Call Centres need to have a multi-channel framework. Such a framework will support the direction of inquiries to the proper area that will reduce the common problem of caller run-around.

A Call Centre’s Multi-Channel framework and its supporting technology includes the use of:

- Telephony
  - Interactive Voice Response (IVR);
  - Telephone Information Management System (TIMS);
  - Voice Mail;
  - Automatic Call Distributors;
  - Predictive Diallers;
  - Fax;
  - Private Branch Exchange (PBX);
  - Intelligent Conference Bridges;
- Voice Dialling;
- Voice Over IP; and
- Customer Call Backs

- Portals
  - Chat;
  - FAQs; and
  - Agency’s Content Delivery;

- E-mail
  - Outbound mailer;
  - Image capture; and
  - Indexing.
3 Call Centre Technology Framework and Architecture

3.1 Introduction

Telecommunications and information systems, both hardware and software, make up the heart of the Call Centre. During the implementation phase, adequate time should be allowed to assess all requirements; in particular, the information systems hardware installation process will need to be coordinated with the telecommunications installation and any building modifications needed to support the equipment.

It is important to put the right telecommunication systems in place from the beginning. The right technology for a Call Centre is very difficult to determine due to the rapid advancement in technology and its deployment. Hence, an agency should allow sufficient time to develop an effective telecommunications plan. An initial audit of the current telephony infrastructure and call analysis will provide the basis for deciding future telecommunication requirements for the Call Centre. If major telephony hardware or software installation is required, sufficient lead-time for delivery and installation should be factored into the telecommunications plan. Additionally, a Call Centre site will need access to telephone exchanges and fibre optic cables. Disaster recovery plans should also accommodate dual telephone access.
3.2 Generic Call Centre Technology Framework

The Call Centre should allow Customer Service Officers (CSOs) to confirm and enhance the public’s good experience of the agency, and it should also transform the calibre and status of the CSOs to assist in the development of good relations, greater effectiveness, better service and cost savings with and for the public.

The public needs to have a single point of contact and accountability and be able to access that point via multiple channels. Diagram 1 above shows a generic technology framework that supports an integrated Call Centre. It outlines five basic layers of a Call Centre:
• Customer Touchpoints

Here, in a multi-channel Call Centre environment, the following possible access channels by the customers may need to be supported:

- **Telephone:** Enabled by a an integrated Call Centre utilising intuitive technology comprising telephone switches, automatic call distributors, voice processing, computer telephony interfaces and other customer care applications;
- **Self-Service:** Enabled by Public Kiosks, integrated Interactive Voice Response (IVR), where the public can either surf the agency’s portal or call to attain the relevant information needed via a series of clicks or key presses;
- **Face-to-Face:** Supported by remote customer care applications and walk-in customers;
- **Mail:** Enabled by Fax, Normal Mail, E-Mail and supported by the relevant document management and archiving systems necessary to sort, track and retrieve historical information. Additionally, it is via this channel where the agency can attain, for example, supporting photos or softcopies of documents in support of a complaint on a road requiring repair; and
- **Portals:** Enabled by the Internet, Kiosks where the public is able to personalise and search for the needed information. This will be supported by Content Management software that will enable the public to gain easy access to necessary information, forms, guidelines etc.

All access channels should also be treated equally to ensure that the public receives the same grade of service and therefore, the same experience of the agency regardless of the way they decide to make contact with the agency. This will ensure that no access channel and therefore, no member of the public will be seen as second class. In doing so, an integrated blend
of technology and business processes to manage the various channels needs to be developed.

- Routing Logic

Events from the Customer Touchpoints can be routed to and from agents using routing logics. For example, a call received by the system can be routed to the agent with the shortest queue, or simply to the next available agent.

Within this routing logic, a number of components can be integrated to provide facilities to route calls:

- **Interactive Voice Response (IVR):** Allows customers to firstly communicate with the IVR his requirements. Based on the customers’ set of requirements, the system will be able to identify the most appropriate agent to service the call;

- **Universal Queue Skills Based Routing:** Skill sets of each of the agents are documented within the system, and based on the requirements of the particular customer’s call, the most appropriate agent will be identified by the system to service the call;

- **Content Delivery & Outbound:** For outbound calls, there will be a component of the system that allows for the setting-up of the content of the actual outbound calls. For example, if a set of information or news is required to be delivered to a particular group of customers, the system will need to be firstly programmed with the set of information or news. Subsequently, the system will need to be provided a set of customer contacts that it is required to call. This method of calling the customers is provided by the Outbound component of the technology framework

- **Image Capture & Indexing:** If the mail customer touchpoint is used, a component will need to be able to capture as well as index the image of the mail. Agents will use the index to search for the
email image to assist his processing of the customers request or issue;

- **Agents**

Agents or Customer Service Officers (CSO) are the individuals that attend to the customers. They are able to access the customer requests, calls or complaints, from the multitude of customer touchpoints. They are also able to access the various backend systems that support their daily operations.

- **Business Applications**

Business applications are systems that are used to support the agents or CSOs in their daily operations. These systems allow the agents or CSOs to gather important information on their customers. This can be from Customer Relationship Management (CRM) systems or even the legacy back office systems.

- **Operational Data Stores & Warehouses**

These are storage areas for the information on the customers. The business applications will access the customer information from these data stores. It is noted that while there may be multitude of business applications, as well as data storages on the individual customers, it is important that all the business applications have a single view of the customer. This single view will need to be derived from the various data storage into a main data warehouse.
3.3 Call Centre Technology Architecture

The earlier Section 3.2 describes the components within a generic technology framework for call centres. It should be noted that not all call centres adopt the entire suite of the components highlighted.

Due to various reasons such as costs and skills, there are various technology architectures that have been adopted in the implementation of the call centres. These different architectures are varied in the complexity, costs and skills required to implement and maintain them.

Sections 3.3.1 through to 3.3.6 discuss these architectures that include:

- Inbound Call Centre;
- Enhanced ACD, IVR and Skills-Based Routing;
- CTI Server Enhanced;
- Outbound Call Centres and Campaign Management;
- Virtual Call Centre; and
- Fully Integrated Call Centre.
3.3.1 Pre-Convergence Architecture – Inbound Call Centres

In Diagram 2, there is no integration between the telephone system (ie. Private Branch Exchange (PBX)) and the data systems (ie. Customer database and application server). The agents or CSOs answer inbound telephone calls and then use the computer screens to look up information on the customer database. This is known as a “look up and say” system.

There is some basic queue management whereby calls are routed to the next available agent by the Automatic Call Distribution system (ACD). This would be configured in the first instance by the PBX installer and the functionality cannot be changed by the users except for the Call Centre manager.
3.3.2 Pre-convergence Architecture – Enhanced ACD, IVR and Skills-Based Routing

In this model (Diagram 3), the role of the Call Centre agent or CSO is beginning to evolve. More experienced or specialized agents/CSO can deal with particular types of call or calls for particular customers.

A graphical user interface is attached to the Automatic Call Distributor (ACD) that will allow an administrator to set up priority trees for agents/CSOs based on business rules. For example, a particular group of agents/CSO will deal with complaint calls or a call may be routed to the same agent/CSO who dealt with a customer on their previous call by customising the system.

Some of the functions of the Automatic Call Distributor (ACD):

- Analyse and distributes high volumes of calls to agents/CSOs and also captures and stores extensive information relevant to those calls - queue-to-queue transfer, group and personal call backs;
- Allows for prioritising of agents/CSOs to deal with overflow situations. Skills-based routing allows calls to be sent to the agent/CSO best suited to deal with the call; Call treatments such as; pre-recorded messages, music-
on-hold, voice recording etc. will be used in the event of long waits when an agent/CSO is unavailable to attend to a call; and

- ACD can be coupled with intelligent routers to facilitate virtual Call Centres.

