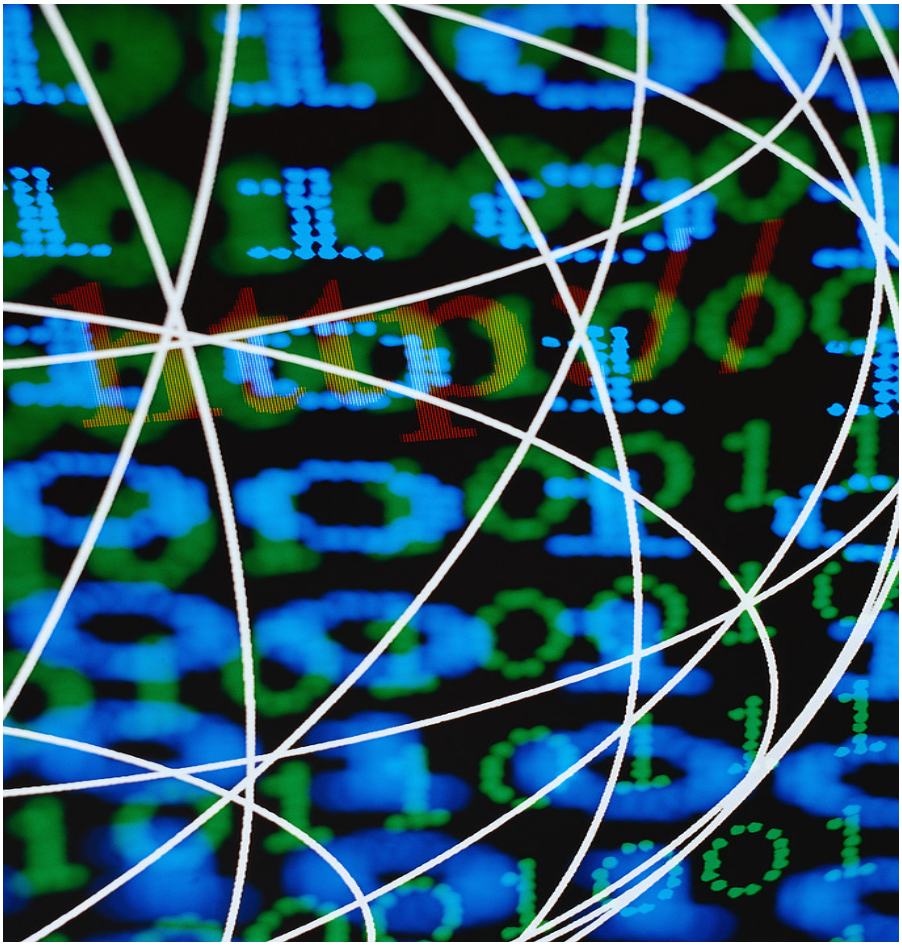
INFORMATION SERVICES STRATEGY



2008

CONTENTS

1. EXECUTIVE SUMMARY

The States of Jersey government is a broad, diverse organisation. It size belies its complexity, as it encompasses all the different UK government tiers from national down to local, with several domains, from revenue to social care, from public safety to justice and from transportation to environment.

An objective for the States is to reap the same benefits from IS as its business counterparts. To do this it will:

a) avoid reinventing the wheel across the organisation and work in concert wherever possible;

b) look beyond technology and focus on the usability and productivity aspects of projects and programmes; and

c) demonstrate effective cost/benefit, both in the initial case and in the final delivery.

The IS strategy of 2005 set the States on a journey from a fragmented, decentralised position towards a more consolidated team driving transformation. This current strategy builds on this, with an emphasis on cross enterprise service delivery and transformation projects, working with customers and stakeholders, rather than playing a back office role of managing assets and technology.

The IS team has capabilities, but lacks the overall capacity of strength in depth to tackle the current scale of work being requested across the organisation. Benchmarking against other government organisations indicates that the underlying level of investment is lower, but not considerably so, than average. Given headcount constraints particular services may need to be provided via third party suppliers.

The States spends in the order of £20m per annum on average on IS. Some 50% is spread across the States on a departmental basis and a management model is under development for controlling that spend, for prioritising its use, and for holding individual executives to account for business benefit delivery in the IS enabled projects.

Currently the ownership of individual applications and data rests with individual departments and internal teams. Focus will be applied to ensure that appropriate synergies and cost benefits are driven from the maintenance and exploitation of this important asset base, under appropriate security.

Key areas of focus for the next 18 – 24 months are:-

a) Online services and exploitation of Web technology

Governments across the world have invested a great deal of energy in building Customer Service portals that optimise access to information and online services. Internet technology has presented a completely new channel for servicing markets and customers. For many organisations this has transformed processes and created a truly customer centric delivery model, as well as removing cost from organisational processes.

The States is developing an overall delivery programme of work, cross-cutting across the entire organisation, with a central team responsible for the ongoing management and operation of Web services.

b) Leveraging the significant investment in the data and information held by individual departments

The States has invested a significant amount of resource and cost in collecting and maintaining data about its citizens in order to provide them with services. The historical approach has been for departments to collect and retain citizen information on a departmental basis.

Given the scale of both the States and the resident population there is a dis-economy of scale in the cost of collecting, maintaining, keeping secure, and servicing the customer on a departmental by departmental basis. The States has the opportunity to create an organisation where individual departments have responsibility for collecting data and information, and holding it securely, and making it available under strict conditions to other departments for prescribed/appropriate uses.

c) Business process improvement

New systems developed will have increased emphasis on usability and productivity. Many business problems are solved by an examination of policy, organisational shape, process redesign and appropriate training of staff. Technology plays an important but relatively small part in the overall equation. Information Services will ensure a consideration of all of the above aspects as part of its project.

d) Reshape the IS organisation

The emphasis will be on creating one function with clear roles, succession planning and career opportunities. Greater use will be made of "in Jersey" resources including third party suppliers and opportunities for young people. The team will also create a more explicit customer facing team for managing the day to day States customer IS issues. The processes and skills required for effective Project Management will be emphasised to ensure successful project delivery. There will be greater commitment to the use of service catalogues and service level agreements.

e) Investment in data centre infrastructure

The States will create two long term stable operational hubs managing its applications and data. This will enable the consolidation of specialist support and service resilience. New sites will be identified for these data centres.

2. INTRODUCTION

What is an IS Strategy and why do we need one?

> *"Information technology and business are becoming inextricably interwoven. I don't think anybody can talk meaningfully about one without the talking about the other."*

Bill Gates – from "Business @ The Speed of Thought", 2000

In many organisations today, the Information Services ("IS") Function has become an important enabler of the activities of that organisation. There has been a major shift in the use and dependency made of IS over the last 15-20 years. Even the last ten years, with the advent of the internet in common use and the deployment of mobile/remote computing, have seen a profound change in both work and personal use of IS. The expectations of the citizen about the way the Public Sector will make use of these services and support the citizen have grown in proportion to the experience they have of IS in their personal lives.

As with any profound change, the opportunities and benefits enabled by IS can outstrip an organisation's ability to fund fully, and to manage, all the potential initiatives that can arise. This leads to questions of overall governance and how accountability for change, for budgets, and delivery of benefits is discharged.

Like any other limited resource there are also competing demands for skills and attention from the IS Function. The priorities of individual Departments will sometimes conflict, or at least need alignment, to ensure that the organisation has a whole gets the maximum benefit and as much synergy as possible from its investment in IS. This is particularly important for the States of Jersey where, given the relatively modest scale of the customer base, the breadth and depth of IS underpinning the core Departmental functions is possibly unique.

The IS Strategy is therefore a statement of the principles which will guide future decisions and planning to ensure IS resources, services and systems are aligned, and remain aligned, to the wider vision, purpose and goals of the States of Jersey over a horizon of the next 3 to 5 years.

As such this IS strategy can be seen as a "signpost" indicating the current direction and rate of travel for the way the organisation will use IS. It sets out the risks and issues that must be managed on the journey. Of course, this direction is open to change. The use of IS should support the delivery of Government policy, not inhibit it.

The potential use of IS should also help to inform Government policy. On that basis we have included mechanisms within our proposals to ensure there are processes in place to manage and update the key elements of the strategy to meet the developing needs of the organisation. In addition we propose to include a formal review and reassessment of the IS Strategy as an integral part of the annual business planning process.

3. MISSION AND VISION

The Mission: What is an IS Function for?

