

Best Value Review of ICT

Hypothesis 2 Report

Summary sheet

Hypothesis If we introduce an integrated business / information / ICT planning process and introduce business systems analyst roles within departments, we will meet business needs more closely.	
Summary of recommendations The review recommends that the ICT / IS planning processes are embedded within the business planning and service development processes being developed to produce the annual Best Value Performance Plan. The review further recommends that this process is supported by the establishment of staff who have responsibility for helping departments to determine their business process requirements and how they employ ICT / IS to meet their business needs (Business Systems Analysts). A structure is recommended for departmental IS functions.	
Service Benefits	Coherent planned ICT strategies which are based on quality information concerning political priorities, departmental needs, and is aligned with other cross-cutting corporate functional plans (such as asset management) to enhance the delivery of service objectives.
Estimated future costs / efficiencies	No financial efficiencies are anticipated in the ICT service. Some efficiency gains may be expected within services as ICT solutions are more aligned to the business needs. Estimated costs associated with the model are initial recruitment / training costs for BSA staff (£35,000) and implementation support (£45,000). All the above subject to skills audit
Current costs	Current costs arise from duplication of effort between departments and lost opportunities of co-ordination across departments.

<p>Risks</p>	<p>Minimal risk. Without commitment from senior management, the processes would be ineffective resulting in wasted staff and managerial time.</p> <p>Similarly, if the IS role is not utilised at all levels of planning from unit level to corporate level, it will not gain the credibility necessary to be effective.</p>
<p>Volumes</p>	<p>Assumption that costs of IT personnel freed from other departmental roles will be sufficient to provide BSA (departmental and corporate) staff. In reality we may need to undertake some recruitment.</p>
<p>Ease of Implementation</p>	<p>Relatively straightforward (process) although time and support is required to develop and communicate detail of structure.</p>
<p>Further information / work required</p>	<p>When the planning cycle for BVPP is determined, then details such as timescales, membership of groups, consultation with partner agencies can be drawn up for the strategic ICT planning processes.</p> <p>Identify where efficiency gains affect department staff. Draw up job specifications for IS functions. Carry out a skills audit among current ICT staff, recruitment and training.</p>

Report Author...Heather Russell
Working group team...Stuart Campbell, Mike Collier, Tracey Graham, Karen Noble

Report

Summary of Hypothesis

The challenge workshop identified a lack of integrated business planning / information planning and ICT planning mechanism. This concern was supported by evidence gathered in the first phase of the best value review from service managers, ICT staff and ICT managers. Recognising the increasing role of ICT in all aspects of the HCC's work, the disparate processes operating in different departments were considered to be ineffective in meeting the demands of HCC. A mechanism which enables a strategic view of ICT, as well as responding to the specific business cases of individual service units was sought (see diagram 1).

A need for staff who have a thorough understanding of both technology and the business was identified by the workshop. The need was described as being for people who could 'speak both languages' and translate between the two. Their main roles would be

- ❑ to work with services to determine information, transaction and communication requirements
- ❑ to bring awareness of technological capability to departments
- ❑ to provide a link between corporate ICT planning and service plans
- ❑ to assist departments in reviewing their ICT solutions

