

Operational Management Centres

Caravel Group -
specialist
services for
mission critical
environments

Operational Management Centres

Safeguarding the corporate nerve centre

With a drive towards effective service delivery, businesses increasingly look at operational management centres as a means to deliver core business functions effectively and efficiently.

Operational Management Centres are vital business units and significantly contribute to an organisation's ability to deliver excellence and to remain competitive.

These business units typically reach into all areas of the business. They are often operational 24/7 and any proposed change to them is therefore a critical undertaking usually involving the added complexity of an outsource arrangement with one or more suppliers.

While change involves significant risks, it is also often unavoidable, particularly when a functionality upgrade calls for the transformation of an existing facility, when a new facility is constructed, or when business units move into new premises.

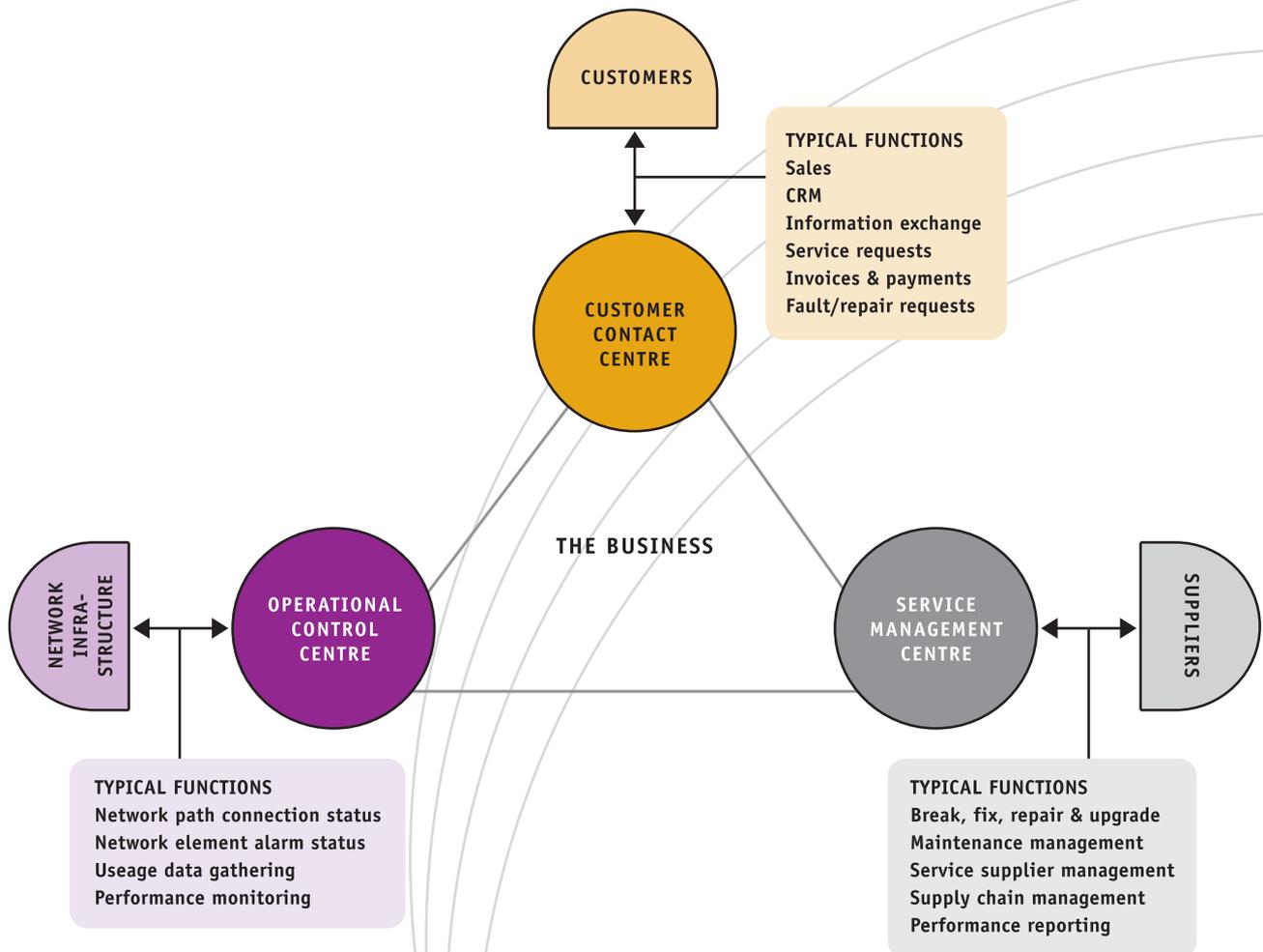
This brochure outlines Caravel's services relating to Operational Management Centres and their specific needs in all respects, including Mission Critical Moves.

- **Operational Control Centres**
 - **Customer Contact Centres**
 - **Service Management Centres**
- } in various configurations
depending on business need

As a specialist project management company with a track record in large, complex multi-disciplined projects, Caravel understands that projects of this nature carry many inherent risks.

Caravel will successfully manage your operational management centre project from start to finish and deliver a quality result.