There is the potential for the IS function to have different meanings to different people. This ranges from a relatively transactional perception of IS, e.g. delivering a PC to a desk, to strategic expectations, e.g. in reviewing information needs across departments and looking for synergies in systems and processes.

IS works in partnership with States Departments and agencies to drive and foster cultural and business change in Government, through the delivery of information, systems and technology services that are expert, high quality and affordable in the long term.

There are several fundamental aspects to the States IS function:

- **Senior level engagement and strategic partnering** in the planning of new systems to support departmental needs. This is to ensure that IS investment is driven by business need, that business decisions are taken in the full knowledge of cost, risk and what is technically possible, and that priorities and demands are aligned not conflicting.
- **End user support** by making sure that the systems and services work for the people who need to use them and that incidents and problems are resolved in a timely manner
- **Availability and reliability** of the underlying technical infrastructure such as the telephone and data networks.
  Developing and delivering cross-departmental strategies for the corporate use of information, processes and systems to maximise efficient and economic use of these assets, and aligning the activities of individual Departments where appropriate through the use of IS.
- **Overseeing the Corporate Programme of IS enabled projects** to ensure that initiatives, typically driven within Departments are meeting appropriate management standards and techniques.

The IS function in the States is a federated model with many individual Departments having locally based IS resource and budget to support particular systems and users, and to deliver particular programmes of work.

The IS team in the Chief Minister's Department (CMD) provides leadership in developing and driving a government-wide IS strategy which defines standards, governance and a technical architecture that ensures appropriate security and resilience of government systems and enables Departments to deliver services to their customers.

The Director of IS acts as Head of Profession for the IS professionals across States Departments, as well as overseeing the total investment in IS for the States and the contractual relationships with third parties. The Director should ensure an appropriate framework of quality control.

As part of the public sector there is always the onus to provide demonstrable value for money services in enabling the States of Jersey to achieve its objectives. As such the function is not seen as a "free good". The underlying running costs for the function as a whole will be subject to benchmarking, and any new project will be considered in terms of a fully funded "total cost of investment" which includes ongoing running costs and replacement values.

The Vision: What will Information Services look like over the next few years?

Key changes over the next twelve months will be an IS emphasis on improved communication with, and education of, the customer base. Increased use will be made of third party services, preferably locally based, to augment and support in-house resources. This will be supported by procurement and supplier management processes. Operationally the emphasis will be on continuing to meet existing service levels. Some incremental change in services will take place.

A project management framework for prioritisation and quality control of projects will be introduced, with attention on clear business benefits, the cost/risk of delivery and key benefits.

The underlying organisational structure of IS in the States will be refined in line with the current "Skills for the information Age" models being adopted in the UK Government. The balance of resources within the function, taking workload demanded, skills required and skills available will be reviewed. Emphasis will be placed on developing more career opportunity and progression for staff across the function, with clearer expectations of job roles. Work will start on establishing IS as a profession with its own culture, as has been developed for Finance and HR. A proposed structure is set out in Section 5.

The next three years time will see increased delivery of services and information "on line" reflecting a greater use of web technology to collect and disseminate information across the States and to the residents of Jersey. The strategy for leveraging data and systems across Departments to deliver more effective and efficient customer service will have been developed and will be being delivered.

There will be improved customer satisfaction with IS across the States as result of focussed Customer Service initiatives. There will be an established operating model for the IS function, including how IS and the Business works together to identify opportunities. The Project Management framework will be well established and used routinely

Pressures on use of IS resources (both people & money) are likely to be compounded as competition with the Finance Sector for the finite IS resources in Jersey becomes stronger. Increased staff morale should come through the development of new skills and the opportunities from the new projects. Skills gaps will be supported through the use of third parties and graduate training schemes, and limited resources will be concentrated on the priority projects and core value added activities. More work will be undertaken in conjunction with third party specialists.

The technical infrastructure will have been through major refreshment, in particular the Data Centres that host the business systems will have been refurbished and renewed.

In five years time the States IS function will be an agile, flexible organisation with a high mix of skills. Members of the team will be able to play several roles. The function will be seen as aligned to business needs and driven by customer focus.

Data sharing will have facilitated consolidation of some business processes and functions across Departments. The internet will be a primary communication and interaction channel for the States, and will be closely aligned with States-wide Customer Service activity.

IS Operations will have moved into a "24 hours, seven days a week service" scenario as increased customer demand & working patterns lead to a requirement for "always available" services. This will have changed the underlying support models for the States, and the supply of information services will be based on the use and management of third party suppliers, and resources, to meet increased demand.

4. KEY BUSINESS DRIVERS

There are several key areas that IS must address in order to support the strategic direction of the States.

4.1 Support the States strategic decision making and the delivery of its strategy

IS needs to support and help Departments to deliver their business plans and strategies. This will be done through the business support group role as set out in the organisational structure (Section 4), and centrally by having an effective and supportive corporate Programme Management process in place. This will support Departmental projects and ensure all projects are managed well.

IS will consider States and Departmental strategies together in how it plans its activities to facilitate synergies and manage potential conflict. The IS Strategy will be updated annually in support of the States Business Plan and in support of the States Strategic Plan

4.2 "Putting the Customer at the Heart of what we do"

For Jersey residents and businesses this means working with Departments on the development of websites and the provision of online services and the "one-stop" customer services concept.

Internally, this means continuing to change the profile of the function from operationally focused towards end usability. We will review structure of the helpdesk service, i.e. how IS provides front line customer service

Project delivery processes will be reviewed and improved to ensure customers' needs regarding training and process analysis are met within the project rather than separately. We will undertake a customer satisfaction survey and seek to consistently meet Service Level Agreements.

4.3 Business as usual

The underlying function is to keep the core infrastructure of systems and communications technology available, to enable Departments to serve their customers, and maintain user confidence in the ability of IS to do so.

We will work to ensure resilience is designed into our operations and will provide core system availability within our SLA Targets

4.4 Staff and Resources

Availability of skills is the key limiting factor in successful delivery. The States has a broad spread of expertise but the demand outstrips the supply for these skills. In a small, relatively geographically separate community access to more skills will come at a premium. We will promote internal development of staff to address resource constraints and develop a sourcing strategy to augment shortages by use of third parties. Particular attention will be paid to supporting local supply markets and promoting Jersey training schemes to grow the supply of skilled IS resource.

Use will be made of a skills "audit" process to identify skills and competencies gaps across the broader States IS community. This will encourage and facilitate training and development of our staff.

4.5 Financial Management

IS costs across the States need to be visible and transparent so that investment in Information Services can be decided and managed on a macro basis, not just Department by Department. This will enable more effective prioritisation of projects. All IS enabled or supported projects need business cases prepared on a full cost basis, and projects that do not meet particular financial criteria will be discounted. IS will work within budget constraints and financial directions to support the business and inform the budgeting and business planning process.

4.6. Health New Directions

The Integrated Care Record ("ICR") Programme is a central plank of the New Directions Health Care Strategy. All IS enabled projects within the programme will need to be managed under an agreed framework with appropriate quality assurance carried out. We will work in partnership with Health to ensure the programme is effectively executed and that a viable technical infrastructure is in place to support the solution.

4.7 Political Process

IS needs a flexible prioritisation process in place to support the demands of the political process. IS will also endeavour to support preparation of the Strategic plan by suggesting how delivery of objectives may be supported by information technology. We will proactively communicate IS Strategy to States Members and relevant groups e.g. Council of Minister's, scrutiny, Corporate Management Board (CMB) etc.

4.8 Technology changes

The States needs well researched technology strategies. These will be based principally on tried and tested technologies with proven benefits and acceptable risks of delivery. IS will review and monitor the available technology to provide solutions to business requirement e.g. mobile computing.

An underlying technical "architecture" and road map for introduction will ensure technology changes are planned and managed through appropriate controls.