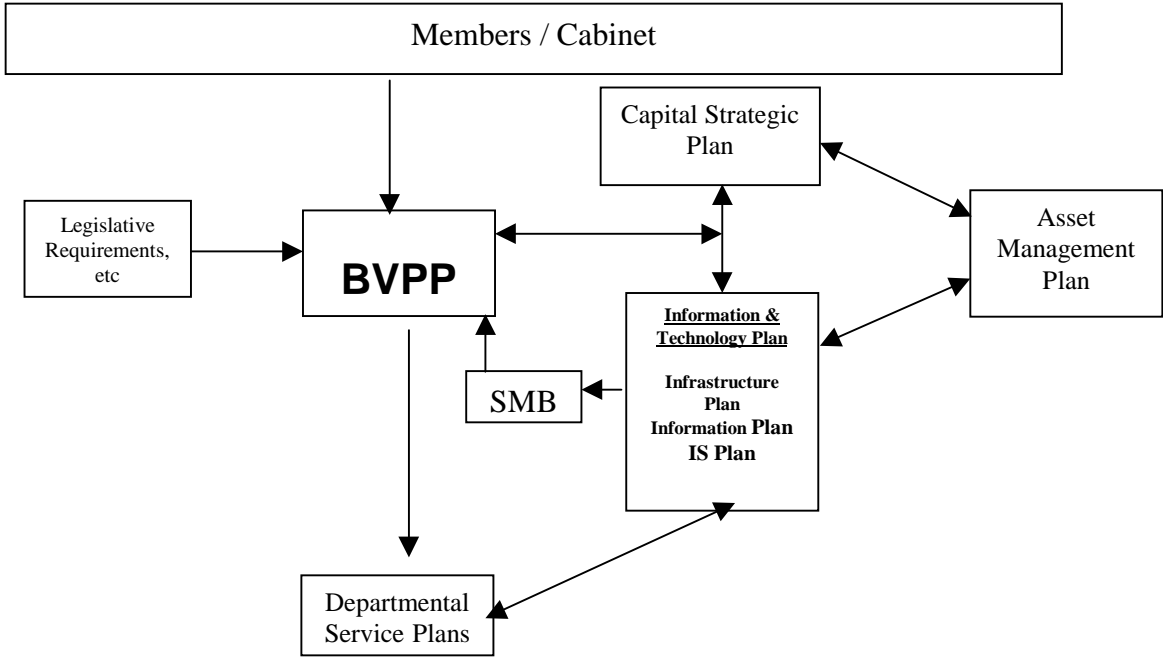


Diagram 1

The responsibility for producing the ICT Performance Plan rests with the Director of Community Information. The ICT Plan must take account of the strategic objectives of the Council via Member priorities and departmental business plans. It must inform and feed into other corporate functional groups such as asset management, human resources, and finances. It is important that there is close collaboration between these groups (see Hypothesis 3 for the implications of HCC's property portfolio on ICT and vice versa). ICT planning incorporates an iterative process for considering the needs of different functional groups. Aligning and balancing the business and corporate demands on ICT can not be taken by ICT management alone, but must be overseen by Senior Management Board (SMB). It is suggested that the Council develop a method for evaluating strategic business cases to guide the prioritisation processes for determining the Corporate Capital Strategy (see paper 'Capital Strategy 2000/1 Onwards' submitted to Policy Committee in July 2000).

Business systems analysts would work within the IS function of departments to promote ICT awareness within service planning, facilitating service managers and staff in developing their knowledge of technologies and the part technologies could fulfil in delivering service objectives. Within the planning process, BSAs would help translate the ICT strategic plan to workable service ICT solutions by assisting services work up business cases that are in alignment with strategic ICT plans. They would also act as a main communication channel between services and corporate ICT. In addition, they would have responsibility for assisting services in carrying out reviews of their ICT solutions against their business plans.

For cross departmental projects, working with partner organisations and linking and negotiating with other corporate strategic plans, a small team (3) of corporate BSAs need to be established. They would be based either within Corporate Information Systems Unit or within Corporate Services.

Approach taken

- ❑ The current processes within HCC were collated and studied through interviews and documentation where available.
- ❑ A literature search (internet, books and journals) was carried out to learn of current thinking. Sources are listed at the end of the paper.
- ❑ The experience of how other public service and private sector organisations carry out these functions was sought, and evaluated through interviews and a written questionnaire.
- ❑ Consultation took place with HCC key personnel working on other corporate agendas to ensure appropriate links (e.g. Anne Fisher for Best Value Performance Plan, Andrew Nightingale for Capital Strategic Plan, Stuart Campbell links with the Information strategy).

An exploration of other organisations' experience shows that Hertfordshire is not alone in lacking effective integrated business / information / ICT planning processes. The Gartner Group (Frick V 1999 'Alignment: A business issue, not an IS Issue') report that alignment of the strategic IS plan with business need is the issue most consistently cited by CIOs as their primary management challenge over the past few years. Frick goes on to argue that IT plans should not be separate from business plans, but (infrastructure apart) business plans should address technology issues as an integral element of an actionable plan. Some evidence exists

for the effectiveness of implementing this view in 'Interactive IT planning correlates to higher profit' (Rosser, 1996).