OPERATIONAL MANAGEMENT CENTRES - CONCEPTUAL OVERVIEW



Business needs shape the reality - hybrid solutions

For ease of application, this brochure deals with key aspects of functional units as outlined in the concept diagram (above).

Concepts don't always accurately reflect the business reality because organisations fulfill their various functional needs in different ways. Specific business requirements therefore often give rise to hybrid operational management centres which frequently combine several functionalities into one business unit. A customer service facility may, for instance, incorporate a Service Management Centre and a Customer Contact Centre.

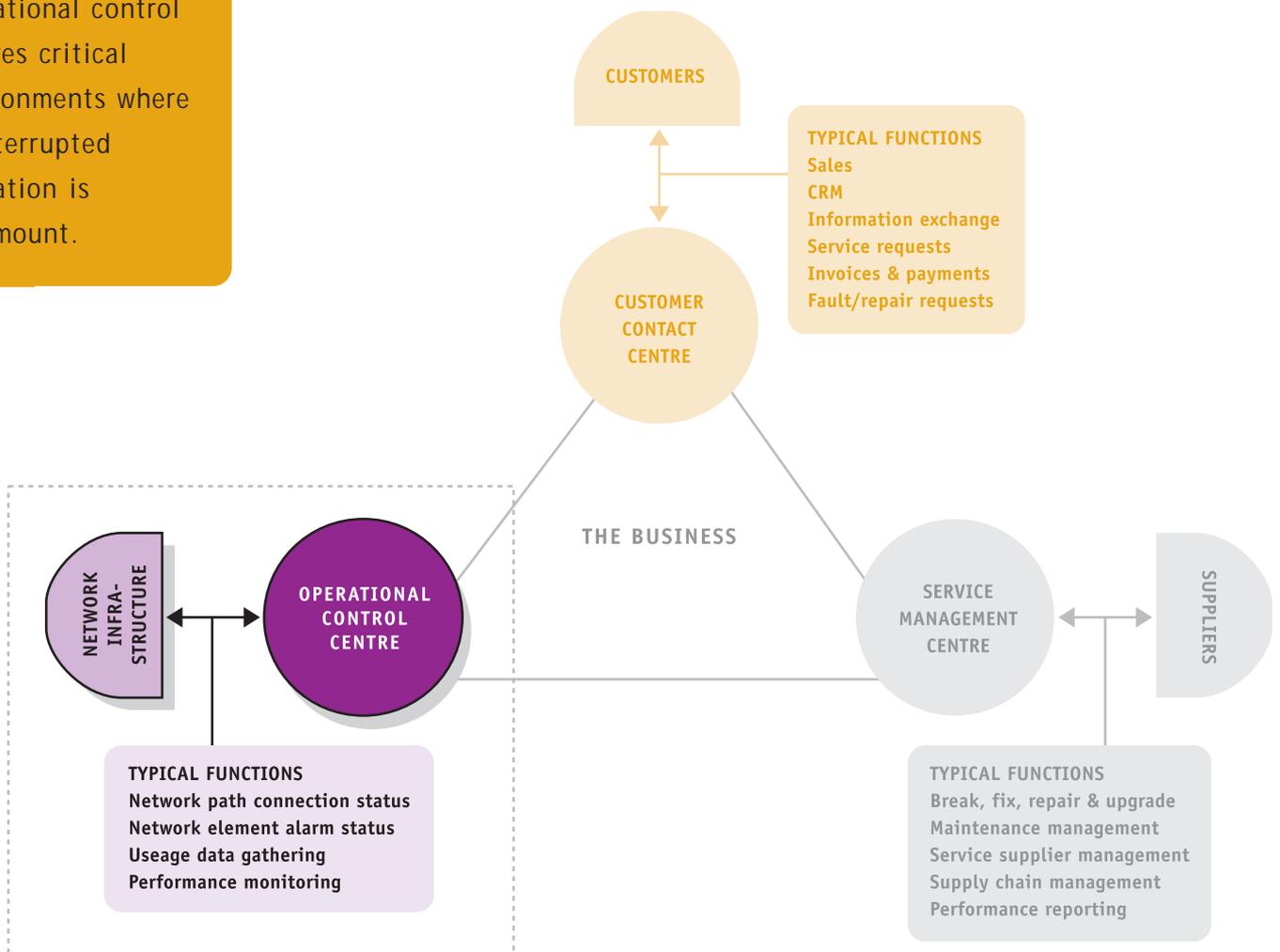
Operational Control Centres

An Operational Control Center is the control hub where the 'spokes' of an organisation's operational control merge in a mission-control-like environment.

As the virtual brain of the entire operational system, the Operational Control Centre operates in real time and typically involves live operational infrastructure - for example a large electricity distribution network.



Operating around-the-clock and in real time makes operational control centres critical environments where uninterrupted operation is paramount.



The network belonging to the Operational Control Centre control can include:

- electricity reticulation
- gas reticulation
- water reticulation
- telecommunications
- transport organisations (rail, road, air traffic, marine)
- emergency services (fire, ambulance, police, search & rescue, maritime)
- remote control centres for IT system
- remote control centres for building services and security systems

Operational Control Centres operate in real time and integrate live data from multiple sources with existing operational systems. Mimic diagrams usually display the status of the network on large format screens.