An Interactive Voice Response unit (IVR) can be put into place to field calls that do not require user intervention. An IVR can accept spoken requests as well as input from the keypad, irrespective of who the caller is.

The IVR can also be programmed to deal with different languages and will allow experienced users to interrupt the flow of the interaction to input their responses at any time. The IVR will enable the Call Centre to operate 24 x 7, creating a round-the-clock service to the Public.
3.3.3 Convergence Architecture – CTI Server Enhanced

Diagram 4: Convergence Architecture – CTI Server Enhanced

In Diagram 4, a Computer Telephony Integration (CTI) server allows control of telephony devices directly from the PC desktop where telephone controls are built directly into the application.

The key purpose of the CTI server is to deliver customer information to the agent or CSO at the same time the PBX transfers the call to their headset. The PBX uses a method called CLI (Calling Line Identification) or ANI (Actuating Line Identification) to identify the inbound caller. This number is then passed to the CTI server which uses the number to look up the caller’s information in the database.

The call-related information is passed to the application server which “pops” the appropriate screen onto the CSO’s/agent’s workstation at the same time that the ACD places the call to their headsets.
CTI also allows the blending of inbound and outbound calls. The CTI server and ACD can identify CSOs/agents who have been waiting in an inbound queue for a specified period of time. The CTI can then pass an outbound call through to the CSO/agent from the management system. This will help balance the load on the CSOs/agents.

### 3.3.4 Convergence Architecture – Outbound Call Centres and Campaign Management

![Diagram 5: Convergence Architecture – Outbound Call Centres and Campaign Management](image)

In this architecture (Diagram 5), predictive or preview dialling are methods used in the management of outbound campaigns. The Predictive Dialler (PD) is fed outbound call lists from a campaign database (possibly a computerised Campaign Management System). The PD makes the calls and when answered, the PD passes the call to the next available agent or CSO. Agents/CSOs do not have to
spend time in dialling and waiting for calls, as they are only involved in live calls.

Calls that are answered by a fax, answering machines etc. are logged and withdrawn from subsequent campaigns. Unanswered calls are placed back in the campaign list to be called at a later time.

Rules can also be created which state the number of times a call is placed to a particular number. Numbers can be excluded from campaigns by highlighting it in the campaign database.

Alternatively, in preview mode, the customer information for the next outbound call is popped onto the CSO’s/agent’s screen and the agent initiates the call from an on-screen button.

3.3.5 Convergence Architecture – Virtual Call Centre

Diagram 6: Convergence Architecture – Virtual Call Centre
Many organisations now use cross country or global networks, alleviating the need for separate Call Centres in different geographical areas. Smaller, specialized Call Centres can be connected by Wide Area Networks (WANs). This architecture (Diagram 6) is transparent to the caller as all smaller Call Centres’ can be accessed via the same channels.

Voice and data can be passed between the Call Centres. This will enable operating hours to be 24 x 7. Disaster or call avalanche strategies can provide for switching functionality between the various Call Centre sites.

### 3.3.6 Convergence Architecture – Fully Integrated Call Centre

![Diagram 7: Convergence Architecture – Fully Integrated Call Centre](image)

The addition of an intelligent router (Diagram 7) allows both voice and data to be transferred across the Public Switched Telephone Network (PSTN) so that both
the voice call and application screens can be passed to remote agents/CSOs, while remaining transparent to the callers.

A web server may facilitate internet telephony (VOIP) so that web based applications can allow users to speak directly to an CSO/agent while browsing through their own on-line details.
4 Call Centre Implementation Planning

4.1 Setting the Objective of the Call Centre

As a Call Centre project without clear objectives tend to encounter major problems, Call Centres must have a set of business objectives, formulated in business terms. These objectives should be formulated before any procurement activity begins. While narrow objectives are easier to address, if the needs are not genuinely narrow, there is no point in forcing them into a narrow definition.

The business plan must also establish sound financial and organization justification for the adoption of such a strategy. This also includes identifying service level objectives, outlining size and site considerations, financial requirements, the extent of organizational process re-engineering and the time frame for implementation.

4.2 Sizing the Call Centre

Any organization considering establishing a Call Centre should start by collecting as much data as it can about its existing calls.

The estimation of the likely size of a Call Centre is based on:

- The number, length, timing and subject of phone calls currently received;
- The estimated increase in these calls when a Call Centre service is introduced;
- The likely length of calls – for example are the typical interactions with callers likely to be more or less complex than the present;
- The time staff spend on pre- and post-call activity;
- The likely staff occupancy;
- The prospective efficiency gains from dealing with callers in one interaction rather than multiple interactions;
- Any hourly, weekly or seasonal variation in peak call traffic; and
• Any other factors pertinent to the implementation of a Call Centre in hand.

Appropriate staffing is one of the most critical aspects in establishing a Call Centre. Ensuring that correct numbers of staff are recruited and deciding on what levels they will be hired are two key decisions in effective human resource management.

Elements of a typical staffing plan include:

• Determine critical competencies and job standards;
• Develop position descriptions and person specifications;
• Set a process for staff selection;
• Decide on internal or external management of the process;
• Calculate number of staff initially required;
• Implement recruitment and selection process; and
• Design the initial induction-training program.

The number of calls and their duration are the two important factors in determining the staff numbers required in a Call Centre. Estimating call volumes is more difficult in an inbound Call Centre than in an outbound Call Centre. The basic process for estimating staff numbers is as follows:

Step 1 - Determine the number of calls to be made/received;
Step 2 - Determine the average talk time for each call and after-call work time;
Step 3 - Determine the actual productive time of a CSO.
These are some of the definitions used as the basis for the calculations:

- Call time is the actual call time spent on the telephone;
  After-call work time is the time spent on the paperwork or data processing associated with that call;
- An average CSO’s day is generally considered to be a six-hour shift or 360 minutes;
- Average contact time = call time + after-call work time; and
- Average number of calls per day = 360 average contact time.

<table>
<thead>
<tr>
<th>Staff Number Requirements</th>
<th>Calculations</th>
<th>Formula</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minutes per CSO day =</td>
<td>360 minutes</td>
<td>A</td>
</tr>
<tr>
<td>Average call length</td>
<td>2 minutes (120s)</td>
<td></td>
</tr>
<tr>
<td>+ Average after-call work time</td>
<td>1.5 minutes (90s)</td>
<td></td>
</tr>
<tr>
<td>= Average contact time</td>
<td>3.5 minutes (210s)</td>
<td>B</td>
</tr>
<tr>
<td>Average number of calls per CSO</td>
<td>360 (A) / 3.5 (B) = 103 calls</td>
<td>C</td>
</tr>
<tr>
<td>Total number of calls per day</td>
<td>1500</td>
<td>D</td>
</tr>
<tr>
<td><strong>STAFF REQUIRED =</strong></td>
<td>1500 (D) / 103 calls = <strong>14.6 staff</strong> or 15 staff</td>
<td></td>
</tr>
</tbody>
</table>

The final Call Centre sizing work may require specialist assistance from vendors of automatic call distribution systems who will usually have load simulation capabilities. Nonetheless, the method above produces an estimate; as such, it would still be worthwhile to have contingency plans.
4.3 Determining Telephony Technology

There is a wide range of telecommunications equipment available. These range from the basic to the very sophisticated exchange-based technologies. Discussions on these key technologies include:

- A basic option is to adopt a single contact number. Special number services, such as, 1800 numbers, allow customers to call in for free.
- A basic telephone system for a Call Centre begins with a key telephone system, where the telephones have functionalities to allow the user to select lines for outgoing or incoming calls directly.
- A PABX (Private Automatic Branch eXchange) is a specialised equipment that acts as an extension of the public network. It allows different telephones within an organisation to have their own number (or extension) where calls can be made or transferred internally. Outside callers can dial a specific extension to reach a person or section. PABXs are normally purchased or leased from associated vendors.
- Automatic Call Distribution (ACD) systems provide flexibility in distributing and managing inbound calls by automatically keeping callers on hold until the next CSO or agent is available. An ACD can also prioritise calls in a queue.
- Automatic Call Distribution-Management Information Systems (ACD-MIS) give comprehensive management information in real-time, as well as historical information, for effective call management analysis and reporting. It provides reports on 15-minute and 30-minute call traffic patterns and individual groups or CSOs. Overall Call Centre performance can be reported and aggregated on a daily, weekly, monthly and year-to-date basis.
- Centrex is a sophisticated network service with advanced call-handling capabilities that replaces the need for a PABX, as the infrastructure is provided within the exchange. ACD capabilities and MIS reporting are available, direct from the exchanges. However, Centrex does not offer the functionality and full range of reporting that a standard PABX/ACD system offers.
• IVRs are increasingly being used by inbound Call Centres to manage call volumes more efficiently. Calls are screened by offering callers a choice of options that can be selected by pressing a button on their telephone handset. The IVR then directs the call to the CSO responsible for that area. This is commonly known as skill-based routing.

• Agencies need to be aware, however, that IVRs often offer menu options that require customers to navigate extensively in order to get to a real live person. This can be very frustrating. As such, it is better to offer fewer menu options.

• The installation of a computer-assisted telephone contact system can provide simple information for customers. Here, customers are required to key in their account number or a personal identification number (PIN) to receive information on items such as account balances or listen to prerecorded announcements.

• Computer Telephone Integration (CTI) provides an intelligent link between the telephone system and the system to display customer information on the screen as the call arrives. This is done using Calling Line Identification (CLI). Advanced CTI can be an extremely expensive option and is typically only used in large Call Centres. It should be noted that handsets are not necessary if the telephone and computer systems are integrated.

• Predictive diallers are useful if a large number of outbound calls are to be made from the Call Centre. The predictive dialer equipment dials numbers from a master list and is able to filter engaged and no-answer calls. On receiving a voice answer from a customer, the system passes the call through to the first available CSO.

• Another technological enhancement for a Call Centre is the use of the automatic call recording equipment. This technology provides the Call Centre with a digital transcript of telephone conversations that can be used for dispute management and for providing feedback to CSOs on call quality. If automatic call recording equipment is being used, an organisation is required to inform the customer that their call may be
monitored. Customers then have the right to ask for the call not to be monitored.

- Headsets play a key role in creating a quieter environment. This facilitates the speed of telephone answering time and computer data entry. For this purpose, headsets need to be lightweight and sturdy. A number of different types of headsets should be tested to find out which are most suitable for the CSOs. Given potential noise problems, the headsets with built-in noise reduction facilities are a good option.

4.4 Determining Data Access and Technical Integration

4.4.1 Access to integrated data

One of the most complicated part of Call Centre projects is giving the Customer Service Officers (CSOs) access to the data they need to do their work. Accessing and updating ‘customer’ data where the data is not ‘owned’ by the agency that sets-up the Call Centre can cause particular problems. Specifically, ‘customer’ data that is spread across multiple systems tend to lead to data duplication and reconciliation problems. Therefore, one of the key issues to determine during the planning stages is to establish:

- Where the data is located;
- Who owns the data;
- The degree of duplication;
- Identify reconciliation problems; and
- Access methods.

Requirements for data interchange, access and technical integration need to be set out in the service requirements for the Call Centre, as problems with data access can make it impossible for the Call Centre to meet its business objectives.
4.4.2 Customer systems

Specific systems are also required to provide CSOs with relevant customer information so that they can handle inquiries properly. The system should have the ability to manage new callers as well as regular customers, and allow for easy and flexible scripting. It should also incorporate automatic tracking of call outcomes with a calendar and diary that records date and time automatically when entries are made and is able to schedule follow-up calls as appropriate.

Designing in-house systems can be difficult and time-consuming. However, there are already sophisticated Customer Relationship Management (CRM) applications available that can be customised for an individual organisation's needs.

4.4.3 Criteria for selecting customer systems

In general, the criteria for selecting the right type of software should be based on the following:

- Relationship management capabilities;
- Compatibility with existing hardware;
- Ability to meet required response times (processing speed);
- User friendly;
- Call management and scheduling facilities;
- Input/output options to link with other systems;
- Local support when things go wrong, training and ongoing maintenance; and
- Compatibility with other systems.

When customer databases already exist, a corporate database interface will need to be used for data integration. By integrating the key fields from the database with the customer contact system, CSOs are able to view appropriate screen information. The interface also allows data to be transferred between the main corporate systems and the customer contact system.
There are also software enhancements for existing information systems that can help organisations achieve significant efficiencies. Using fewer keystrokes and developing a simpler process for inquiries and/or amendments are two such examples.

A well-maintained customer database is critical for managing ongoing customer relationships efficiently. A relational database links data from all parts of the organisation and allows the development of a useable database. A customer contact management system collects, stores, organises and updates information so that it can be easily retrieved and used within the Call Centre. Customer information, transactional information and call contact information can all contribute to identifying trends and customer segments for the development of marketing and communication strategies.

4.5 Future-proofing the Call Centre

Call Centres may need to change rapidly and radically. For example, many Call Centres create demand for their services and have to be scaled upwards. New trends emerging in Call Centre capability points to an increasing need to consider distributed and virtual Call Centres that are located across multiple sites. The ability to handle transactions spanning multiple channels, such as web transactions and e-mail as well as fax and post, is becoming increasingly important, especially in dealing with enterprises and sophisticated customers. It is therefore important that the ability to be flexible be an important part of any Call Centre requirements.
4.6 Involve the Call Centre Management Team

Involving the right people is important in any planning process. In a Call Centre project, the management team that will eventually run the Call Centre must be closely involved in the planning phase from an early stage. If the Call Centre is new, this should mean that the Call Centre manager and deputy managers are to be recruited in time to participate fully in all the principal stages of the procurement.

4.7 The Importance of Undertaking Customer Research

The requirements and preferences of customers who contact an agency must be understood before deciding on which technology will be most useful and have the greatest acceptance by callers. While agencies can get some type of feedback from their customers on an informal basis, by studying complaints received, exit surveys and customer feedback, it may also be necessary to conduct targeted market research.

Customer feedback collected within the previous 12 months would be the most useful, and should be focused on measuring customer satisfaction levels. If customer feedback is not readily available, then primary research should be undertaken. If the agency does not have the relevant expertise to conduct the research, the agency should engage an external market research firm, with knowledge of Call Centres. Following is a checklist of possible key information needed to understand customer requirements:

- Customer satisfaction levels with the service provided;
- Frequency of agency contact;
- Preferred method of contact;
- Services utilized; and
- Areas requiring improvement.
Research should also include customers’ reactions to different technologies, such as the telephone, facsimile, Interactive Voice Recognition and the Internet. This will help to determine the most appropriate technology for use within the Call Centre.

4.8 Which Call Centre Approach is Best?

Agencies should consider all of the options before developing a service strategy using Call Centres. The major options include the use of hotlines, shared infrastructure arrangements, outsourcing, or establishing an internal Call Centre.

4.8.1 Hotlines

Agencies with short-term needs can use hotlines for the management of new or changing community or business issues, crises management and event-predictive demand peaks. Election announcements, changes to legislation, infrastructure shortages/outages (water/electricity) or natural disasters that will cause an increase in calls from the public are typical examples.

Hotlines do not require a sophisticated telephony or information systems infrastructure and can be rapidly deployed using existing agency staff, on a short-term basis. Agency staff need to be well trained and briefed on the overall purpose of the hotline and the likely issues that will arise. Agencies should develop a procedure to ensure a dedicated contact number can be provided quickly from the local telecommunications provider.