Of those responding to our survey, only Norfolk County Council presented an integrated model which they find effective in managing their ICT service. Their ICT services are wholly outsourced (with the exception of ISM staff) and their ICT strategic planning processes reflects this. As we do not currently expect to move towards such a model of externalisation, the model adopted by Norfolk may prove too bureaucratic for HCC at this present time. However, the Norfolk model offers some pointers for establishing structures for clear accountability. The Chief Officer with responsibility for ICT and Finance is herself joint funded by NCC and the contractors demonstrating the importance of ensuring links are made at the most senior level.

The literature search revealed that current thinking is to embed ICT planning within business planning, rather than setting up separate systems. One model that we considered to avoid separate ICT planning processes was to ensure that the whole workforce was fully aware of technology capability. We rejected this on the grounds that the regular training and updating required on such a scale would engender prohibitive costs.

Observations on current system

Currently, there is no standard process by which departments carry out their business planning. Departmental business plans may or may not address the information and communication technology needed to meet their objectives. Typically, ICT units are contacted as and when an IT need is identified. ICT staff are not necessarily consulted at an early stage in service planning.

There is no mechanism or process whereby a strategic view of the ICT requirements of HCC as a whole is formed which incorporates departmental objectives, cross cutting objectives, member objectives, legislative initiatives and partnership working. HCC is acknowledged as a leader in strategic working for the HertsConnect initiative. What is needed is to build on that experience and establish and embed process to enable cross-departmental working to flourish on an ongoing basis.

With the centralisation of the infrastructure and client management roles, opportunities have arisen to re-train some of the departmental ICT staff to develop IMS roles.

Social Services employ 8 staff as information management officers. They are from non-technical backgrounds and reimbursed on M1 salary scale. Their role is focussed on helping the service to determine its information needs.

The table below outlines the processes in the major departments.

	Corporate Services	Education	Environment	Social Services
<i>Information Strategy</i>	None	None	None – previous attempts made to write one.	None. Last strategy written in 1994/95.
<i>Information Planning Process</i>	<p>Most sections / depts carry out their own business planning processes. They call on CISG where they identify a need for information or IT solutions. Not formalised – no input from IS in initial stages.</p> <ul style="list-style-type: none"> • Corporate Finance have an integrated information/business planning process • Corporate Personnel have used CISG in conjunction with business planning, but not consistent. • Members Services have started to use CISG in planning processes. • Corporate Systems Group meets every two months to agree development plans e.g. for financial ledgers. All depts represented. 	<ol style="list-style-type: none"> 1. Objectives taken from Educational Development Plan 2. Email to all senior managers as part of Annual IT Unit Planning Process 3. Ad hoc requests from managers during year. 	<p>Ops Sub Board meet on a quarterly basis to consider proposals for information systems. (They meet weekly to discuss other issues.) They challenge the project lead and then prioritise in work programme.</p> <p>IS Development work programme is reviewed and modified as needed by NTU IS Development Manager.</p>	<p>Lead officer for project submits proposal to Information Management Board. IMB considers proposal, decides prioritisation against existing projects and allocates money and/or resources.</p>
<i>Prioritisation</i>	Individual sections / depts with occasionally competing / conflicting priorities.	High priority given to EDP objectives. Otherwise agreed between AD-Resources and Head of IT.	For each new project undertaken by NTU, one or more reasons from a list of approved justifications are assigned. Each reason has an associated value which are totalled to give a 'project score'. This score is then used to allocate an implementation priority of Very High, High or Moderate.	All projects are given a score according to two criteria – size of project and impact on department. Initially all information projects were given a score and ranked. Any new projects are then slotted into the list.