Any disruption or malfunction carries the potential for severe consequences and must therefore be avoided.

Controlling network health and maintenance

As real network hubs, Operational Control Centres fulfill vital control functions by configuring, maintaining and monitoring the network and supporting other operational centres with key network information.

Monitoring and control

Monitoring and maintaining the health of the network is a prime function of the Operational Control Centre. As network conditions change, it reconfigures the network either automatically or by manual intervention to maintain or restore service connectivity.

The Operational Control Centre monitors the status and traffic of the network but it also has a prime ability to switch and control it. As a result, it typically operates with connections to the network 'traffic' carrying plant. Given the live network environment, these operate in or near real time.

Network events are captured in real time (for example with SCADA equipment connected to the network plant) before they are analysed and converted into relevant information including alarms. The Operational Control Centre usually initiates alarm handling and trouble ticketing ready for execution by service management centres and customer contact centres as appropriate.

Usage data acquisition

The Operational Control Centre gathers important network usage information which is then passed on to rating and billing engines for invoicing via the customer contact centre. This information also provides relevant data to marketing departments.

Performance management

Network performance management provides essential information for asset management decisions including plant or capacity upgrades or replacement of assets that are at the end of their useful life. The Operational Control Centre supports this process by collecting network events, analysing them and converting them into reports. Performance management data is invaluable for the purpose of forecasting and capacity planning.

Configuration management

A key role of the Operational Control Centre is the management of the network configuration. This includes the maintenance of the entire network status, detailed knowledge of its precise components and the ability to track changes in any of these elements over time. The system also includes a spares inventory as well as data about the historic and current status of any faults and components under repair.

Multi-channel communication

Effective communication is extremely important in the Operational Control Centre environment. Given the need to communicate with service management centre and customer contact centre systems and their support entities, the Operational Control Centre may need to support a wide range of communication channels and technologies (Fax, email, internet, IVR). This allows the business unit to optimise the channels for supplier interaction and minimise costs.



Core business processes

Operational Control Centres implement processes on a day-to-day basis to keep the network going. These processes are absolutely fundamental for the business. Skills based routing is an essential technique and often used to ensure that requests get to the right people at the right time for implementation.

While routing charts for the different centres may appear similar, they are clearly different as caller requests may be on a network, product or service level supporting business-to-business relationships or individual customers.

A mapping that charts typical processes is below.

Call Mapping	CORE BUSINESS PROCESS		
	Network Information Requests	Network Provisioning for Service or Network Order	Network Trouble Notification
Call Lodgement/Reception			
Call Assignment			
Call Notification			
Call Tracking			
Call Escalation			
Call Closeout			
Call Reporting			

In practice, each empty cell would include a specification of functionality

Skills based routing ensures that 'call' initiated actions follow a clearly defined path

The commercial reality

Clearly, the health and reliability of the network is of prime importance and closely linked to its commercial viability. The total focus of Operational Control Centres is therefore on delivering network services, maximising reliability and gathering usage data.

Operational Control Centres support a range of service level agreements. These are managed with other parties via Service Management Centres or Customer Contact Centres and in turn supported through the day-to-day management of alarms, faults and traffic routing as required. Centre 'reliability' thereby becomes quantifiable through performance reports attached to service level agreements.

It goes without saying that the usage data collection for billing purposes is a commercial imperative. After all, customers need to be billed in line with their usage and agreed level of service.