Hotlines are generally classed as an unsophisticated customer contact strategy given their use of simple technology and the application of short-term resources. If the frequency of use of a hotline increases, along with the need for more dedicated resources, then a longer-term solution is required. Hotlines should not be a permanent, ongoing strategy. Where an ongoing requirement for such a service is identified, a Call Centre should be considered.
Crisis management is particularly important for natural disasters, such as landslides and flooding. Dealing with crises demands proper guidelines and procedures that allow for rapid expansion of call handling capabilities and provide immediate information to public inquiries. Temporary hotlines are probably the best choice here.

4.8.2 Shared arrangements

There are considerable costs (that includes associated expenses) involved in establishing a Call Centre. Before making a major decision, an agency should carefully consider alternative options, such as a shared arrangement.

A shared Call Centre facility can become an efficient contact strategy for smaller agencies. Such a strategy provides significant savings on infrastructure, advanced technology and ongoing running costs. In a shared arrangement only the personnel and the information provided is specific to each agency, along with separate contact numbers.

An option is a shared arrangement with other Government agency that already has a Call Centre. This may involve an agreed sum of fee for service or a recovery of some of the other agency’s establishment costs. It would also be beneficial to establish a Service Level Agreement so that both parties are clear on the scope of the arrangement and each party’s responsibilities.

Alternatively, agencies may consider sharing all of the costs of developing a Call Centre with another agency that wants to set one up. This will provide significant savings, particularly in the costs associated with the essential telephony and information systems technology platforms.
4.8.3 Outsourcing vs. In-Sourcing

Outsourcing

Outsourcing is another option for agencies considering a Call Centre. There are two main types of outsourcing: full customer contact outsourcing or partial outsourcing, involving a specific task, function or campaign. The latter option is generally considered when organisations wish to focus on their core business or may already have a Call Centre that is operating at full capacity.

The following are some of the main reasons to consider outsourcing as a potential option for provisioning the Call Centre:

- When the Call Centre is going to have difficulty in meeting its service level targets in a cost-effective way on its own. An outsourcer has access to a larger pool of resources than a small Call Centre operation; these resources can include management skill, human resources, technological resources or operational expertise. The outsourcer should be able to offer greater flexibility and scalability;

- Where the capabilities that might be outsourced are not core competencies of the department, such as, procuring the Call Centre. In some cases the capabilities may be seen as a distraction to the main organisational objectives;

- Where the capital requirements for building a Call Centre are difficult to meet. In general, the private sector currently has relatively easy access to investment capital;

- When the function under consideration for outsourcing is easily defined, readily achievable and good performance is easy to measure and rewarded. If this is not the case, managing the contract with the supplier is going to be overly troublesome;

- Where there is going to be a problem acquiring the skills needed to operate a Call Centre; and

- Where some flexibility in sizing is needed, for example where it is difficult to predict the size of the Call Centre or where the volume of calls
varies greatly over time. On the latter point, contractual conditions need to be carefully specified so that passing some possibly arbitrary threshold in call volumes, for example, does not lead to a steep increment in cost.

**In-Sourcing**

Depending on the differing circumstances, in-sourcing a Call Center could be more effective and may be the choice option in place of outsourcing. The following are some of the main reasons for considering developing the Call Centre in-house. They apply most strongly when compared to outsourcing of the entire Call Centre:

- Where the function under consideration for outsourcing is not easily defined, not readily achievable and good performance is difficult to measure and rewarded. These circumstances will tend to create problems in any Call Centre, and will normally lead to constant disputes with an outsourcer. (An in-house small-scale pilot can help to discover how serious a problem these issues are in practice);
- Where core competencies or core skills are needed in the Call Centre;
- Where staff in the Call Centre has other skills that the organisation does not wish to risk losing, even when these skills are non-core and are not connected to competencies;
- Where staff may move from working in the Call Centre to other parts of the organisation (and vice-versa) on a regular basis;
- Where Call Centre staff are involved in doing work other than answering or making customer calls;
- Where the information required for answering calls is not well developed, organised or even understood because of the newness of the Call Centre. This will typically be the case in a pilot project, as well as in Call Centres that have a broad mission; and
- Where there will be a substantial problem disengaging from the chosen supplier.
Outsource vs. In-Source summary

The decision to use an outsourced bureau for partial or complete customer contact services will depend on the relative expertise of the agency, the complexity of agency information and customer contact, privacy issues, internal procedures and the extent of database support and maintenance that currently exists.

The choice of an outsourced bureau for customer contact may not be a permanent one. Some agencies have decided to establish an internal Call Centre after using an outsourced bureau due to:

- Desire to retain greater control of customer contact;
- Dissatisfaction with the basic service provided;
- Need to develop specific expertise internally for long term strategic development; and
- Ability to provide more cost-effective service with existing resources.

Agencies should also be aware of the need for extensive support to the outsourced bureau in the form of adequate briefings, agency-specific training, constant updating and regular reporting and feedback.

The effectiveness of the service will be influenced by the strength of the relationship that is established between the agency and the outsourcer on an ongoing basis. Clear expectations and Service Level Agreements will assist in this process.
5 Call Centre Operations Management

Effective Call Centre Operations can be divided into six key areas as depicted in Diagram 8 above. The first section, human resource management practices, introduces strategies designed to motivate staff and reduce attrition rates. It addresses advanced human resource practices, including career paths and competency-based progression. The following sections focus on the importance of motivation strategies and staff recognition, performance measurement and reporting, quality assurance practices, financial management and business continuity planning. The final section discusses the latest trends within the industry and how the utilisation of advanced technologies can contribute to achieving efficiencies in lowering costs and handling calls.

There is a certain need for more customer-focused service and improved call handling in public sector Call Centres. It is important to recognise that Call Centre customer service officers, team leaders and managers are critical to achieving this goal. Their proper motivation, recruitment, retention, training, reward, health and safety are essential elements of effective use of Call Centres.
in the Public Sector.

Call Centre staff must be provided with user-centred and customer-focused information and support systems in order to deliver the level of service that is desired.

In achieving this, Call Centres should:

- Work in partnership with their staff and unions (if any) to:
  - Recognise and value the central role of all staff in the Call Centre;
  - Have a common understanding of the aims and goals of the Call Centre;
  - Have an agreed work culture (attitudes, beliefs and behaviours) in common with the rest of the agency;
  - Have a shared commitment to training every individual in the Call Centre;
  - Encourage and support staff to identify and enhance their own skills; and
  - Have an inclusive relationship between the Call Centre, staff and their representatives; and
- Adopt high quality employment standards.

Many existing HR policies and practices are directly applicable to the Call Centre situation, however there are particular issues that require special attention in this environment.

5.1 Human Resource Management Practices

Developing fundamental human resource practices is key in managing a Call Centre. In this section, the importance of developing more advanced strategies is emphasised. Such strategies include ongoing staff development and training, competency-based progression, employment strategies, recruitment and selection enhancements, scheduling and rostering of staff and career path planning.
5.1.1 Ongoing staff development and training

Ongoing training is an important part of achieving best practice within a Call Centre. Adequate time should be given for ongoing training, which ultimately leads to the delivery of service excellence and maximum customer satisfaction. As an example, a local council in the United Kingdom allocates one day per week to training, with sessions varying from a half day to a full day depending on the subject matter. Ideally, at least half a day should be spent on the training of staff every two weeks. Refresher training also needs to be considered as part of the ongoing training strategy.

Key areas for ongoing training should include:

- Customer service;
- Negotiation skills;
- Product knowledge and systems training;
- Policy and procedures;
- Call handling techniques; and
- Stress management.

Team leaders, in particular, need to develop specific Call Centre management skills in quality assurance, performance management, staff motivation and the efficient use of technology.