	Corporate Services	Education	Environment	Social Services
<i>User Involvement</i>	No evidence	No evidence	Membership of Ops Sub Board from all four parts of dept to bring wider perspective – but are senior manager, not front-line staff.	IMB has membership which ‘represents’ all sections of the dept, but these are senior managers, not front-line workers.
<i>Documentation</i>	No evidence	EDP and Annual IT Programme	IS Programme provides a short description of each project, specifies their staff resource requirements, their development duration and gives a rationale for the position each occupies within the work programme.	Quick Look Proposal Form summarises the objectives of project and attempts a basic cost-benefit analysis.
<i>Information Management Function</i>	Key areas of development/need are planned for on a project basis. Project teams are established to determine information requirements and steering groups are set up to oversee. Recently units have been encouraged to ‘adopt’ specific staff to manage the IS process e.g. two information officers have been appointed to work on asset management.	No one person responsible for information management within Education. From April 2001, Education will be part of Children, Schools & Families Service. The IT Unit and a new Management Information Unit will be managed by a Head of Management Information who will be responsible for information management.	A Computing Unit and an Information Unit have been combined as the result of a recent review to carry out the information management function.	Research & Information Unit works closely with users to specify information needs – translating business requirements into more technical forms. Computing Unit manage the development of and provide technical support and training for major systems

Potential changes / proposals

1. Develop and introduce a process for determining ICT solutions which delivers political objectives on an HCC corporate, service needs, and is aligned with other functional strategies within HCC e.g. asset management, capital strategic plans.
2. Introduce ICT / service development roles within departments. Such roles would assist services in determining their information, transaction and communication requirements. The IS function / Business analyst staff would be situated within departments to allow an in-depth understanding of the business. They would have responsibility for working up ICT requirements with the services, informing services of staff who know their business well. Business system analysts would help services work up ICT solutions and inform business managers of potential ICT solutions to assist them in delivering their objectives.

ICT planning processes

This model takes the Best Value Performance Plan as the primary planning process for the authority which is informed by Member priorities. Departmental Business Plans and corporate functional plans all address the objectives contained within the BVPP while concurrently attempt to align themselves with other business and functional plans. Alignment requires an iterative process of consultation between the services and functional groups as well as consulting with unit to strategic level. Partners and providers must also be consulted in this process. The BVPP is an annual plan, whereas ICT, Capital Strategic Plan, Asset Management and business plans need a longer term strategic view. The trend for ICT contracts is for increasingly longer terms. Any process adopted must also agree prioritisation criteria.

Business systems analysts or IMS roles

The Business analyst or IMS role is usually placed within a central IT unit. Tesco's placed their business analysts within the business departments for a time, but brought them back to the centre as they were becoming too established within departments. Each business analyst is assigned to a specific part of the business, but is located within the IT department.

Norfolk County Council, Newcastle City Council and Kent County Council all have centralised teams of IMS staff.

The review suggests a placing some business system analysts within departments and placing a small team at the centre within Strategy and Consultancy (a traded unit which is part of corporate services). There are strong reasons for suggesting this dual location structure.

Business systems analysts in departments

- HCC has devolved financial structures and devolved business planning processes. Departmentally based business systems analysts would be able to network more effectively and gain credibility of service managers, staff, financial managers, asset managers etc.

- Feedback from users (HEDRA user survey) suggests that users value ICT staff who understand their business.
- If some of the existing departmental IT staff have an aptitude for and interest in being re-deployed to this new role then their skills, departmental knowledge, experience and contacts could be retained. Opportunities for using existing IT staff are arising as efficiencies are realised through various actions. The implementation of the Cranfield report centralising infrastructure, centralising client management of contract (as highlighted in the HEDRA study), and the move from in-house system development to outsourcing developments and standardised packages all result in efficiencies and a reduction in departmental IT roles.
- Departmental IS/ BSAs would support departmental services with their business plans, bringing an ICT perspective, assisting them in identifying their information needs and the technology required to support those needs. They would also assist the department in integrating these plans into a departmental ICT plan (to submit to Assistant Directors with responsibility for ICT) and support the users in reviewing the effectiveness of the ICT solutions against their business need.

Business systems analysts within the corporate centre

- As the demand for this role within departments would fluctuate, basing business systems analysts within corporate services would allow them to be pulled into departments on a project demand-led basis. Strategy and Consultancy already operate on this basis and also carry out strategic work for the authority. Therefore it would be a straightforward process to introduce this function to the unit, possibly as designated IS resources.
- Corporately located BSAs would be best placed for working on major projects involving cross departmental working such as the CSF system or working with partnership agencies.
- Corporate BSAs would also have responsibility for supporting corporate ICT with the integration of ICT strategic plans with other functional strategic plans and departmental business plans.