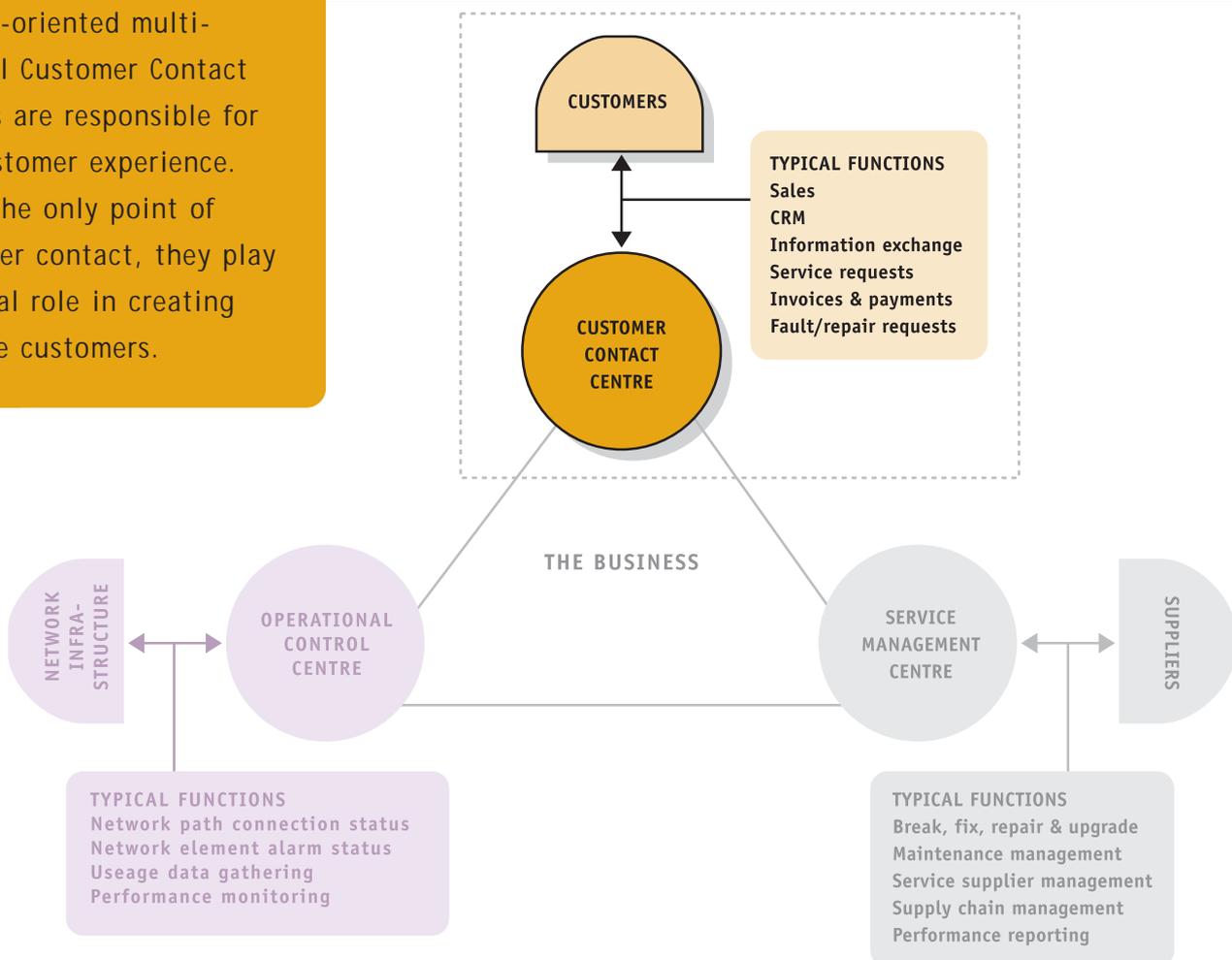
Customer Contact Centres

Customer Contact Centres in their various guises are the focal point of customer service for most companies today. Using a variety of multi-channel contact solutions, these centres interact with customers in real time to implement the customer relationship strategy using a wide range of technologies.

The mix of solutions typically involves a wide range of technologies and may include web systems, call centres and other inbound and outbound communication modes.

They provide pre-sales, sales and customer support or a variety of other types of service from a query and information point of view.

Service-oriented multi-channel Customer Contact Centres are responsible for the customer experience. Often the only point of customer contact, they play a crucial role in creating lifetime customers.



Like most operational management centres, a live operational system is the virtual engine of the Customer Contact Centre which will usually have extended business hours up to a 24/7 operation.

Hybrid centres often reflect specific business needs, which results in contact centres taking on different functionality and names (customer call centre, customer interaction centre, customer service centre etc). However, all customer centres operate on the principle of meeting customer needs in real-time or near real-time.

Supporting exceptional customer experiences

Contact centres handle blended service, support and sales interactions seamlessly across communication platforms. Their ability to communicate effectively with a customer often makes the difference between a sale and a lost opportunity.

Customer relationship management (CRM)

CRM is a customer-centric philosophy that places special detailed focus on every customer interaction. It permeates the entire organisation and is a business-wide strategy designed to reduce costs and increase profitability by solidifying customer loyalty. CRM gathers intelligence which ensures that staff in sales, customer support and marketing can make the right decisions on everything from cross-selling to competitive positioning tactics.

Multi-channel communication

Contact with customers can include a range of channels such as telephone, email, fax and internet, through knowledge portals, forums and the like. It is extremely important to determine the best channel and ensure that the experience is seamless across channels.

Core business processes

Customer Contact Centres constantly implement processes which are absolutely fundamental for the business. Like other Operational Management Centres, Customer Contact Centres utilise skills based routing to ensure that requests get to the right people at the right time for implementation.

While routing charts for the different centres may appear similar, they are clearly different as caller requests may be on a network, product or service level supporting business-to-business relationships or individual customers.

A typical mapping chart is below.

Call Mapping	CORE BUSINESS PROCESS		
	Customer Information Requests	Customer Service or Order	Customer Trouble Notification
Call Lodgement/Reception			
Call Assignment			
Call Notification			
Call Tracking			
Call Escalation			
Call Closeout			
Call Reporting			

In practice, each empty cell would include a specification of functionality

The apparent similarity of routing maps for different operational management centres belies their fundamental difference. Information requests may be on a network, product or service level in support of business-to-business or individual customers.

The commercial reality

Customer Contact Centres are often the first - and sometimes only - point of customer contact which makes their optimum performance a vital element for an organisation's ability to reach its business goals.

Fundamentally, contact centres are key enablers for the entire business and pivotal for achieving high customer loyalty which in turn drives margins, revenue growth and shareholder value.

At Caravel we know that Customer Contact Centre projects encompass multiple subject matter areas, and that achieving transformational results requires addressing—and mastering—each area. This is evidenced by our track record that covers a range of industry sectors and businesses.