It is important that Call Centres critically re-examine the success of the overall training strategy on a regular basis, to determine whether they have achieved the desired results.

While training is often considered a cost, its importance in maintaining quality standards within a Call Centre cannot be overstated. Best practice Call Centres regard regular, ongoing training as a high priority.
5.1.2 Competency-based progression

Industry trends now focus on moving Call Centres towards competency-based progression. This is an important part of the process of ensuring that overall performance and service standards are maintained. The progression of an agent or Customer Service Officer (CSO) to the next salary level is contingent upon the acquisition of skills appropriate to the position.

Competency-based assessment is necessary for competency-based progression to be implemented. The assessment is generally carried out through observation of calls (monitoring/double jacking), efficiency tests such as keyboard assessment and accuracy of inputting and the achievement of positive ratings for call quality assessments and call handling.

It is extremely important in this environment that:

- Call Centre staff has been informed beforehand that monitoring is taking place;
- Immediate, direct feedback is given by the coach after a listening in session, with counseling on identified strengths and weaknesses; and
- The objective is for the listening in of calls to be an aid to coaching Call Centre staff with an overall objective of improving quality of service by identifying shortcomings in procedures and or determining the individual training/development needs of Call Centre staff.

5.1.3 Employment strategies

The move away from employing full-time, permanent staff is another key trend in Call Centres. Employment options include the use of part-time staff. A pool of part-time staff will also provide a Call Centre with greater resourcing flexibility, particularly during peak periods or unplanned events. Call Centres also need to be aware, however, that regularly using part-time staff for specific times and days of the week may imply permanency. As a guide, hours of employment for part-time staff should always vary.

The employment of part-time staff can ultimately lead to offers of permanent
employment, based on the staff performance and their suitability for permanent positions.

5.1.4 Recruitment and selection enhancements

Once an initial recruitment and selection process has been designed and utilised, the effectiveness of the process will need to be reviewed. Indications that a recruitment and selection process may need refining include selecting staff unsuited to the specific environment, a lack of team harmony, poor levels of productivity and staff turnover levels in excess of 20 per cent.

To improve the recruitment process more specific role-play tests may need to be developed, the selection pool of candidates may need to be widened, and profiling of candidates may need to take place through the use of structured tests to assess the extent of a candidate's customer service orientation.

It is essential that the recruitment processes applied to selecting staff for the Call Centre take into account the need to evaluate the applicants' telephone skills in a live environment. This will be best achieved through a structured telephone interview rather than through a traditional face-to-face interview. In conducting a telephone interview it is far better to bring a potential applicant into the Call Centre or an assessment centre in order to conduct the interview. In addition, telephony interviews will be of most benefit if they are mixed with tests that require the interviewee to use IT Systems at the same time.

The telephone interviews may be augmented by the use of face-to-face interviews, role plays or assessment centres to test, for example, team work skills.
In addition, exit interviews can be used to provide a profile of those staff who leave the Call Centre to compare them to high performers who remain, using an established customer service inventory with recognised validity and reliability levels. Information obtained from exit interviews can be used to improve current workforce management practices.

5.1.5 Working patterns

Industry trends in Call Centres indicate that organisations are also moving towards more flexible work practices. These include the use of flexible working hours and the increased employment of part-time staff to achieve greater resourcing efficiencies and cost reductions during peak and non-peak periods. In addition, using shorter shifts to accommodate peak periods and workforce management tools can achieve greater efficiencies in call-handling strategies.

- Shift considerations

A key aspect in maximising staff performance on a continuous basis is understanding the impact of shift length (hours worked per day) on CSO productivity.

Long operational hours at a Call Centre, particularly one operating seven days a week, will also have a great impact on CSO performance over the long term. Appropriate shift rotation and shift design must be considered. For example, full-time staff should be rostered on for only one weekend per month, with the majority of weekend work allocated to part-time staff. On a normal eight-hour shift, adequate time needs to be allocated to breaks for lunch, morning and afternoon teas and staff meetings.

For maximum productivity, part-time staff should be rostered on for no more than four- or five-hour shifts and for no more than 20 hours per week. Letting part-time staff work longer hours and on a frequent basis can also imply permanency. Shifts of five hours or less also reduce the need to have 45-minute or 60-minute lunch breaks.
Many government organisations have flexible working hours that lead to rostered days off for CSOs. Call Centres are attempting to move away from this practice, given the need for greater resourcing flexibility and cost reductions. The cost of resourcing for rostered days off can be considerable when both direct costs and indirect costs, such as relief, training and rostering, are taken into account. The need for increased flexibility in rostering staff is a clear business and cost imperative.

- Workforce Management

Many Call Centres begin their operations by producing rostering schedules manually. As the number of CSOs increase beyond 20, it becomes more difficult to take into account various rostering variables. In such cases, the use of specialist workforce management software should be considered. Specialised rostering software is available that uses call data to provide the basis for calculating the number of staff required.

The real benefit of a sophisticated rostering system is an increase in staffing efficiencies, which may result in cost savings. Staffing numbers will more accurately match calling patterns and the time taken to construct rosters will be considerably reduced. In addition, an analysis of a CSO’s work time, including actual talk time, after-call work time and waiting time can indicate whether staff have been efficiently rostered to match calling patterns.

When managing call demand, the adequacy of staff numbers must be reviewed on a regular basis so that adjustments can be made. While it is not possible to predict the number of inbound calls, the use of more efficient staffing practices will ensure that operational savings can be achieved.
5.1.6 Career progression

Many Call Centres have a tendency to implement relatively flat structures. Typical staffing levels consist of a manager, team leader and CSOs. Such a structure provides limited opportunities for experienced CSOs to develop career path options. Limited career path options can lead to increased staff turnover, particularly of experienced staff.

It is therefore important to identify opportunities where more experienced CSOs can be recognised for their knowledge and skills. Introducing a level of senior CSOs or workplace coaches can be useful. Providing task variety through project work and similar Call Centre activities can also assist in the multi-skilling of staff and lead to further advancement.

5.2 Motivation & Incentives

Call Centres have experienced some problems in retention and motivation of staff, evident in the large variations in staff turnover.

In surveys carried out in the private sector, the intensity of the Call Centre working environment is quoted as a major reason for high staff turnover rates. The approach to performance management recommended in these guidelines will assist Call Centres in preventing this from becoming an issue.

Call Centre staff tend to face repetitive tasks and activities over the duration of his work. This is consistent of any Call Centres. To avoid this situation, a number of steps that can be taken include:

- Providing staff with a variety of work within the Call Centre;
- Multi-skilling staff in a wide range of services; and
- Moving staff between back and front offices.
Along with appropriate remuneration levels for CSOs is the importance of recognition of excellence in performance. Most Call Centres focus on designing some variation of rewards and recognition programs to encourage consistently high levels of performance and team morale.

5.2.1 Rewards and recognition programs

The design of a rewards and recognition program for a Call Centre needs to include an assessment of call quality evaluations, the number of calls handled, accuracy of information, and bonuses for the achievement of targets or quality assessments.

Team leaders and the Call Centre manager should also be included in the program as they are ultimately responsible for driving the overall performance of the CSOs. In addition, a rewards and recognition program should not only encourage individual performance, but should also promote team performance. It is essential to achieve a balance between individual and team performance, without compromising team harmony and the overall quality of service delivery.

The program can include incentive awards, such as outstanding customer service, the most number of calls taken in a week, and team member of the month as judged by other Call Centre staff or the manager.

Rewards offered for performance may include both non-cash bonuses and monetary incentives. Ultimately, the rewards and recognition program should be used to encourage desirable behaviours and the attainment of specific results. It is important that staff have some input on appropriate incentives. A specific budget should also be allocated to the Call Centre manager. Overall, the Call Centre should have a planned and structured approach to recognising desired performance both on an individual and team level.
5.2.2 Motivation events

Events planned to motivate staff, such as theme days (Team Away Days, Hari Raya, Chinese New Year, Deepavali, Labor Day, Merdeka), can also contribute to increased performance and staff morale. An enjoyable and motivating environment should be developed through the use of well-planned events and staff recognition.