We recommend that the departmental business system analysts are situated within departmental teams together with the remaining ICT functions. These include project management and sponsorship, client management, training on specific departmental systems and the systems development. The latter function is envisaged as an interim measure while the function is being run down. The other functions are beyond the scope of this hypothesis, but a detailed consideration of resource implications should be carried out.

We recommend that a small team of 3 corporate BSAs are situated within Strategy and Consultancy in Corporate Services.

ICT planning, Information Services and Business systems analysts / proposed structure

Community Information

Director of CI (Andrew Robertson) responsible for: -

ICT Infrastructure Group – provides common ICT infrastructure services to agreed standards / corporate SLA.

Corporate Information Systems – responsible for delivery of corporate wide information systems. Ensuring delivery of all service based solutions in agreement with corporate framework.

Director of Community Information to be responsible for the co-ordination of the production of the following strategies which should have a three year horizon and be updated / agreed by SMB annually: -

ICT Infrastructure Strategy
Information Systems Strategy
Information Management Strategy (currently being produced by Charlie Watson led task force: IMSG)

Corporate Services

Small team of business systems analysts situated within Strategy and Consultancy.

Departments

It is suggested that the following IS capability be built into departments: -

Information Management remit – in accordance with information management principles being established by current taskforce. Also to include strategy, systems (Web/digital, data services), information management.

Client Management for service specific contracts and corporate infrastructure SLA.

Business Analysis – to develop strategic thinking and work up business solutions.

Project Sponsor and Management – as identified in the Asset Management Best Value Review – see attached appendix 1.

Existing Specific Systems Development – to be run down as packaged solutions are introduced as per hypothesis 1. *Service specific systems training* to remain with departments to address specific needs – e.g. training on Children Schools and Families system.

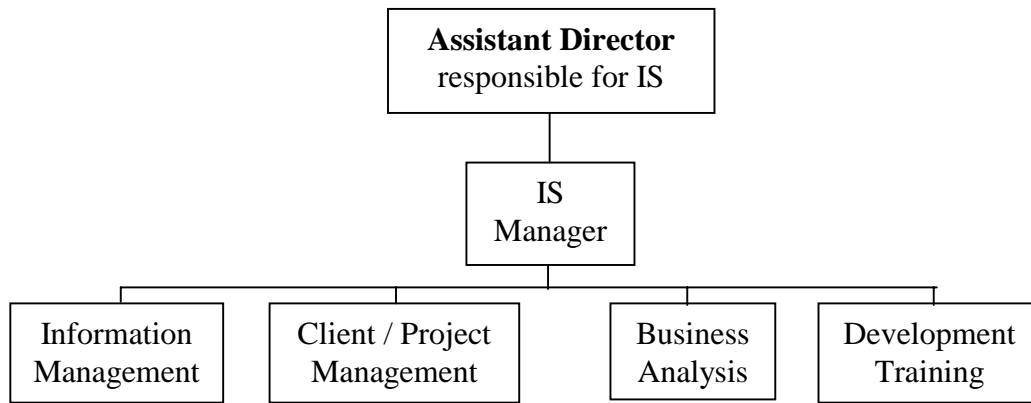


Diagram 2.

Departments to produce annual bids for ICT / IS to a common format based on a business benefits approach including post implementation reviews. Any proposed expenditure over £500 to be ratified by Assistant Directors with ICT remit. Any bids over £25,000 to be ratified by Director of Community Information (see High Level Decision Making Chart).

Departmental strategies and plans to support the above to be produced on an annual basis and progress reported to quarterly meeting of ADs with the IS remit. Annual / quarterly strategies / plans and reporting to be considered by SMB/Cabinet.

Suggested process for the plans / reporting listed above is attached as *diagram 3*.

Service benefits

1. Strategic ICT planning which enables close links with business and member objectives.
2. The opportunity to align ICT with other corporate functions (such as finances, asset management, human resources) to assist departments in meeting their objectives.
3. Greater clarity of ICT processes.
4. Through the introduction of a BSA role, departments would be better informed about technology options and arrive at solutions which better meet their business needs.

Current costs

Not applicable.

Estimated future costs / efficiencies

There are no quantifiable efficiencies associated with either of the two recommendations in this hypothesis. However, it is assumed that services would increase their efficiency and effectiveness if technology solutions match their needs more closely.