Service

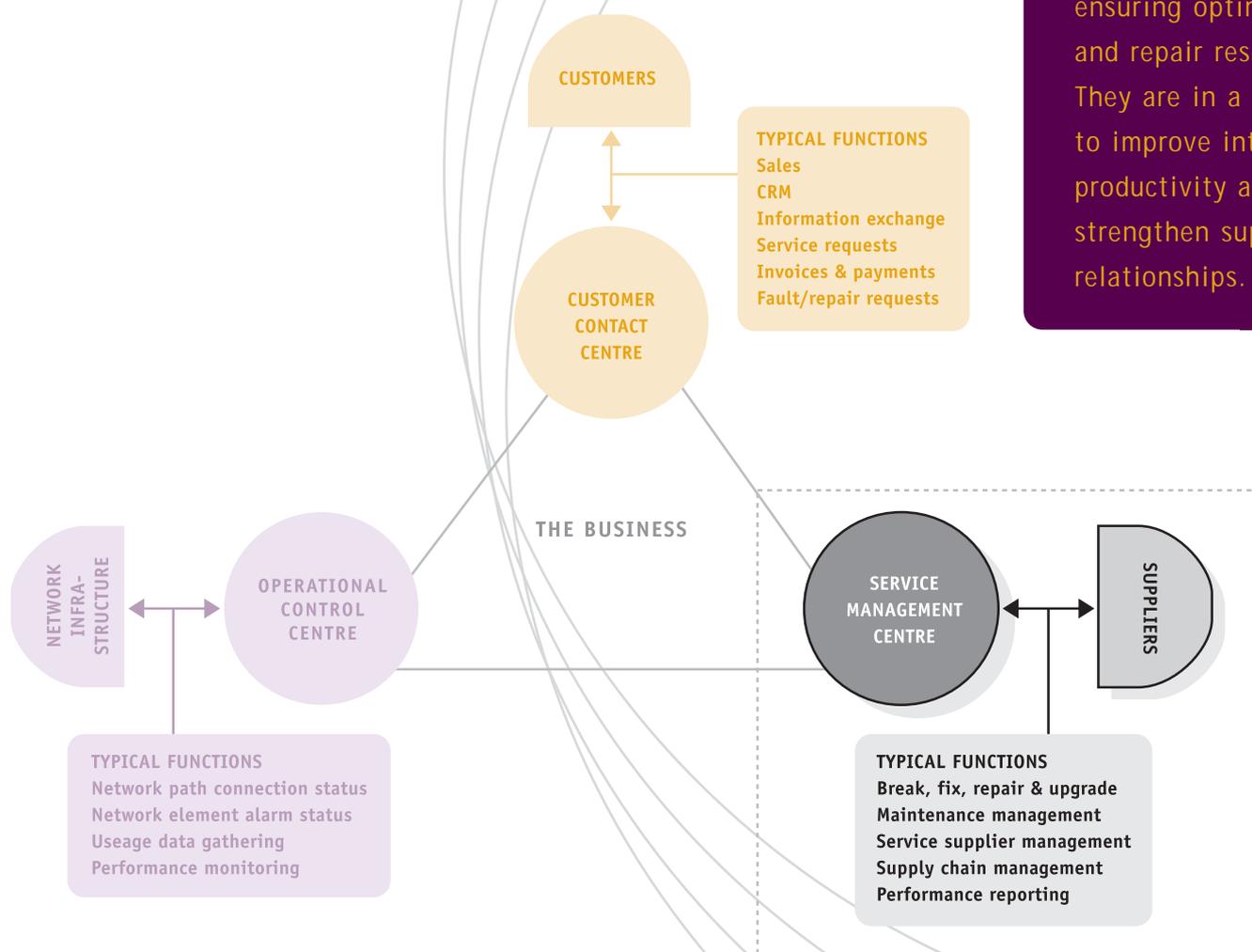
Management Centres

Service Management Centres typically handle customer trouble or service calls. Depending on the nature of the business, these calls may come directly from business customers or via a Customer Contact Centre in the case of retail customers.

The centres implement faults, repair and maintenance management functionality in support of the organisation's supply chain and logistic management strategies.

Service Management Centres provide a single point of assistance where skilled agents deliver optimal levels of first call resolution for customers.

Service management centres play a crucial role in the business value chain by ensuring optimal fault and repair resolution. They are in a position to improve internal productivity and strengthen supply relationships.



Business continuity planning and disaster recovery

Being prepared for disasters is of utmost importance for Service Management Centres. While other management centres also need to address business continuity and disaster recovery, this aspect is of critical importance at the service management interface between the network and the customer.

After a suitable plan has been devised for implementation, it must then be regularly tested to confirm that it is effective and able to protect the business as designed.

Similar to other operational management centres, Service Management Centres tend to operate on a multi-channel system involving web systems, call centres and a range of inbound and outbound communication modes.

With live operational real time capability, often around the clock, any disruption to a Service Management Centre can have severe consequences for the business.

Strengthening productivity and supply relationships

Service Management Centres are central to business success and intrinsically linked to an organisation's brand value with several key areas coming into play.