5. ORGANISATIONAL STRUCTURE

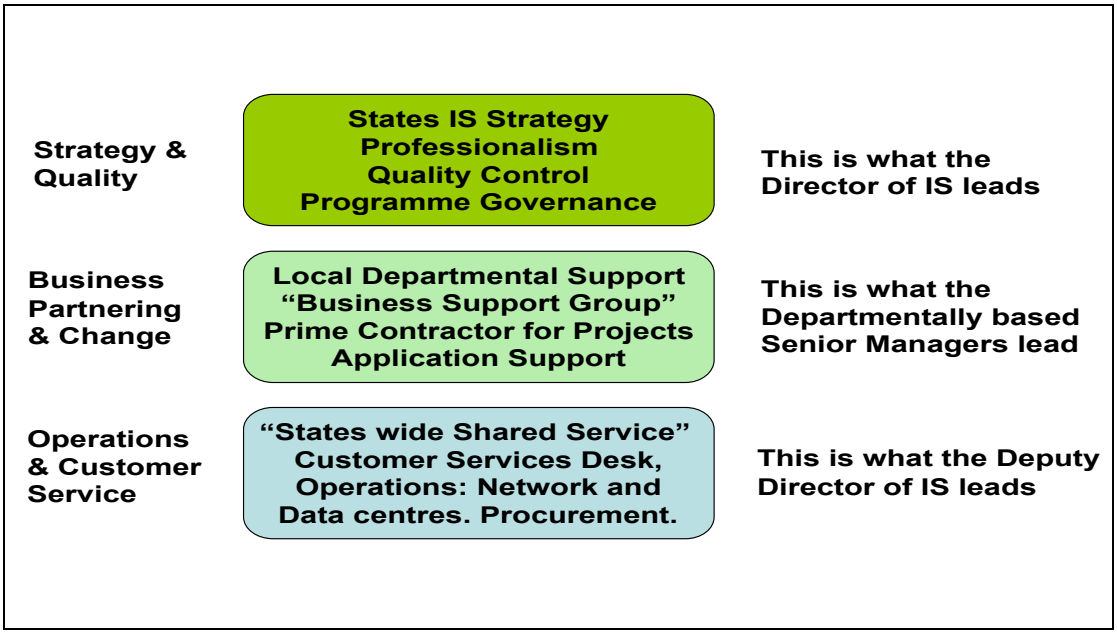
Setting the shape of the IS function for the States of Jersey is a complex challenge. The States' government is a broad, diverse organisation and encompasses all the different UK government tiers from national down to local, from revenue to social care, from public safety to justice and from transportation to environment. Different departmental pressures lead to different patterns of business. The governance orientation of IS needs to reflect both the national and the departmental pressures, and the IS patterns of business should reflect those of the departments.

The key drivers for the shape of the IS function are to:

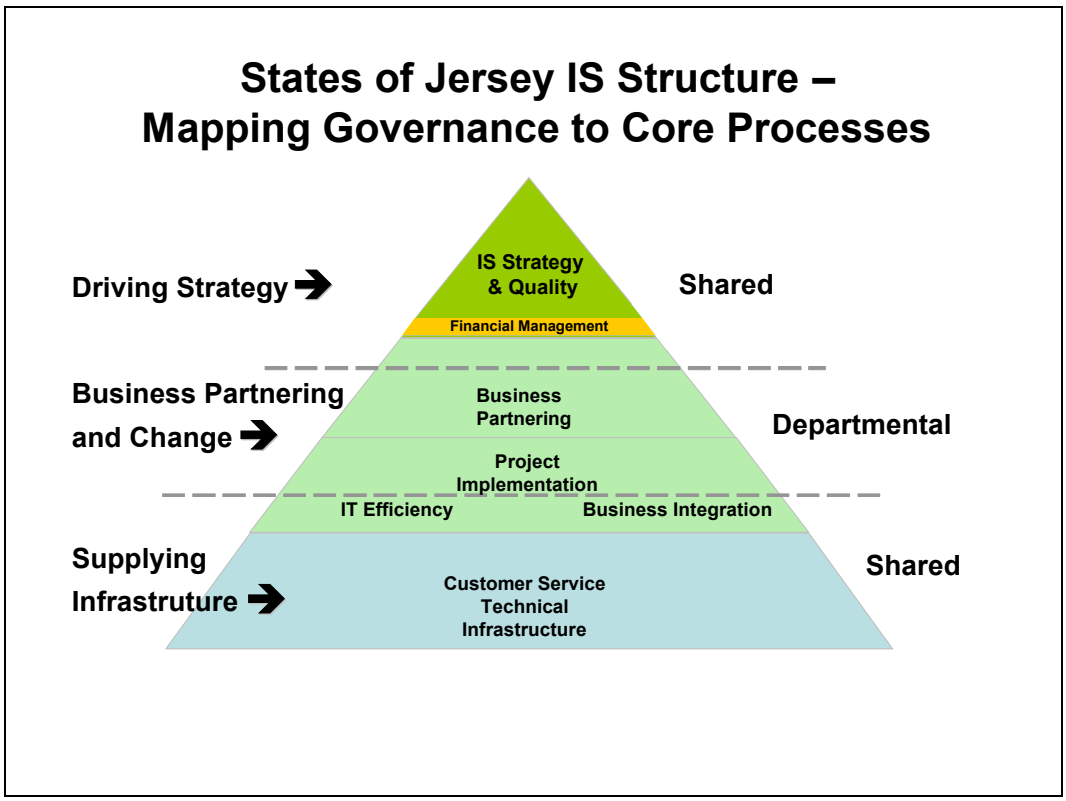
- Enable the States to leverage synergies.
- Support new departmental models and changes.
- Reduce duplication to cut costs.
- Introduce standardisation to reduce complexity.
- Pinpoint accountabilities for delivery.

The orientation of the IS function seeks to balance the pressures for the States wide integration with the pressures for local departmental responsiveness. There is effectively a continuum ranging from the centralised through to very decentralised. At the centralised end of the spectrum all assets and capabilities would be held in one department. This would maximum synergies, and provide a consistent product delivery and customer experience. The local departmental model provides complete departmental self sufficiency. Under this model one forgoes any synergies and emphasises strong local basis of expertise and local autonomy. The States was in a localised model until some three years ago. The direction of travel has been towards a "federated" position. This centralises strategic assets such as the data centre but decentralises other departmental assets (such as local applications). This enables an emphasis on States wide efficiency, flexibility and learning. It also maximises the synergies that should be possible in an organisation the size of the States. It also facilitates appropriate attention on local departmental issues.

Under the federated structure the IS function can be viewed as consisting of three distinct pieces:



In a highly centralised function all three of these macro processes would be centralised. In a local departmental model all processes would be local to individual departments. Under the federated model the strategy and quality processes are lead from the Chief Minister's Department but determined in a shared model with key departmental representatives contributing to the strategic process. The business partnering and change process is conducted at the departmental level and accountability for successful delivery sits with the local IS team for the Department. The supply of infrastructure and operations is led centrally, but as with strategy is managed in a shared environment with the involvement and contributions from departmental representatives.

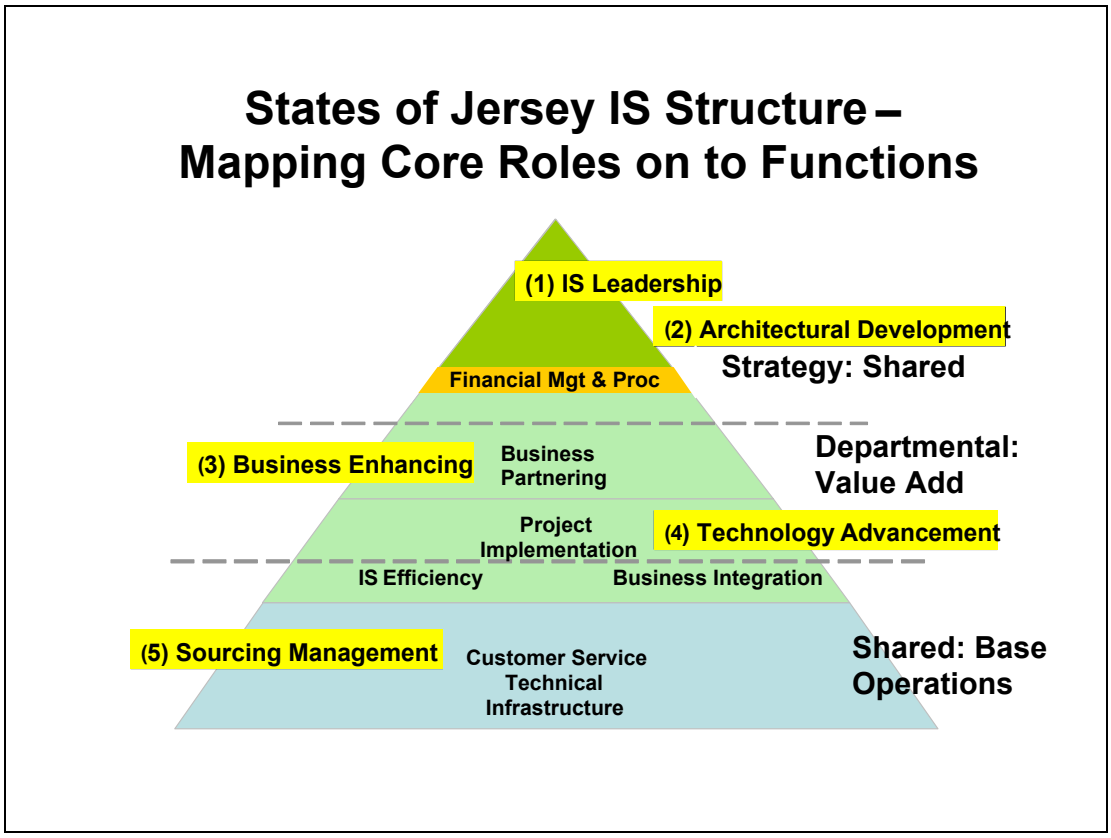


This model enables certain activities to remain embedded in the departments, valuing particular local differences and business imperatives. It also enables certain core functions that are common across the States to be sourced in the most effective way with economies of scale direct to external supply.