Planning such events can be quite time consuming. An events committee should be established with the responsibility for planning and coordinating of Call Centre events. Membership on the events committee can be rotated on a regular basis to encourage wide involvement.

In addition, entering industry award competitions can stimulate and motivate Call Centre staff. Industry awards, such as those conducted by the Australian Customer Service Association and Australian Teleservice and Call Centre Association, can provide an added incentive for Call Centre staff to perform well.

5.2.3 Fatigue & burnout

Because of the high customer contact at Call Centres, there has been a growing recognition within the industry of the increasing levels of stress and fatigue associated with this type of environment.

Two methods that can help reduce the likelihood of staff burnout are providing a variety of tasks and appropriate job design. Careful ergonomic design, performance management and motivation strategies will also help to keep staff happy.
5.3 Performance Management & Reporting

These guidelines recognise the need to tackle performance management of the Call Centre from a balanced scorecard approach. This is equally true in assessing the performance of Call Centre staff.

The approach adopted to performance management should be balanced and reflect:

- Quality objectives;
- The customer facing nature of the role requires regular feedback from live calls that have been listened into by a team leader;
- The operational objectives of the Call Centre; and
- The business objectives of the Call Centre.

It should be recognised by Call Centre managers that other factors affect the performance of the Call Centre including the performance of IT systems, the effectiveness of business processes and the physical work environment. Improvements in systems, processes and the work environment can have much bigger impacts on Call Centre performance than the pursuit of operational objectives alone.

5.3.1 Call Centre performance

Two groups of measurements should be considered in analysing the relative efficiency and effectiveness of a Call Centre. These measurements are metrics and customer satisfaction levels.

Industry standards for call metrics within Call Centres are as follows:

- 80 per cent of calls answered within 20 seconds;
- Average call wait time is 20 seconds or less;
- Call abandonment rate of less than 5 per cent;
- 99 per cent overall CSO availability;
- 95 per cent first call resolution at first contact;
- Best practice average time to answer = 6 seconds;
• 83 per cent of agent time estimated to be taking inbound calls;
• 16 per cent calls received outside office hours;
• Average call duration 187 seconds;
• Global benchmark of 81 per cent customer satisfaction;
• 0.7 per cent calls not resolved;
• Zero handoffs or transfers;
• <3% calls abandoned;
• 208 seconds time to resolve;
• 98% in 3 working days, turnaround time for complaints;
• 22 per cent staff turnover within Call Centre;
• 27 months Call Centre agent length of service;
• 37 hours worked per week, Call Centre agents;
• Days worked per annum 220 days a year and 7.2 hours a day;
• Staffing (Agent : Supervisor): 13 : 1; and
• Average Training : 27 days per annum.

(Source: Gartner Group)

Comparing a Call Centre’s Key Performance Indicators (KPIs) to the industry standard will indicate areas in need of improvement. It is important that comparisons are made with Call Centres of a similar nature. For example, Public Sector related Call Centres often have different performance standards than sales-related Call Centres. However, there are some generic KPIs that are accepted as key productivity measures in all Call Centres (Gartner Group). These generic KPIs can include:

• First call completion rates;
• Average speed of answer;
• Percentage of calls answered within X seconds;
• CSO talk time, wrap time;
• Percentage of time CSO is on calls, on hold, on idle, and available;
• Total number of calls handled for the day, week, month, year;
• Number of calls transferred; and
• Number and percentage of calls abandoned.

The main focus of these productivity measures is to ensure that call transactions are handled efficiently, which ultimately contributes to excellence in service delivery. Too often Call Centres focus on productivity measures without considering the qualitative aspects of service delivery. Part of the research process should involve customer feedback on acceptable levels for service standards.

Two other important performance measures are cost-per-transaction and revenue-per-CSO (if applicable). Many Call Centres are unable to identify accurately the cost-per-transaction because of organisational reporting practices. The use of activity-based costing will enable a Call Centre to identify both fixed and variable costs that are directly applicable to the operation of the Call Centre.

5.3.2 Individual performance management

Measuring individual agent or CSO productivity is a cornerstone of effective service delivery, but care must be taken that excessive performance management does not lead to staff perceptions that they are machines. Performance measures are important, but they can also have a negative impact on staff morale and overall CSO productivity.

Call Centres often focus on measuring individual productivity by analysing the average number of calls per hour and per day, a threshold percentage of clerical work in relation to actual calls, and average call transaction time (talk time and after work wrap up time). However, call monitoring can also provide a good indication of the overall quality of customer interactions taking place on a one-to-one basis.

Call back evaluations, customer surveys and call monitoring, as well as monthly statistics, will provide CSOs with direct feedback about their performance. Performance monitoring should also be linked to competency-based progression, which was discussed in Section 5.1.2.
Furthermore, both progressive and annual staff appraisals should be linked to performance-based pay. Annual bonuses for teams and individuals that are linked to the achievement of Call Centre KPIs should be considered.

5.3.3 Other performance indicators

There are other performance indicators a Call Centre should track that can indicate additional issues relating to performance. Such indicators include staff turnover, average length of tenure, absenteeism levels and staff satisfaction levels.

Obtaining feedback on staff satisfaction levels (commonly known as organisational climate surveys) can be achieved by developing structured questionnaires tailored to suit the Call Centre's specific environment. This type of survey can indicate staff satisfaction levels with management practices, such as performance feedback, supervision levels and the overall effectiveness of the rewards and recognition program.

5.3.4 Improving CSO performance

Improving individual performance can be achieved through the use of various training strategies, such as induction training and one-to-one on-the-job training.

It is extremely important that there is a planned programme of induction training in a Call Centre environment and this will need to cover:

- Customer Service skills;
- Call Handling skills;
- Communication skills;
- Familiarity with IT Systems;
- Explanation of appropriate business processes and business and organisational context of the Call Centre; and
- Management training for team leaders.
Obviously the length of induction training will depend on the skills the individual already has and the complexity of the business processes.

As for the one-to-one training, many telephone systems now have remote (silent) call monitoring facilities so assessors can listen to calls, without the knowledge of the agent or CSO, in order to assess the quality of service provided by the Call Centre. This facility helps reduce the bias normally associated with the process of monitoring known as double jacking, where the call assessor sits side-by-side with the agent or CSO.

Double jacking can be a useful tool in training new staff. It requires the use of a double headset so that the coach or team leader can also listen to the calls. The coach or team leader generally sits next to the CSO and observes at least five to 10 calls. Feedback is given after each call, to help CSOs improve their call-handling techniques. Further training issues may also be identified during the double jacking session.

Regular double jacking, perhaps one hour per month, along with call quality observations, can lead to increased service standards.

Call Centre agents should also be given coaching and training on an ongoing basis. In a Call Centre environment it is particularly important to build the time required for ongoing training, into staffing profiles. This is equally true for team meetings. Call Centres should publish their targets for the number of days training a year for their employees.

5.3.5 Performance reporting

An important part of overall performance management within a Call Centre is to report on what has been achieved. The KPIs that are set when a Call Centre is first established will provide a benchmark to help analyse performance. Over time, an improvement in performance should be noticed.
Call Centre performance, based on the established KPIs, is directly sourced from the telephony Management Information System (MIS). This will provide the majority of quantitative statistics. Reports on customer satisfaction levels and call quality observations should also be collected as part of the overall performance management strategy.

Call Centre performance against KPIs should be recorded on a weekly and monthly basis. The standards set should be reviewed quarterly to determine whether the standards are still relevant or need adjusting.