Supply chain management

The supply chain integrates decisions, processes and activities on a lowest-total cost life cycle basis from raw material to end user. The supply chain usually comprises two essential elements: strategic sourcing and strategic logistics. Typical supply chain costs include inventory management, logistics, transportation, warehousing, purchasing, procurement and sourcing.

Supply chain costs are the biggest single item in an organisation's total operating budget. Any slight deviation consequently exposes a company to significant risks. This highlights the importance of the systems used to manage all elements of the supply chain.

Break-fix and repair

One of the core responsibilities of the Service Management Centre is dealing with customer or network faults, repair and maintenance management processes. An important first step is therefore determining the origin of the problem and routing the call as appropriate.

It may not be clear to the customer whether a reported fault needs intervention at a network level, customer level or both. This may lead to calls being simultaneously logged with Customer Contact Centres and Service Management Centres alike.

A key feature is the management of the workforce required for break-fix repairs on-site, component replacement and/or management of the repair of the defective equipment. Warranty management processes also need to be supported.

It should be noted that Customer break-fix as opposed to 'network' break-fix may well be delivered by the CRM systems within the Customer Contact Centre while network troubles will often be reported by the Operational Control Centre.

Maintenance management

Service Management Centres carry out planned and unplanned maintenance which is co-ordinated by Customer Contact Centres and Operational Control Centres. There is, however, a core responsibility to manage and deploy the workforce required to effect maintenance which requires the administration of supplier contracts for this purpose. Maintenance management is often supported by a computer based maintenance management system (MMS).

Multi-channel communication

As with other operational management centres, operations usually include a range of channels such as telephone, email, fax and internet through knowledge portals, forums and the like. Choice of the right channel influences productivity and can contribute to stronger supplier relationships.



Core business processes

Service Management Centres constantly implement processes which are absolutely fundamental for the business. Like other Operational Management Centres, Service Management Centres utilise skills based routing to ensure that requests get to the right people at the right time for implementation.

While routing charts for the different centres may appear similar, they are clearly different as caller requests may be on a network, product or service level supporting business-to-business relationships or individual customers.

Example of a typical routing chart:

Call Mapping	CORE BUSINESS PROCESS		
	Service Information Requests	Provisioning for Service	Service Trouble Notification
Call Lodgement/Reception			
Call Assignment			
Call Notification			
Call Tracking			
Call Escalation			
Call Closeout			
Call Reporting			

In practice, each empty cell would include a specification of functionality

The commercial reality

Service Management Centres are 'big cost items' and extensively governed by several contractual agreements which are the platform for achieving improved commercial outcomes.

The centres aim for positional advantage by managing a highly complex web of interrelated service level agreements, both on an external level (with suppliers and customers) and on an internal level (with other business units).

Given the complex nature of their relationships with customers, suppliers and the workforce, Service Management Centres have a significant impact on other business units including the sales/marketing department.

Managing the different relationships often means balancing different objectives to achieve commercially sound outcomes.

Implementing and changing Operational Management Centres

The process of building or changing an operational management centre is very complex and often goes hand in hand with the implementation of an e-business strategy.

The e-business world

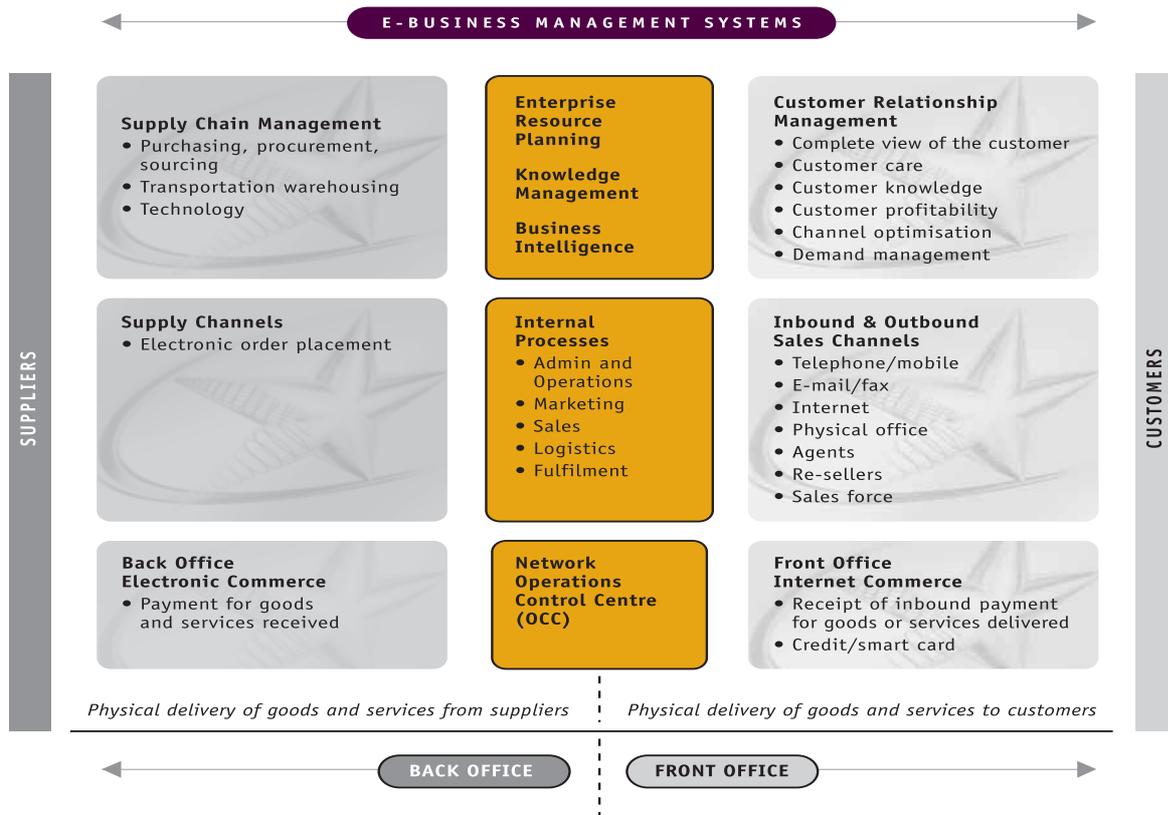
E-business is more than just a buzzword. Closely associated with the CRM strategy or a supply strategy, e-business relates to doing business electronically online or over the internet. The related infrastructure accommodates large-scale applications, notably CRM and supply-chain management programmes, and therefore typically forms part of the Customer Contact Centre or Service Management Centre solution.