There are five key roles that are critical for all IS organisations and which should be retained in-house regardless of sourcing strategy:

1. **IT Leadership** includes vision, the fusion of IS and business strategy and managing IS resources.
2. **Architectural Development** creates the blueprint for business-driven technical design. This role is crucial in providing a stable and flexible foundation for intra- and inter- organization working, without setting the organization in electronic concrete.
3. **Business Enhancement** is the IS demand side. It includes business process analysis and design, project management and the management of relationships with users. It is critical to the successful exploitation of IS by the organisation.
4. **Technology Advancement** involves tracking technological change and development to determine the applicability and relevance of specific solutions within the overall architectural blueprint.
5. **Sourcing Management** includes the management and development of relationships with services providers. The supply-side role is increasingly important as a greater proportion of IS spending is with external service suppliers.

Under the federated model IS Leadership, Architectural Development, and Sourcing Management will be undertaken centrally. The business enhancement and technology advancement will be managed at a departmental level with support from the IS centre and the IS community and fellow departments. The IS Strategy recognises these key roles and the need to ensure this core capability in-house. The IS Strategy also recognises that in a number of areas this core capability needs strengthening and this will be addressed.



In overall terms the trend is for the IS function to be strengthening its central control, having moved from a local departmental model to a mixed or federated position over the last three years. However it is likely that the governance orientation for the function will remain federated, i.e. shared for the foreseeable future and that the leadership of the three “macro processes”, strategy and quality, business partnering and delivery of change, and the supply of infrastructure services will continue to operate in the shared service/local departmental orientations described.

6. GOVERNANCE – Control over IS

There are several boards that oversee the activities of the IS function in the States:

States Programme Board
This board is the main sponsor of IS in the States. It meets on a quarterly basis and is chaired by the Greffier. The purpose of the Board is to review IS strategy, review the capital and revenue proposals for IS prior to the States Business Plan, review/consider priorities where resources are limited or where there is conflict, and to monitor progress, at a high level and on an exception basis, of the overall programme of projects. This board consists of senior executives drawn from across the States and makes recommendations to the CMB.

IS Policies and Standards Board
This is chaired by a member of the IS Senior Management Team. The key purpose is to ensure that appropriate IS strategy, supporting policies and standards are in place to promote efficient and effective delivery of government services and value for money. The board meets on a quarterly basis. The board is designed to enable strategies, policies and standards to reflect the business need, and deflect in accordance with changes in business need.

Security Policy Group
This board is chaired by the Director of Services, Judicial Greffe. The aim of the board is to make sure that government information is fully secure when privacy and confidentiality are appropriate. It is also to make sure that the integrity and availability of government information is maintained at the appropriate level. The board will monitor the effectiveness and clarity of the information security policy and recommend improvements. The board provides bi-annual reports on security issues to the CMB, which also approves the corporate Information Security Policy.

In reporting terms, the Director of Information Services is directly accountable to the Chief Executive of the States.

The IS function holds regular monthly meetings at a strategic, operational, and project level. The strategic meetings are chaired by the Director of IS and attended by representatives for all of the business support group areas and the corporate functions. In addition the HR business partner and Finance Director are present. The agenda covers IS strategy, progress on business plan deliverables, staffing, financial position, service performance and risk.

7. FUNDING

Funding for an IS function is a challenge in many organisations because Information Services is usually perceived as a department rather than a cross-cutting function. As such it is subject to usual departmental budget pressures, which are typically downward. In fact, IS use is usually increasing in all organisations because the volume of projects, driven by benefits to the business, incur greater IS involvement in delivering an overall net benefit to the business.

For a new system to be delivered there are additional licensing, training, support and maintenance costs which must be found. These may be modest relative to the overall savings made in the business context, nonetheless they have to be budgeted for and found within the IS cost envelope. Similarly, increased use of IS, for example traffic across the network, will result in a demand for increased capacity, in order to maintain or improve the speed of performance and this will result in further cost increases, albeit justified by the benefit to the business.

Within the States there is an identified team within the Chief Minister's Department which carries much of the associated budget for the IS function. In practice this particular team budget represents approximately 50% of the total States' spend on IS. Without seeking to consolidate the overall IS function expenditure further, the Director of IS will have oversight of the total IS functional spend across the States. This will enable "best value" decisions to be taken from the point of view of the States' wider priorities rather than on a Department by Department basis. The overall spend profile will also be used to benchmark the States corporately against UK government comparators.

The principal change in cost profile for the IS function arises from new projects. New projects will be controlled by use of Financial Directions, States Business Planning and the business case process to ensure that all projects are fully funded. In other words, sponsoring departments will have to build in the cost of running, as well as building, new systems or services. Business cases will be subject to validation through the States' Programme Board process. New projects will therefore have to fully fund the impact of infrastructure additions and increases in support and maintenance. This may necessitate transfer of budget from a department to the central IS budget.

Regardless of where the funding is available to undertake IS enabled project work or initiatives, each project will still need to be prioritised against States-wide priorities and needs and against the limiting factor of skilled resource within the States itself.

The nature of IS projects is often such that costs will fall within a range (often at the higher end of that range) and benefits often fall towards the low end. Such benefit cases will need to be compelling, with a significant net benefit accruing to ensure that there is sufficient contingency to account for variances in ambitious benefit projections. Where projects are deemed of highest priority, they may need to account for a cost premium in order to take the first call on specialised resources. This would also enable specialised resources to be brought in if necessary.

The funding timeframe revolves around the States' Business Plan. It is expected that all Departmental IS-enabled projects would be endorsed by the States' Programme Board before the States' Business Plan is put together so that there is clarity, upon approval by the members of the Business Plan, as to which projects are identified and costed into the new Business Plan year. Projects that fail to get explicit inclusion in the States' Business Plan, and the endorsement of the States' Programme Board, will typically have to wait until the next Business Plan year. They will only be accelerated under exceptional circumstances.

8. FINANCIAL PROFILE

The States spend £20m per year on IT.

Running costs, i.e. to maintain systems and applications already in existence, are approximately £15m. The largest running costs reside in ISD (£7m), Education (£2m), Income Tax (£1m) Social Security (£1m) and Health (£1m).

Approximately 40% (£5m) of the annual spend is incurred on development projects and project management. Key projects for the next period are:

- Health Integrated Care Records (£12,000,000)
- Corporate Web Strategy (£3,500,000)
- Corporate Property Management System (£400,000)
- Migration Control System (£400,000)

A profile of the States' IT spend for the next 6 years in detailed below:

	2008	2009	2010	2011	2012	2013	Average
Departmental Running Costs	12,461,466	12,461,466	12,461,466	12,461,466	12,461,466	12,461,466	
Infrastructure Maintenance	2,096,000	3,534,000	1,834,000	3,434,000	1,104,000	4,104,000	
Total Baseline Running Costs	**14,557,466**	**15,995,466**	**14,295,466**	**15,895,466**	**13,565,466**	**16,565,466**	**15,145,799**
Development Projects	4,661,400	8,561,400	8,411,400	2,161,400	2,161,400	3,661,400	4,936,400
Total States IS Spend	**19,218,866**	**24,556,866**	**22,706,866**	**18,056,866**	**15,726,866**	**20,226,866**	**20,082,199**

The States' 2007 IT spend was recently benchmarked by the National Computer Centre against nine UK Public Sector Bodies. The results indicate that local spend is below the average of these UK authorities:

Total Spending as Percentage of Turnover:

States of Jersey	3.84%
Average of UK authorities	4.16%

Total Spending per End-user:

States of Jersey	£4,055
Average of UK authorities	£4,787

This level of spend can be deemed to be even lower relatively in that the States of Jersey pay rates that are acknowledged to be above the UK average. The adjustment for this would reduce the States of Jersey figures. It is also the case that the States of Jersey government is a broader, more diverse organisation than any UK public sector body. Its size belies its complexity as it encompasses all the different UK government tiers from national down to local, with several domains, from revenue to social care, from public safety to justice and from transportation to environment.