The importance of setting realistic performance measures and attainable targets cannot be stressed enough. If targets are set too high, there will be frustration in not being able to achieve them. If targets are set too low, then complacency and over-confidence may diminish results. The challenge is to find the right balance between call quality and call quantity.

5.4 Quality Assurance and Performance Management

Industry trends suggest that Call Centres are focusing much more attention on implementing quality assurance practices within their Call Centres, so that customer satisfaction levels remain a primary focus.

In this section, specific quality assurance practices are identified that will contribute to the overall achievement of service excellence. Specific practices discussed include call monitoring, customer call backs, mystery calling, benchmarking and processes and procedures.

5.4.1 Call monitoring

Many Call Centres have introduced call monitoring strategies to ensure that quality standards are maintained when providing appropriate information to customers and to measure the quality of customer interaction. Given the increasing use of part-time staff and the hiring of new staff, call monitoring can assist in the identification of specific training needs.
The actual process of call monitoring can be carried out either through double jacking, silent call monitoring or the use of automatic call recording equipment.

Earlier, the use of automatic call recording equipment is identified as one method to facilitate call monitoring. This technology provides digital voice recordings that can be played back for analysis. It can also track calling patterns and analyse call content and voice tones.

Call monitoring is a useful tool for coaching staff to improve performance. However, if it is used as a disciplinary or negative performance management tool, it may result in feelings of mistrust and suspicion by staff. The primary purpose of call monitoring should be its value as a development tool. This must be clearly communicated to staff.

The Call Centre manager and team leaders should carry out 10 call observations a month for each staff member.

A possible checklist of key dimensions that can be used as a basis for call monitoring includes:

- Initial greeting;
- Customer acknowledgement;
- Use of courteous statements;
- Displayed empathy;
- Kept customer informed when keying in;
- Listened effectively;
- Quality of voice tone and pitch;
- Effective use of questions;
- Use of positive words;
- Reaffirmed call outcomes/action;
- Ending of call – additional help/thanked;
- Call resolution/outcome; and
- Overall professionalism.
As part of the process, a specific call monitoring evaluation form should be designed to take into account the relevant call dimensions that are appropriate for the specific Call Centre environment. Other staff can be involved in the process of call monitoring in order to give them some insight into the standard of calls required at the Call Centre and to provide them with task variety.

5.4.2 Customer call back strategies

Another method of assessing customer satisfaction is a call back strategy, where one to five per cent of all customers who made calls to the Call Centre the previous day are contacted.

A customer callback strategy has a number of key benefits, including:

- Identification of customers’ satisfaction levels with their interaction with the agency;
- Identification of areas for improvement;
- Serving as a public relations exercise; and
- Providing the CSOs with skill and task variety.

The actual percentage of customers to be contacted will depend upon the overall call volume of the Call Centre. For example, if the Call Centre receives 10,000 calls per day, one per cent of calls would equate to 100 calls. This number of customer call backs may not be necessary. Instead, a decision to conduct 50 customer call backs per day may be made. The number of customer call backs conducted will also depend on the availability of Call Centre resources.

The call back strategy can be undertaken by CSOs on a rotational basis, using a call evaluation assessment form developed specifically for the Call Centre.
5.4.3 Mystery calling

A technique that can also be used to assess the overall quality of customer interactions is a well-planned and structured strategy known as mystery calling. This strategy is based upon a similar technique used in retailing called mystery shopping. Mystery shoppers, pretending to be customers, visit a store and evaluate it on a number of key dimensions.

It is recommended that an independent organisation that specialises in quality assurance practices be engaged to conduct the mystery calling, to ensure that the process remains free from bias.

The key decision criteria involved in establishing a mystery calling strategy include:

- Determine the purpose and objectives of the mystery calling strategy;
- Establish specific customer scenarios with Call Centre management;
- Design a mystery calling evaluation form;
- Agree on specific times and days of the week for mystery calling to take place;
- Decide on how many calls will be made per week and per month; and
- Determine how often and in what format the mystery calling results will be presented.

5.4.4 Benchmarking

Once the Call Centre becomes fully operational and achieves a reasonable level of efficiency and effectiveness, one quality assurance practice to consider is benchmarking.

Generally, benchmarking would be carried out only after a Call Centre has been operational for at least 12 to 18 months, so that an accurate performance comparison can be made. It is likely that a Call Centre will experience a number of teething problems during the initial establishment phase.
Benchmarking involves a comparison of key processes and procedures within the Call Centre against other Call Centres considered to be “Best in Class” or recognised as utilising efficient and effective Call Centre strategies.

The overall process can be quite time-consuming. It entails making a detailed analysis of key operating procedures and requires an understanding of how certain efficiencies have been achieved and the specific work practices that contributed to that achievement.

One of the key tasks in undertaking a benchmarking process is to ensure that the benchmarking partners has significant resemblance to the one under study. This will allow the benchmarking process to have more meaningful comparisons.

For instance, a newspaper Call Centre will find little value in undertaking a benchmarking exercise with a local Council unless that Council's Call Centre has generic processes and procedures in place that can be compared to the newspaper's Call Centre environment.
5.4.5 Processes and procedures

When a Call Centre is first established, a number of processes and procedures are often implemented that use manual rather than automated methods and are paper-based rather than electronic. The importance of conducting regular process reviews cannot be overstated. Considerable efficiency and productivity gains can be achieved by making improvements to existing processes and procedures.

Process mapping is one of the strategies for reviewing Call Centre processes and procedures. An operations manual that specifies all of the major processes and procedures carried out within the Call Centre should be developed and regularly updated. The operations manual can then become a basis for establishing quality accreditation (e.g. ISO9000) for the Call Centre. Documentation of processes and procedures is an integral part of the quality accreditation process.

Call Centre procedures should be reviewed regularly to ensure that all of the tasks undertaken are working effectively.

Clear specification of a Call Centre's policy and procedures should be developed in electronic format and can be utilised by all Call Centre staff for other purposes, including training and performance management.

5.5 Financial Management

Regardless if the Call Centre is service or sales orientated or a combination of both, effective ongoing cost management is required. This section addresses the major operating costs, potential cost impacts, equipment upgrades and strategies to reduce the cost of transactions.
5.5.1 Operation budget requirements

One of the most significant operating costs of a Call Centre is staffing, which tends to be about 65 per cent of the overall budget. Other expenses include network costs (18 per cent), equipment costs (8 per cent) and facility costs (7 per cent) (Gartner Group, 1997).

The significant ongoing expenditure on staffing includes recruitment and training, and salaries. In addition to base salaries, there are on-costs of about 30 per cent (superannuation, leave etc.).

5.5.2 Potential cost impacts

Once operational budgets have been established, unforeseen events may occur that will require increased resources. Organisations need to recognise the impact that major operational issues have on the overall operating budget. Such examples include:

- The introduction of a new or upgraded computer system;
- New marketing campaigns;
- Crises events or unpredicted demand;
- System issues; and
- Relocation due to Call Centre growth.

These events typically lead to increased expenditure in staffing, network and training costs. In particular, the costs involved with relocation can be considerable when the upgrade of furniture and equipment and the planning and coordination of the move itself are taken into account.

Future capital requirements for the Call Centre also need to be considered. Capital investments in more sophisticated technology will require a business case that outlines the potential cost savings to be achieved, efficiency gains and an overall return on investment.
In addition, the cost of depreciation of capital equipment must be considered. Normally, capital equipment is depreciated over a three-year period.

5.5.3 Equipment upgrades

Call Centres must also take into account the possible introduction of new technology in their annual planning processes, since the rapid technological changes taking place within the industry can lead to greater efficiencies.

Organisations need a planned approach to capital investments on a planning cycle of approximately three years for system upgrades and new technology. Vendors and internal Information Technology (IT) departments tend to focus on enhancements and upgrades to telephony equipment and information systems over a two-year cycle.