Full-scale e-business functionality incorporates electronic ordering and payment processes between customer and supplier. While physical components still require physical handling and transport mechanisms, all other parts of the business relate to electronic information.

E-business systems are so integral to operations that their performance and reliability directly affect the company's performance. Its proper use and functioning can be a determining factor in ensuring higher returns and reacting to opportunities.



Typical e-business model



The value chain

Traditional business models show supplier-business-customer linkages in a value chain¹. One company's customer is the other company's supplier. Individual roles depend on the frame of reference. However, most entities have multiple suppliers, customers and competitors who are connected to each other in multiple customer-supplier relationships.

1. M.E. Porter, *Value Chain Analysis, Competitive Advantage* (1980)

Mission critical moves

Most businesses need to consider relocating their operations at some point e.g. to cater for growth or changed business needs or when a lease expires.

In the past this simply meant packing and transporting inventory and office supplies, but today the logistics of moving an entire operation can be a tremendously complex undertaking with serious risks for a business.

Mission Critical Moves are typically relocations that involve whole businesses or business units that are operational 24/7. Such moves demand careful consideration for planning and execution to protect critical business units from disruption, which could have disastrous implications for the business.

The opportunity to do more

A relocation can represent a good opportunity to tackle the implementation of other corporate goals at the same time.

As a result, the scope of works can include:

- reorganisation of the business units involved
- change in business processes and procedures e.g. communication, command and control
- technology refresh
- general upgrade of accommodation facilities
- upgrade of operational support contracts and service providers
- upgrade of operational support procedures
- job descriptions, recruitment, training needs reassessment and training delivery
- cultural aspects associated with people behaviour
- occupational health and safety
- employment relations matters
- deployment of upgraded IT&T systems to support new functionalities

While synergies may be achieved by expanding the scope, careful assessment is essential to ensure that project risks are thoroughly managed. Caravel therefore conducts a detailed analysis of the requirements with the client to determine the Scope of Works prior to initiating any work.

Maintaining uninterrupted operation and securing data is of paramount importance for business units that operate in a live environment

Caravel's planning process for Mission Critical Moves is invaluable for the successful relocation of any business that has e-commerce capability or relies on transmission or receipt of data that could be disrupted.

Considering affected business units

Seemingly straightforward relocations can easily run into trouble when individual business units are not adequately considered in the planning process.

As outlined earlier, Operational Control Rooms, Customer Contact Centres or Service Management Centres are indispensable to the business and their uninterrupted operation must be safeguarded at all times.

Data Centres and Foreign Exchange Dealing Rooms are similarly critical and should receive the same level of attention in case of change through relocations.

Data centres

The core function of data centres and data warehouses is to ensure and maintain the integrity of an organisation's electronic information. It goes without saying that any disruption or loss of data due to a poorly planned move can have dire consequences for a business.

Foreign exchange dealing rooms

Dealing rooms are quintessential business units that live and breathe in a live environment. Any disruption to operations as a result of a move can be catastrophic to the business, its stakeholders and even the wider economy.

Relocating without regrets

As project management specialists in large, complex multi-disciplined projects, Caravel will manage your mission critical move with careful attention to all necessary aspects to ensure that the scope appropriately addresses all risk factors.

Core areas that will be addressed include:

- accommodation space procurement including lease rental negotiation and interior design
- office equipment, furniture, files
- office desktop systems such as computers, telephones and fax machines
- computer systems, servers, IT networks and telecommunication cabling and transmission plant
- structural building services, power, air-conditioning, security, fire and wet area requirements for kitchens/common rooms, toilets/showers
- change management considerations including HR, employment relations, occupational safety and health, training and cultural change aspects
- transition management with staff communication and logistics management
- business continuity and disaster recovery
- Process changes driven by change of location or systems

In addition, Caravel will liaise with your suppliers, such as your interior design company and outsourcers, to ensure that all agreed business requirements are addressed.