9. KEY PROJECT AREAS

Key project areas

The delivery of business benefit through IS enabled projects is led on a departmental basis and is the accountability of the Project Executive. The focus in the IS Corporate projects team is to ensure projects and programmes are delivered to high standards. Corporate project team resources are allocated only to key corporate projects and to ensuring the good governance and quality control of corporate and departmental projects. Key project areas are:

Web development strategy

The States of Jersey vision for public services, that the customer is at the heart of what we do, requires services be more customer-focused, streamlined, accessible and efficient. Delivery of information and services over the Internet is a key element of that vision and the Organisation Development Board has agreed a Web strategy for achieving it. Web-based delivery offers very significant benefits in terms of improving the quality and accessibility of customer services and information, but also drives down the cost per transaction to an extent which could save the States several million pounds per annum.

However, the States of Jersey internet site, when measured alongside other comparable sites, falls amongst the lowest 20% of UK local authority websites, and is behind those of Guernsey, Malta and Singapore.

Redesign and development of the States Internet and Intranet to deliver excellent customer services, together with the replacement of the underlying technologies, will be a key programme for 2008 and 2009, requiring significant IS resources and effective programme management and governance. This will be achieved through setting up a web programme team to deliver the programme, with resources for the ongoing management of the web, as well as an appropriate programme organisation structure.

This programme brings together other key areas for the IS Department. Services to be delivered online will require business processes to be reviewed to ensure that they are both customer focused and streamlines. IS resources will play a key role in facilitating business process improvement across the organisation and will ensure that processes are optimised and consistent.

In addition, successful delivery of the web programme requires the States to review and streamline the way that data is held and used within the organisation by ensuring that, while individual departments have responsibility for collecting data and information and holding it securely, it is made available under strict conditions to other departments where appropriate. A programme of work to identify and map key data, information and applications will be delivered.

Migration Control system

In June 2005, the States approved new mechanisms and policies to monitor and regulate migration in a fair and transparent manner. This project will bring together disparate processes and systems to enable licenses to be issued to businesses defining the number of people they can employ, and linking this to the ability of those employees to access local housing. By controlling access to employment and housing – and by recording accurately the details of all residents on a Population Register – migration can be regulated and accurate population statistics maintained to plan future services.

This project will develop and implement to applications required to deliver the migration legislation, policies and procedures. A Population Register based on the current Social Security database will be developed as part of the Migration Control system will allow the employment and housing status of individuals to be monitored to allow a balance between economic growth and demand on the Island's resources in the future.

Integrated Health Care Records

The Integrated Care Record ("ICR") Programme is a central plank of the New Directions Health Care Strategy and is an ambitious programme to replace all current systems and patient databases with an integrated set of applications that share the same patient data. The sheer scale and complexity of this programme introduces a high level of risk and all IS enabled projects within the programme will require good governance to ensure that they are delivered with the appropriate quality controls. IS and Health will work in partnership to ensure the effective delivery of the programme and the technical solution.

Data Centre

Data centres represent key resources for the States of Jersey and this project addresses both the short term and longer term requirements for safe and secure environments to house the infrastructure upon which all States information and systems are held.

In addition to refurbishing the current centre at Cyril Le Marquand House, a new facility will be identified in conjunction with Property Holdings and developed to ensure that the States has two high qualities but geographically separate facilities.

10. INFORMATION TECHNOLOGY ARCHITECTURE

The States of Jersey Information Technology Architecture (ITA) means both the design of States information systems and their intended operation (the concept) as well as the hardware and software which the States actually procures to execute the concept and deliver its services (the reality).

The States ITA is made up of a series of technology layers, a "stack" of components that encompasses all elements of technology from the hardware that drives the communication networks all the way up to the delivery of services to the citizens and public that the States of Jersey serve. In its simplest form, the technology architecture stack is as shown to the right: each layer relies on all the layers below it and, like any complex machine; the delivery of end services relies on all the components working correctly and in harmony.

Although commonly shown as a column, the complexity and effort involved in creating and managing effective technology architecture more closely resembles an iceberg with customer service and the user experience being the pinnacle above the waterline: as with most essential utilities, most people never see the underwater complexity at first-hand.

The ultimate foundations of any technology architecture are the communications networks that connect computers to each other and allow users to connect to the information that they need. Sitting on top of these communication networks are the computers that hold and serve up that information (hence their generic label as "servers"); these machines and the software that they run combine to form the IT infrastructure. This conceptual layer provides familiar services such as access control (logon username and password), e-mail, document storage and printing and database storage and management: all services that benefit from economies of scale and generally work most efficiently when centralised and consolidated.

Of these services, database storage and management is perhaps the most important of all since it is the raw data held in these databases that supports and enables much of the work of the States of Jersey. Generally referred to as the States "information layer", this raw material of government is the foundation on which the applications in day-to-day use in departments rely.

The vast majority of this data is held and managed using Microsoft's SQL Server database product and indeed, Microsoft SQL Server is the preferred product for all significant databases in the States. Where the solutions to specific requirements preclude the use of SQL Server (e.g. the Jersey Land and Property Index) then Oracle is an alternative database technology but one which is generally only used as part of a complete solution rather than as a database of choice.

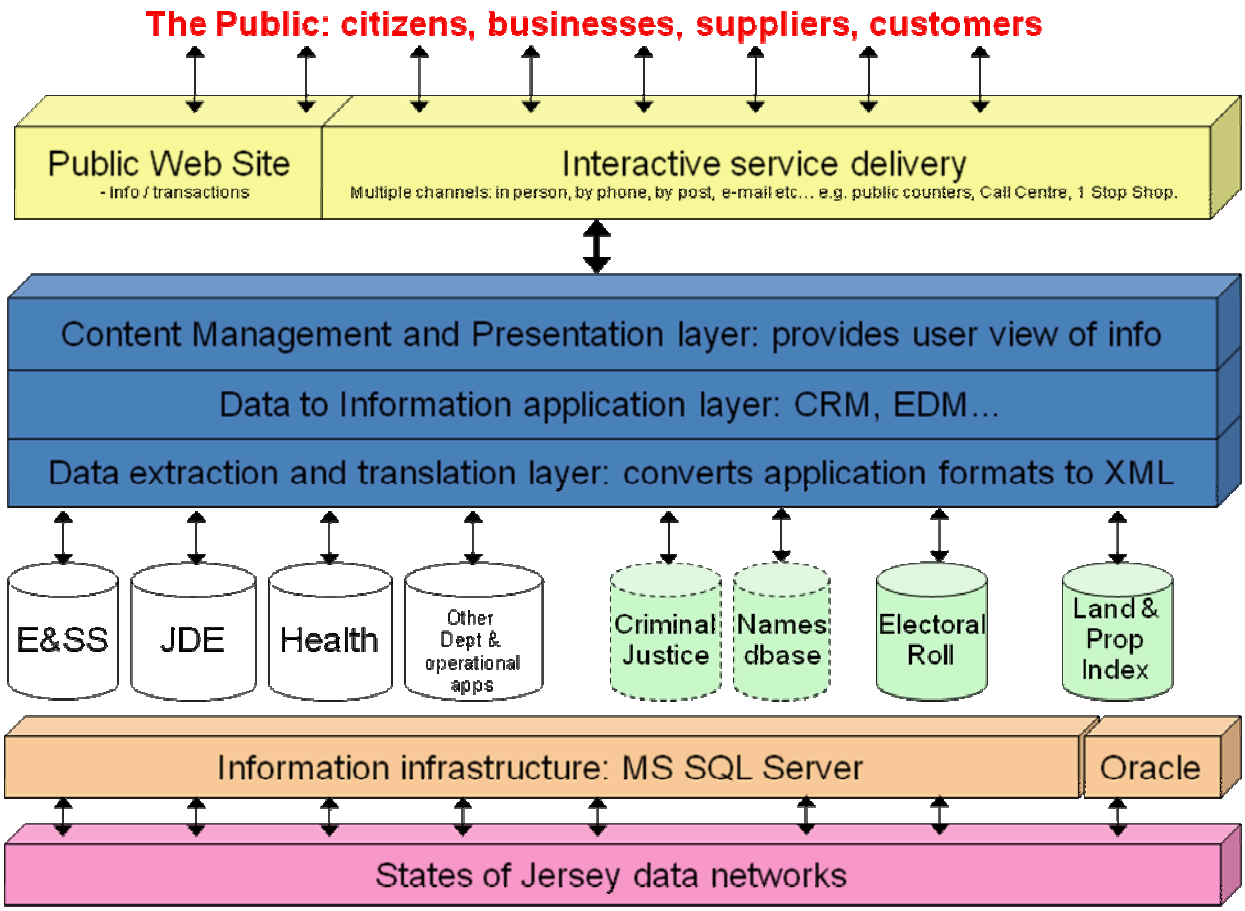
Using the iceberg analogy, this tier represents the bottom 50% of the iceberg as it encompasses many servers performing a large number of different roles that all knit together to form a useful whole. In order to ensure reliability, considerable time and effort is spent on system design and administration to eliminate single points of failure or provide redundancy and resilience where this is not possible.