After an implementation phase, it is not anticipated that there would be additional costs associated with establishing business analysts (BSA role) in departments or corporate centre. Human resource efficiencies from the centralisation of the client management of contracts function, and the reduction of in-house system developments would release technical staff with knowledge and experience of the departmental business who could be redirected to the business analyst role.

Implementation costs

- ❑ Determining number and level of IS / BSA / business analyst staff required - 4 days.
- ❑ Audit of ICT staff competencies – 3 days work by Personnel Officer on M3.
- ❑ Without carrying out an audit of ICT staff competencies, a best guess figure of £1,000 per person for retraining for 30 staff is likely to be a generous estimation.
- ❑ Preparing new job descriptions – 3 days.
- ❑ Recruitment and Training costs £35,000.
- ❑ Implementation support for introducing new planning processes - preparing documentation and consultation - 2 – 3 weeks.
- ❑ Implementation support costs are likely to be in the region of £45,000.

TOTAL IMPLEMENTATION COSTS ESTIMATED AT £80,000 (estimate dependent on skills analysis)

Implementation issues

HCC needs to consider the sensitivities of ICT staff who will be asked to retrain in a different role and how to handle ICT staff whose roles may be phased out, but do not have the required skills or aptitude to perform the IS/ BSA function. Will also need to consider the relationship between the information managers from the Research unit in Social Services and any new BSA staff, unless these staff are encouraged to refocus their skills to include a broader technology remit.

The work of the information strategy task force which is due to report later in the autumn must also be considered alongside these proposals.

Potential risks

- ❑ It is important when the detail is worked out that the new process should not be so onerous and complicated that managers are tempted to circumvent the system.

- If the BSA role does not include people with sufficient seniority, they may not be included in the business planning cycle at an early stage or decisions may be taken at a higher level without ICT input.
- If the BSA roles do not have strong links with central ICT, they may become isolated (as evidenced by Kent and Tesco's). They could also lose their focus and fail to introduce information about new technology solutions to the business.

Volume information used

We have assumed that 30 BSA staff would be needed throughout HCC (excluding schools) This is an estimate based on the following information and final figures will be subject to a full skills audit:

Norfolk County Council has 18 BSA staff for the whole Council.

Social Services have a team of eight information managers for the department.

We assume that CSF will need a team of 10, other departments and corporate centre would have smaller teams.

It is further assumed that the salaries can be covered by reassigning existing ICT staff to new roles so no additional costs or efficiencies are expected.

Extra skills / training required

Business analyst role requires

- communication skills
- persuasive skills
- analytical skills
- negotiating skills
- facilitation skills
- presentation skills
- business process and analysis skills
- a broad knowledge of technologies

It is assumed that a certain proportion of current departmental IT staff already possess some of these skills. An audit would need to be carried out to ascertain which staff (or those whose roles will diminish with the changing structure and direction of ICT are most suitable for these posts. It was not appropriate for the Best Value review to carry out any further investigation of staff competencies as any change of role would need to be introduced and handled sensitively with affected staff. Wider analysis of other roles within the IS remit outlined above should also be included in this exercise.

Further information / work required

- Investigate the number and level of the IS / BSA staff needed to support the businesses in CSF, Environment, Corporate services, F&R and ACS.
- Analyse the volume of efficiencies gained from diminishing roles in departmental ICT staff.

- ❑ Audit the competencies of ICT staff (and IMS staff in Social Services).
- ❑ Recruit and train ICT staff where necessary.
- ❑ Communicate new roles and structures throughout HCC.

- ❑ Work up detail of ICT planning model to fit with BVPP planning cycle (when known) e.g. membership of planning group, time scales, iterative procedures for liaising with departments, consultation processes with partners etc.
- ❑ Prepare and publicise new procedures.

Recommendations

- ❑ It is recommended that the above models are adopted to integrate business / information and ICT planning and that ICT should be addressed in business plans at all levels. The service plan guidance being developed for implementation next Spring is an opportunity to ensure that ICT requirements are included in every service plan.

- ❑ IS roles should be introduced and located within departments and the corporate centre after detailed consideration of resources needed to perform recently revised ICT functions within departments. Current skills and expertise need to be mapped against these requirements and a staffing plan devised and implemented.

Diagram 3.