Computer models help bring the proposed facility to life and allow fine-tuning during the planning and design phase.



Our implementation capability

Uninterrupted operation, protection of data and security of processes are among the fundamental imperatives of operational management centres. Caravel therefore painstakingly addresses the many specialist subject matter areas and any interdependencies to uncover and manage risks that can jeopardise business-as-usual operations.

Specialist areas that will significantly influence the success of your project are related to the business, the processes, core network system technologies, operational support systems and people.

The business

Business aspects are typically addressed by the business consultant. Specialist areas include:

- supply chain and logistics management strategy
- maintenance and asset management systems
- business cases and benefits matrices and benefits realisation processes
- inbound and outbound call centers
- organisational structure and operation
- location, locality, access for staff and availability of skilled staff (recognising shift and 24 hour access needs)
- business continuity and disaster recovery

The processes

Caravel recognises that Operational Management Centres operate within a complex mesh of processes. Even subtle changes can potentially expose the operation to significant risks.

Processes include:

- business processes and how they affect the people
- skills based routing
- security
- business continuity planning/disaster recovery and how they affect people

Core system and environmental technologies

Operational management centres are heavily technology dependent. In this environment, a solid understanding of the broad range of technologies is absolutely invaluable. It promotes decisions that make the most of available technology while also supporting the overall success of the project.

Technologies include:

- predictive dialing
- natural speech recognition systems
- automated attendants, ACDQ's and displays
- work flow and imaging systems including facsimile and document scanning technology involving optical character and handwriting recognition systems
- call recording and monitoring
- systems integration
- network and Local IVR
- load balancing and call blocking between centres
- ergonomics (workstations, lighting, acoustics, headsets, seating, etc)

Operational support systems

Interactive elements of the operational support system can have a great impact on the effectiveness of processes. Operational Management Centres support many varied operational support systems. The effectiveness of the centre is often dependent on the level of integration and the skill level that is necessary for the operation.

Relevant system factors include:

- management tools and how they are used
- supplier scheduling and management systems.
- grade of service at individual, team & centre levels

The people

Caravel understands that people can be reluctant to adapt to a changing environment. It is therefore critical that the 'soft' factors are adequately addressed. People factors include:

- job descriptions and appropriate roles, responsibilities and remuneration
- recruitment (skill requirements – voice, knowledge, personality, etc)
- performance reporting & management against various KPI measures (reward, recognition, consequence of good/bad performance)
- call handling, call reluctance
- support staff training and speech improvement & motivation
- health & safety, OSH, ergonomics and human factor considerations
- effective communication of change
- cultural issues to enhance the feeling of worth for people involved in change

Caravel has the necessary specialist subject matter expertise in all these business areas and represents the wise choice for your project by ensuring timeliness and certainty of result while allowing your operational staff to concentrate on business-as-usual duties.

Your best interests at heart

Managing projects from start to finish means that Caravel will liaise with all suppliers such as interior design companies and technology providers, outsourcers and all subject matter experts as required.

Operating with a truly independent status, Caravel has no alliances or vested interest in other organisations. All project decisions are made on the basis that they support the best possible outcome for your business at the lowest cost.

With full visibility of all supplier information, clients are able to optimise the project and the business.

Methodology

As project management specialists, Caravel has the capability to meticulously address all critical aspects and deliver the best possible project result without adverse impact on your staff or business. Whether you're relocating, upgrading or building a new Operational Management Centre, Caravel will tailor the following methodology to meet your business need.

Typical Workstream	Fact Gathering	Requirements Analysis	Design	Procure	Build	Unit and Integration Testing	Support & Maintain	Operations
Business systems applications					▶		
HR & Change Management					▶		
Accommodation Procurement & Fit-out					▶		
Building Services					▶		
Telecommunications					▶		
IT and networks					▶		
Desk and Furniture					▶		
Transition to new location						Trials	Transition	
Defect closeout period							Support & Maintain	Defect Period

Please refer to Caravel's related brochures.



Caravel's range of project services

As a leader in projects, Caravel offers a range of specialised consultative and implementation services that span the entire life cycle of a project from inception, through implementation to final hand-over. Caravel adds value at every point along the way through project management services for:

Strategic Management of Projects

Core services include:

- Multi-project Management
- Organisational Resource Management
- Value Management
- Project Feasibility Studies
- Critical Chain Modelling
- Organisational Project Management Maturity Assessment

Project Assurance

Core services include:

- Project Governance
- Project Audits
- Project Health Checks
- Recovering Troubled Projects
- Project Risk Assessments
- Post-implementation Review
- Mentoring and Training

Project Planning and Execution

Change Implementation

Business Process Innovation

Business Partnering

Enterprise Management Solutions

Operational Management Centres

Core services include:

- Customer Contact Centres
- Service Management Centres
- Operational Control Centres
- Mission Critical Moves

Safety Critical Projects

Bid and Tender Management

Project Management Office (PMO)

Security Management Projects

Caravel can tailor a range of industry-specific services to suit the exact needs of your organisation.

Please refer to our website for your nearest
Caravel office: www.caravelgroup.com



Caravel
LEADING THE WAY IN PROJECTS

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