Daily system backups are performed at this level and the tapes that hold each backup are then safely stored away from the servers themselves so that a single disaster cannot destroy both the original and the backup copies of the information.

Conceptually, the next layer up the stack on the way to service delivery are the Line of Business (LoB) applications that most departments rely upon for their day to day operations and service provision: these applications and the data that they hold are discussed in more detail below.

Finally, the top layer of the architectural design is the delivery of information and services to the user, be they a member of staff accessing an internal system in the performance of their duties or a member of the public accessing government information through a States of Jersey website.

How these various layers operate and interact is shown in more detail in the diagram below:



This diagram illustrates the practical implementation of the States IT architecture concepts as discussed above. In particular, the double-headed black arrows show that the flow of data and information is a two way process: existing information flows up the stack to support service delivery whilst new or changed information flows back down the stack to update the relevant systems or databases (and this downward flow is an order of magnitude more difficult than aggregating and summarising data *up* the stack).

The two foundation layers of the network and infrastructure support several hundred line of business applications of all shapes and sizes, from small but vital databases used by only one or two people up to large and complex systems regularly used by hundreds of people such as the JD Edwards corporate finance and enterprise resource planning (ERP) system or the healthcare systems.

These line of business applications can be broadly divided into two types: those shown in white on the left of the diagram are the traditional line of business applications usually purchased by a department for a specific purpose. They are typically highly proprietary, complex and based on an all-inclusive design that makes little or no provision for using external data or sharing data with other systems.

Those in green on the right hand side are typically much newer applications acquired in the last five years and follow a radically different and modern web-oriented, data sharing approach. For example, the Electoral Roll application used by Island Parishes does not hold multiple and duplicate address details; instead it simply stores a numeric pointer to the Jersey Land and Property Index (JLPI), maintained by the Planning and Environment department, and looks up the full address details from there as required. This means that significant address changes (e.g. changing the name of a road) only require a single change in the JLPI for all systems that use it to be automatically updated.

In turn, this means that such systems are generally less complex as each system does not need to a) hold its own list addresses or b) include the mechanisms to reconcile those lists with other systems or make manual changes when required. This data centred approach to application design where data is re-used rather than merely duplicated is a key tenet of modern information technology and part of the States information technology architecture moving forward.

Interestingly, such has been the success of this approach for Island addresses that a similar approach is now being proposed for customer contact details: after all, why re-capture the same basic name and address information for States customers in every department when a single common list could be shared. This common Names database is one of the key strands in the public consultation around the proposed new migration control laws and systems and one which has the potential to significantly change the way the IT architecture is built, once the primary databases of names and properties are in place.

Whilst these developments are still at an early stage of development, it is likely that they will feature more heavily in future revisions of this Strategy document and for this reason it is shown on the diagram above as a dotted cylinder: it is a system that doesn't exist today but in all likelihood will in the near future.

The other dotted cylinder represents a fully joined up criminal justice system linking the various departments and agencies involved in the administration of criminal justice: Police, Courts, Prison, Probation etc. Whilst there is no single system in place in Jersey today, this has been achieved in other jurisdictions and so it is highly likely that a solution will be found to meet Jersey's requirements in the not too distant future.

There are indeed parallels between a new justice system and a new healthcare system in that both will need to accommodate significant numbers of users from different disciplines and with different perspectives handling potentially very sensitive information securely and reliably on a case by case basis. Whilst those parallels should not be taken too far, a recognition of the *commonality* of requirements amongst linked but distinct groups of users rather than a focus on the differences in their requirements is driving new approaches to technology and systems design which highlight the need for technical architectures to be both robust and flexible in order to deliver the best result.

Whilst many departmental line of business applications meet the needs of their particular users quite happily, the provision of joined-up multi-disciplinary customer service channels which allow a customer to conduct several simple or even complex cross-departmental transactions simply and easily requires a level of application and data sharing that is rare today. Rather than create such integration by making lots of costly changes to otherwise quite acceptable applications, the modern solution to this problem is to add what is known as a "middleware" layer to the IT architecture.

The "middleware" label stems from the fact that this layer often acts as an intermediary between different systems or between multiple systems and users. Indeed, one of the most common applications of middleware is to generate modern-looking hybrid applications for users where data from a number of different but related applications is combined so seamlessly that the user is unaware of the joins.

Such an approach not only provides a much easier and more efficient way of carrying out a process than requiring the same user to connect to the multiple back-end applications individually and enter the necessary data in each but also means that future changes in those same back-end applications are hidden from the user completely, to the extent that one of more back-end systems could be removed completely so long as the function that they carried out is maintained in the middleware or some other application.

This middleware layer is shown in blue on the diagram above and comprises three key features:

1. servers and software whose purpose is to make the information and processes locked away in traditional applications more open and readily available to other applications. This involves a central program understanding the format and rules of an application and then being able to re-write that content into a standard format that any other application can also understand: the de facto data standard for such translation is something known as XML (XML = an acronym from extensible Mark-up Language – essentially an agreed way of storing raw data together with a description of that data in a format that other computers can understand).

2. the next step is to convert this raw, machine-friendly but human-hostile XML data into meaningful information by placing it in a recognisable *context*. This can be accomplished in a number of ways since modern middleware solutions can check and modify data during translation to allow new mini-applications to be created by effectively re-using parts of existing applications; alternatively other entire applications can take the XML data and make it meaningful.

   In the diagram above, an example would be a customer relationship management (CRM) program combining the data from a number of different back-end applications running in different departments and presenting it to a case manager as a report.

3. once raw machine data has been converted in meaningful information, the final step on the diagram is for the middleware layer to gather that information together and present it in a useful manner to the user, bearing in mind that user may have a variety of devices on which the information could be displayed (e.g. a standard desktop PC, a web browser over the Internet or even a mobile phone screen).

Middleware is a significant topic in its own right and represents the middle 30% of the conceptual technology iceberg with the top 20% being the piece that most users actually see and use directly: application screens, e-mail messages, web pages, Microsoft Word documents, Microsoft PowerPoint presentations etc. It is the effective combination of these three parts that provides a useful and valuable technology solution.

The precise details of the products employed in building the States IT Architecture is beyond the scope of this summary but this information is available on the States of Jersey Intranet at http://itsec/tech_arch/tech_arch_summary.asp and a sample summary is shown in the diagram below:

States of Jersey IT Architecture

Blue = apps we already have ***Green = apps we don't have***

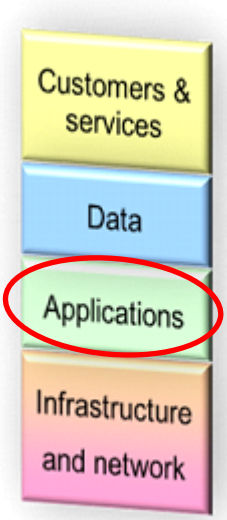
As at March 2008

To summarise, the key elements of the States of Jersey approach to its Information Technology Architecture are that:

- **flexibility** needs to be built-in to accommodate future changes in business requirements and technology (e.g. a service-oriented architectural approach)
- **appropriate security, resilience and disaster recovery** should be embedded at each level and in each application
- **ease of use and integration** will become priority selection criteria for new systems and applications

In common with the business world, Microsoft products form the core of our infrastructure and will be the preferred choice. Whilst we will consider alternatives on their merits, this will usually be to fill niche requirements and not where there is already an equivalent Microsoft product in deployment.