The decision to upgrade or introduce new technology should be made after a thorough industry appraisal of what is available in the marketplace. Benchmarking and attending industry events can assist in this process.

5.5.4 Strategies to reduce the cost of transactions

Once a Call Centre has been operational for 12 months or more and the establishment process is complete, many organisations look for ways to reduce the overall cost of service delivery. The use of Interactive Voice Response (IVR) units, voice recognition, rostering software, automatic call monitoring and sophisticated Customer Relationship Management (CRM) databases are examples of advance technologies that can lead to greater efficiencies.

Efficient resourcing through workforce management and effective performance management will help to maximise the overall level of productivity at a Call Centre.
Utilising alternative contact methods, such as Web-based transactions, facsimile services and the outsourcing of non-core transactions can also assist in reducing costs.

5.6 Business continuity planning

Once a Call Centre is established, a major operational issue is the ability of the organisation to provide a continuing service. Call Centres can be subjected to a variety of both major and minor interruptions, such as:

- Power failures (UPS);
- Information system shut downs, slow downs, upgrades;
- Crisis events - bomb threats, fire, security breaches; and
- Avalanche traffic or unpredicted call demand - power outages / flooding / environmental disasters.

A number of different strategies can be utilised to overcome these unplanned problems. A business continuity plan should be developed to address events that might affect overall service delivery. A range of alternative strategies is required that can handle even the most severe situation. Such strategies should be clearly documented and ready to be implemented should the need arise.

A primary requirement would be redundancy in both telephone systems and information systems. Often, organisations will establish a secondary site that can be utilised as either a training facility or an emergency Call Centre. For unexpected avalanche traffic beyond the capacity of the Call Centre, the ability to send overflow calls to an outsourced bureau should also be considered. The outsourced bureau can take the initial calls until the Call Centre becomes fully operational again or is able to handle the avalanche traffic. Using an outsourced bureau for overflow calls during peak periods or after hours also requires regular contract management reviews to ensure that the arrangement is working effectively and in accordance with agreed service level parameters.
An extremely effective method of handling significant volumes of calls is the use of Interactive Voice Response (IVR) units. This has a recorded message that informs callers of the current situation or what action to take.

Another key aspect to business continuity is the ability to deploy staff rapidly to assist in the management of significant (unpredicted) call volumes, such as during an environmental disaster or power outage. Employment strategies that lead to the development of a casual pool of staff who are trained in all aspects of Call Centre operations are a critical component to the rapid deployment of staff.

Annual testing should be carried out to gauge the relative effectiveness of the business continuity plan. This involves simulating various scenarios that require a rapid response. Escalation to a full scale shut down of the Call Centre and redirection to an alternative site should also be a part of the simulation process.

5.7 Future developments

This final section considers the need to deal with the future development of a Call Centre. The constant focus on achieving operational efficiencies, driving down the cost of service delivery and improving people management and customer satisfaction will continue to drive changes in the industry.

5.7.1 Developing the Call Centre into a full scale contact centre

Once a Call Centre becomes an accepted service delivery channel, the logical progression is to integrate other customer contact channels into a total service operation from the one centre. Because of their high levels of voice contact, Call Centres can readily integrate other contact channels into their service delivery strategy, such as facsimile, IVR and Web-based channels. The seamless integration of multiple channels of access requires a high level of planning and coordination as it would for any new technology acquisition.
This also requires clear performance indicators that will demonstrate the effectiveness and efficiency of the multiple channels of access. In addition, regular reviews of various customer service strategies need to be considered. All key Call Centre personnel should participate in planning these enhanced strategies.

5.7.2 Advanced technologies

Call Centre managers must keep up with the new technological advances in customer contact strategies. The need to invest in the latest technology in order to achieve further cost and contact efficiencies is an accepted industry practice.

As access to the Internet continues to grow exponentially, advanced technologies such as Web agent connectivity, will need to be considered. This facility allows customers to be connected to a CSO directly from the Web page, either through text or voice. Currently, very few Call Centres have such technology in place.

Sophisticated Customer Relationship Management (CRM) systems are also available that can identify customer transactions, including responses to advertisements, complaint tracking, identification of key customers and the tracking of conversion rates.

Computer Telephony Integration (CTI) with Calling Line Identification (CLI), using a customer identification number or a telephone number to bring up caller information, can also produce significant efficiencies in call presentation.

One of the latest developments in call-handling strategies is the use of natural language speech recognition. This allows the voice recognition system to provide or record basic information for simple transactions.
However, adopting more advanced technologies can lead to problems. Experience has shown that unless the technology is a proven application that is already fully operational, the extent of customisation and debugging required will be considerable. In certain circumstances, it is far better to wait. This will ensure that expensive customisation and debugging do not add to the installation costs of the new application.

5.7.3 Future-proofing Call Centres

The ability of a Call Centre to respond to a changing environment is contingent upon the relative sophistication of the Centre and its overall strategic importance to the agency. No Call Centre can be completely future-proofed, as changes within the industry are rapid and require considerable capital investment to keep up-to-date. However, agencies do need to factor in a planned approach to capital investments, such as system upgrades and new technology acquisition on a planning cycle of approximately three years.

Interestingly, many existing Call Centres are currently in a state of change because of the realisation that more efficient practices can generate even greater efficiencies than are currently being achieved.

No organisation that operates a Call Centre can afford to become complacent, as today's state-of-the-art Call Centre is tomorrow's dinosaur. Constant assessment of changing trends, customer needs and advances in the industry are a prerequisite to service excellence.

It is also likely that at times a Call Centre will undergo a period of change brought about by events such as increased staff turnover, business growth and upgrades to various operating systems. The ability of a Call Centre to respond to these changes and to meet new demands is contingent upon the development of best practice principles in their operation.
6 Summary

A Call Centre can provide a number of important benefits. First, an increased focus on Public service is likely to lead to more efficient methods in handling significant levels of Public interactions. This, in turn, leads to a reduction in transaction costs where the majority of simple customer interactions are handled by dedicated, well-trained, frontline staff. The more senior and experienced staff can then be assigned to more complex tasks.

Achieving further internal efficiencies may also allow the agency to initiate contacts with clients and can streamline the handling of incoming calls to a central area, rather than being spread across various sections throughout the agency.

By replacing over-the-counter transactions with telephone contacts, agency and Public costs, alike can be reduced. As long as telephone contacts are handled efficiently, members of the public who do not have time for, or access to, face-to-face transactions will view the change favourably.

In establishing a Call Centre, a business plan needs to be developed with the Call Centre’s objectives defined. In supporting the Call Centre’s objectives, it is imperative that good Call Centre Operations Management practices are employed. Human Resources resides as one of the key factors for Call Centre Operations management. It encompasses 65% of the Call Centre’s operating expenditure that makes it an important factor in the overall success of the Call Centre. Hence, without structured development programs and retention schemes, the Call Centre expertise can diminish together with the overall objectives of the Call Centre.
Glossary of Terms

List of abbreviations and acronyms used for easy reference.

**Abbreviations and Acronyms used**

- IVR: Interactive Voice Response
- PABX: Private Automated Branch Exchange
- ACD: Automatic Call Distribution
- CATI: Computer Assisted Telephone Interview
- CBT: Computer Based Training
- CIS: Customer Interface Services
- CLI: Caller Line Identification
- CND: Calling Number Display
- CSR: Customer Service Officer
- CTI: Computer Telephony Integration
- ICR: Intelligent Call Router
- IDNX: Integrated Digital Network Exchange
- ISDN: Integrated Services Digital Network
- IVR: Interactive Voice Response
- PCS: Personal Communication Systems
- PSTN: Public Switched Telephone Network
- MCU: MultiPoint Conferencing Unit