11. APPLICATIONS PORTFOLIO



The delivery of Government services relies on information: who the customer is, what the service is the process by which it is delivered. Information in modern government is the *combination* of applications and data: applications are simply the tools used by business processes to collect and hold data and applications and data are very tightly entwined.

Applications in the States of Jersey are managed on a department by department basis and support and maintenance is generally decentralised, as is the funding. Historically, Departments have had a high degree of autonomy in selecting, sourcing and delivering information systems, both software and hardware, whilst IS has provided the underlying technology infrastructure and reacted to the often short-term demands of the Departments by providing pragmatic "point solutions".

However, application license fees and development costs are a significant part of the overall States expenditure on IS and the return on this investment needs to be maximised. The overall portfolio of business systems or applications is currently being reviewed and, in future, IS will maintain a strategic overview of the States applications portfolio.

As the States of Jersey continues to modernise, so the design requirements of applications are changing to include issues such as ease of use, flexibility of design and implementation and the ability to work with other systems in an easy and seamless manner whilst retaining appropriate built-in security measures.

This will mean an increased focus on simplicity by ensuring that systems are simple to use, with ease of use as a key selection criteria; that systems are easy to deploy and integrate tightly with our existing infrastructure to make support as simple as possible; that the business processes the applications support are well designed, well tested and fit for purpose; that users receive sufficient training to use applications well and have a mechanism for providing input from real-world use that will lead to further improvements in the future.

It will also mean looking at the re-use of systems across Departments and converging where possible onto a single system for a given function or process. Whilst the States of Jersey is a diverse organisation with a very diverse set of requirements, fewer applications means lower support and maintenance overheads, especially when annual maintenance costs for most applications typically run at 20% of the total system cost.

Where opportunities exist to reduce the number of applications through consolidation of requirements or functions then these will be pursued. This will support the roll out of major corporate systems such as Enterprise Resource Planning (ERP) for finance, HR and procurement functions, and Geographical Information Systems (GIS) for map-based requirements.

It will also mean looking at the overall application lifecycle of development, maintenance and replacement. While local departmental ownership and funding may not change, the IS function will be taking a cross-departmental view of application support and maintenance to ensure that States applications fit together well: applications that do not fit well will be reviewed.

IS will drive the prioritising of competing demands from Departments and focus on the management of risk where systems and devices conflict with base infrastructure, core technologies or security considerations.

The States has long relied on internationally recognised industry technical standards and systems for the storage of data and this practice will continue to reap the benefits of industry support and maintain access to the most cost-effective local and international skills.

IS will continue to track developments in technology that impact application design and deployment and act as a central point of expertise for Departments in their thinking about and selection of applications.

12. DATA ARCHITECTURE

The data and information held by the States is a corporate asset: the States has incurred cost in its collection, and in its secure maintenance and management. The information/data sharing strategy developed will underpin economy, efficiency and effectiveness in the States' collection and use of data.

Principal areas are envisaged around the use of data for managing the overall resources of the States (e.g. HR, asset and financial data) and delivering an improved service to the residents of Jersey (e.g. not endlessly recapturing the same basic information whenever service is required). Since data is held by systems, a high level data map showing what kind of data is held in which systems in which departments will be developed to assist the States in meeting demands for information in the most efficient manner possible. There are a large number of applications in use, many of which hold unique data which is only relevant to a small number of users; others, however, are duplicating data held elsewhere.

Attention will be paid to the accuracy of data in States systems (e.g. the correctness and timeliness of information) rather than just volumes of data held: this may in turn lead to review of the business processes that collect and process data since process efficiency naturally leads to data efficiency. With regard to personal data, Information Services will assume corporate responsibility for all interaction with the Data Protection Commissioner regarding data, data protection and Data Protection legislation. By acting as the central point of contact for the States, Information Services will be able to identify and manage the issues raised by departments and engage in a more holistic conversation with both sides.

Finally, information about data, known as "metadata", will become increasingly important in the future to help users quickly find the nuggets they seek amongst the mountain of data held by the organisation. By enabling computer systems to identify and "make sense" of the data that they hold, so they can begin to actively link disparate pieces of information together to help and support decision-making by those who rely upon them.

13. SECURITY

The security of States systems and data is a matter of paramount importance, especially since security in this context encompasses the three key requirements for confidentiality, integrity and availability, without which any information system is worthless.

Whilst security is frequently discussed as a particular issue, in reality this is not accurate: the States of Jersey approach is that security is a consideration and property of information that is embedded at all levels in all systems and processes.

The States also recognises that there is no "one size fits all" solution to security and that different systems and data will have different security requirements. As a result, the States operates a data classification regime which aligns with recognised international practice and by which all systems and data are categorised. This means that the security controls and resources are applied appropriately to balance the needs and risks that are associated with any application and data. The importance of getting this balance right is reflected in the membership of the States of Jersey Information Security Policy Group which comprises predominantly senior business managers from around the organisation, assisted and supported by senior IS technical and security specialists, and whose remit extends beyond the confines of mere technology.

Confidentiality, integrity and availability are so important to the successful operation of the organisation that each is a key metric in the consideration of any new project and a driving force in the design and implementation of the processes surrounding access to, and management of, information. All new systems require *express* authorisation from Information Services before they can be put live. The mechanism for managing this is the New Systems Connection Checklist which needs to be completed for every system in the States before the system is made available to users for live running. As the States' reliance on technology to operate continues to grow, so Departments are embracing the business-driven issues of disaster recovery and business continuity. Whilst an area in which technology clearly plays a part, the vast majority of questions and issues around a Disaster Recovery (DR) or Business Continuity (BC) plan are

purely business driven and Departmental plans need to be constantly reviewed, updated, and tested as business requirements change.

14. MANAGEMENT OF RISK

The Director of Information Services is the owner of the risk strategy for IS in the States and responsible for ensuring that Officers of the States follow the strategy and discharge their accountabilities for risk management. The Director of IS takes responsibility for deciding how IS related risks are to be managed in the States.

The CMD Director of Finance is responsible for the maintenance of this strategy and is the owner of the Risk Register. The FD will be responsible for ensuring that it is regularly updated by all senior managers, and driving the IS function towards compliance with all mandatory requirements of Treasury Financial Direction 2.7. A mandatory requirement of Financial Direction 2.7 is to review the risk management strategy, and to test its effectiveness.

The risk register is a key document for risk management. It records in one place all risks actively being managed by IS, and gives a snapshot in time view of their status, including probability, impact, planned actions, target action dates, last updated dates, and risk appetites.

The majority of these risks can be aggregated into two emerging and interlinking themes:

i) **Processes:** The IS function not having definitive processes to control and manage workflows and the expectations/delivery/accountability of all key stakeholders

ii) **Resources:** IS not having the resources necessary to meet all of organisation's demands nor having robust staff development programmes to maximise the benefit of the existing resources.

Risk owners are identified for each of the key risks and have to develop risk mitigations for each. Continuous and formal review of the list of risks, whether there are any new or emerging risks and all outstanding risk mitigations, are part of the IS senior management process.

To comply with best practice and support a risk-based internal audit approach, the identified risks will be used to inform the Departmental Internal Audit Plan and, as the crystallisation of these risks may prevent the achievement of Departmental objectives, they will be fully integrated into the service/business planning process.

Three key risk themes have emerged from the analysis of risk:-

1. Over-demand for IS resources
2. Inability to maximise the use of IS resources
3. Project failure

The mitigations for these risks have been principally combined into the key objectives set out for 2008 in the Chief Minister's Departmental Business Plan. This Business Plan is shown in Appendix 1.

APPENDIX 1: Core Objectives for 2008

The following objectives form the basis of the IS business plan for 2008. These support the vision and key business drivers set out in Sections X & Y.

INFORMATION SERVICES

1.1 Staff: 73.4

1.2 Budget: £6,719,500

Capital: £2,886,000

ISD Activities	Staff (FTE)	Revenue Cost in 2008	Capital Spend in 2008
Senior Level Engagement and Strategic Planning	5	443,900	-
End User Support	20	1,314,000	-
Availability and Reliability of Technology	20	3,258,300	1,136,000
Developing and Delivering Cross Departmental Strategies	4	268,700	-
Overseeing the Corporate Programme of IS Enabled Projects	4	419,600	-
Project Delivery	21	1,015,000	1,150,000
	74	6,719,500	2,286,000

Capital Spend in 2008

Availability and Reliability of Technology	
Server upgrade and consolidation	1,000,000
Finance System Hardware	136,000
	1,136,000

Project Delivery	
Document Management	400,000
Records Management	100,000
Asset Management interfaces	300,000
Corporate Population System	350,000
	1,150,000

1. BP Ref	2. Objective/Action	3. Key Performance Indicators	4. Target	5. Imp Year	6. Key Risk	7. Key Objective*	8. Comment
113	Develop Strategy : Develop an IS Strategy to support Strategic Plan 2009 – 2014	▪ Strategy reviewed and approved by Chief Officers.	▪ Qtr2 2008	2008	Business requirements and commitment of individual departments conflict	1, 2(v)	
114	Successful IS Enabled Projects : Develop project management framework for States Projects to guide successful delivery	▪ States Programme Board role established and operational. ▪ PM framework agreed and will include full project costs including any ongoing support costs. ▪ % application across projects.	▪ Qtr2 2008 ▪ Qtr3 2008 ▪ 75% by Qtr4	2008	Department objectives and timeframes conflict with framework.	2	
115	Put the Customer at the Heart of what IS do: Reshape IS function to emphasise Customer Services and Business Partnering roles.	▪ Roles designed and resourced ▪ Undertake a customer survey to understand current needs and perceptions of service ▪ Statistics and feedback to measure performance	▪ Qtr2 2008 ▪ Q1 2008 ▪ Imp Qtr4 2008	2008 On-going	Not enough involvement from stakeholders. Available capacity to undertake new roles; Lack of capacity or capability to address findings of survey	2(v)	
116	Customer at the Heart of what IS Do : Support the business to develop & deliver an “Online services strategy”	▪ Strategy developed. ▪ Implementation plans developed and communicated with all IS Stakeholders	▪ Q1 2008	2008 & on-going	Business requirements not adequately defined.	2(v)	

1. BP Ref	2. Objective/Action	3. Key Performance Indicators	4. Target	5. Imp Year	6. Key Risk	7. *Key Objective	8. Comment
117	Deliver "Business as usual": Review availability targets for line of business applications	▪ % Applications reviewed with targets identified, current position assessed, and remedial plan (if applicable) in place ▪ % Applications with availability targets met	▪ 75% in 2008 ▪ 95% in 2009	2008	Funding levels do not support business need for certain system availability.	2(v)	
118	Deliver "Business as usual" : Review infrastructure designed for resilient and reliable support of line of business applications within SLA	▪ Resilience testing programme developed. ▪ Priority improvements programme identified ▪ Programme of improvements in progress.	▪ Q1 2008 ▪ Q2 2008 ▪ Q3 2008	2008 & on-going	Funding levels do not support infrastructure improvements to ensure availability required	2(v)	
119	Staff / Resources: Improve resource management to match capacity and capability with workload.	▪ Develop a sourcing strategy for all IS Services. ▪ Capacity requirements forecast	▪ Q2 2008	2008 & on-going	Finite skills on Island	7	
120	Staff / Resources : Carry out skills audit of staff to assess current capability and identify areas that Information Services need to address to deliver the new strategy.	▪ Skill audit completed ▪ Skills gaps and training plans developed	▪ Q1 2008	2008 & on-going	Skills required to deliver new strategy are not available on-island. Staffing policies do not accommodate certain roles.	7	

1. BP Ref	2. Objective/Action	3. Key Performance Indicators	4. Target	5. Imp Year	6. Key Risk	7. *Key Objective	8. Comment
121	Financial Management : Develop framework for monitoring whole IS expenditure across States	▪ Quarterly reporting of whole IS expenditure for IS Senior Management	▪ Q2 2008	2008	Information not available in Departmental accounts.	7	
122	Health New Directions: IS to play effective role in Health &SS ICR Programme.	▪ Effective programme team, design and plan in place	▪ Q1 2008	2008 & on-going	Capacity or capability available	2(v)	
123	Communication: Develop communication strategy to all stakeholders	▪ Strategy reviewed, approved and published by IS SMT	▪ Q1 2008	2008	Capacity or capability available		
124	Technology Change: Develop and publish a Technology roadmap so that timeframes for technology assessment and change for Jersey adoption are appropriate.	▪ Strategy reviewed, approved and published by IS SMT	▪ Q2 2008	2008	Does not reflect the business need i.e. too technology led.	2(v)	
125	Ongoing Business Support: Ensure that the infrastructure upon which other systems depend is operational	▪ All corporate systems available ▪ Single government website available	▪ Network available 98% of the time ▪ E-mail available 98% of the time ▪ File & print available 98% of the time EDM servers available 98% of the time	On-going	Limited skilled staff resources Date Centre limitations	2(v)	

1. BP Ref	2. Objective/Action	3. Key Performance Indicators ▪	4. Target ▪	5. Imp Year	6. Key Risk	7. *Key Objective	8. Comment
126	Ongoing Business Support: Ensure proactive planning and action is taken to provide sufficient bandwidth, business continuity, server and storage capacity	▪ Tested Business Continuity or Disaster Recovery plans in place for all corporate applications ▪ The CMD-IS Strategy ensures adequate infrastructure resource planning	▪ 100% of corporate servers covered by automated monitoring tools ▪ Peak usage of network to be less than 75% ▪ Developmen t of plan for DR	On-going	Failure of critical business systems resulting in permanent loss of data or significant impact on service delivery ICT infrastructure is not able to support new business projects	2(v)	
127	Ongoing Business Support: Ensure all support requests are logged, categorised and handled within agreed service levels (helpdesk and change requests)	▪ SMT to review quarterly reports from Helpdesk and address any bottlenecks or problem areas identified to improve service	▪ 98% of service calls resolved within service agreement targets	On-going	Limited skilled support staff unable to handle increased volume of work arising from implementation of new system	2(v)	
128	Specific Projects: Complete the replacement of the States telephone systems	▪ All planned departments transferred to new systems and contribution to corporate savings achieved	▪ Complete H&SS rollout by mid 2008	2008	Technical resilience issue not resolved Limited availability of staff to undertake rollout	2	

1. BP Ref	2. Objective/Action	3. Key Performance Indicators	4. Target	5. Imp Year	6. Key Risk	7. *Key Objective	8. Comment
129	Ongoing Business Support: Ensure ICT activity, procurement and usage within CMD-IS is performed in accordance with procedures within a controlled environment to minimise security failure and maximise usage	▪ A policy procedure/user awareness system is in place to help manage compliance with existing IT security policies and procedures	▪ All new staff undergo training and induction, existing staff are trained on operational aspects of all new systems implemented ▪ 100% of viruses stopped ▪ IS procurement complies with the latest industry and States' infrastructure standards ▪ IS contract mgt – for procurement of support is consolidated and managed by a member of SMT ▪ New legislation reviewed and assessed for IS & controls are identified where required	On-going	Lack of user awareness and focus on security issues Corporate information security procedures not in place or not followed leading to disruption or total loss of service Lack of resources in contract mgt leads to financial and legal exposure Failure to comply with key legislation or legal requirements, resulting in external censure, financial loss and damage to reputation	2(v)	

1. BP Ref	2. Objective/Action	3. Key Performance Indicators	4. Target	5. Imp Year	6. Key Risk	7. *Key Objective	8. Comment
130	Specific Projects: Implement systems to register companies for GST and levy the tax	▪ Systems available for tax collection to be made	▪ To meet States schedule (May 2008)	2008	Business requirements delayed and procurement longer than anticipated leaving less time for development	2	
131	Specific Projects: Refreshment and upgrading of corporate data centres	▪ Data Centres can underpin increased business requirements in terms of reliability and operational performance	▪ Specifications of new Data Centres (Q1 2008)	Q4 2009	Requirements of H&SS programme not finalised or there is insufficient capacity to delivery them Location of Data Centres is not agreed	2(v)	
132	Specific Projects: Design and development of system to support Migration Policy	▪ Database parameters designed ▪ Business processes agreed	▪ Design completed Q2 2008	2009		2	
133	Specific Projects: Consolidation of mapping and address matching systems to provide robust corporate data	▪ Accountabilities to Data Systems and technology clearly defined ▪ Delivery programme designed	▪ Agree design Q2 2008	2008		2	
134	Create a Business Continuity Plan for CMD	▪ Plan agreed and in place	▪ June 2008	2008		2	