

Guidelines

F o r I T M a n a g e m e n t



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Improving IT Service Delivery



Since 1966, the National Computing Centre (NCC) has been helping organisations to manage IT processes and systems development and equip people with the skills to ensure business effectiveness. We do this through a unique membership service that brings together professionals and experts to identify, create and disseminate knowledge and experience across the spectrum of IT issues.



Principia, National Computing Centre
Oxford House, Oxford Road
Manchester M1 7ED

NCC Guidelines

The National Computing Centre
Oxford House
Oxford Road
Manchester
M1 7ED

Website: www.ncc.co.uk

Tel: 0161 242 2121
Fax: 0161 242 2499

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About the Author

Dave Davies is a Principal Consultant with Xantus Consulting. He has thirty years' IT experience in a variety of roles within application development, technology services and service delivery.

Dave has worked with Xantus clients on implementing ITIL-based service processes and service improvement programmes. Prior to joining Xantus, Dave worked for one of the UK's leading retailers as Director of Computer Services responsible for all technology and service operations supporting some 10,000 IT users. Dave oversaw a number of major IT technical projects including technology migrations, consolidation exercises including a major data centre build and re-location.

About Xantus Consulting

Xantus is an independent consultancy dedicated to helping large organisations make effective decisions about their IT Systems and Infrastructure.

Our services are tailored to assist the CIO Organisation and address the complex challenges of today's IS and IT environment. Our strengths lie in advising clients on strategic and operational issues to enable the identification, sourcing and management of optimal technology solutions and services.

We offer wholly independent, trusted advice to leading enterprises including government organisations, 19 of the top 100 UK Companies and some of the world's most recognised brands.

We have extensive experience in infrastructure, service delivery, strategic sourcing, business case development, benchmarking, technical architecture and programme management. Our unique combination of industry knowledge and experience provides our clients with a wide range of specialist IT skills, and an unrivalled commitment to delivery and customer satisfaction.

1. Executive Summary

Most, if not all, IT organisations have service-related issues at one time or another. How the IT function manages these issues, or hopefully minimises or avoids them altogether, can make a real difference to an organisation. Service issues can have a variety of causes, including under investment, lack of management focus and poor change control. These issues will not resolve themselves and sustained effort will be needed to address the root causes. Outsourcing is a tempting option when service issues are prolonged, but often a better approach would be self-help, in the form of a Service Improvement Programme (SIP), to improve service and restore trust in the IT organisation. This does not exclude outsourcing at a later date, starting from an improved baseline.

A SIP will need to be well-led and executed, so select an inspirational leader who can implement cultural change as well as processes and tools. Sponsors will need to recognise that whilst there should be quick wins available, sustainable service improvement will take months or even years and so they should be realistic when setting targets and expectations. A SIP is unlikely to be self-funding within the IT budget alone and so CIO's will need the support of their business colleagues who must recognise the value of the service benefits that will be delivered. Indeed, you may need some specialist help along the way.

Great IT Service Management needs a combination of an overall framework, an integrated set of practical processes, a tool which supports both of these and well trained and motivated IT professionals to make it all work. A well run SIP should consider all of these areas carefully as a failure to address them in a holistic manner will certainly lead to wasted investment and little in the way of service improvement.

The IT Service Desk is critical to the delivery of great service. A well run Service Desk will resolve many issues up front and make the job of the rest of the IT organisation much easier. Invest wisely in your IT Service Desk and you will both improve service and reduce costs elsewhere.

Formalising the 'contract' between IT and its customers, in the form of a Service Catalogue, has many benefits including a better understanding of the level of service that can be supported, an improvement in focus on the relationship between cost and service and an understanding of how service is underpinned by third parties, or a quantification of the risk where it is not.

In summary, improving IT service can be a complex process and may take some time to deliver results. However, it will provide real business benefits if approached in the right way with the full support of the CIO and their customers.

2. Introduction

Today, more than ever, a business depends on its IT function to be responsive to its needs. In the past this usually centred on agility and responsiveness in providing new systems or changes to existing systems. Increasingly, service issues are playing a more important part in how IT is viewed by the rest of the organisation and crucially in how the organisation is viewed by its customers – indeed recent global research has highlighted that service improvement is (with cost cutting) a prime concern of CIOs.

Most, if not all, IT organisations have service-related issues at one time or another. For some they are transient or small-scale, for others they may be enduring and significantly impact on the overall business operations and, in the worst cases, impact both revenue and profit.

Service issues can arise for a variety of reasons such as:

- An under investment in the technology leading to obsolescence and difficulties in maintaining hardware or utilising the latest software facilities
- Lack of management focus due to changes in structure, business direction or ownership
- Poor change control across the IT environment, leading to a lack of stability

'Great IT Service Management needs a combination of an overall framework, an integrated set of practical processes, a tool which supports both of these and well trained and motivated IT professionals to make it all work'

Maintaining high levels of service is difficult, it's like trust – hard to gain and easy to lose. Furthermore, reducing service levels can be self-perpetuating, it can lead to a fall in morale and a loss of key staff resulting in a further reduction in service levels. The good news is that the solutions are not that difficult although, like most things, they do take time, money and effort. There are some quick wins but mostly the answers lie in:

- Making sure that the service mission is well understood by those directly and indirectly involved in service delivery – in other words instilling a service culture
- Aligning people, processes and technology to achieve that goal

In this way an environment can be created where success breeds success and service improvement is sustainable.

Today most IT functions are at least aware that best practice for service delivery involves treating the internal users of IT as 'customers'; customers who demand a certain quality of service and value for money. Whilst Chief Executives may be unhappy with IT that's too expensive or projects that don't get implemented on time, poor service will not only upset the executive; it can impact on every single person in the organisation who uses IT and ultimately on the organisation's true (external) customers.

Outsourcing has been used in IT for many years, ranging from selective outsourcing of non-value added functions such as hardware maintenance to full outsourcing. However, outsourcing should not be seen as the solution to service problems; it would simply fail to provide a clear understanding of the optimum service required and technology solutions desired. Better to implement a Service Improvement Programme (SIP), perhaps with the assistance of a third party experienced in such an exercise. After this, the internal services can be benchmarked against industry standards, peer review or outsource providers. If the outsourcer can then still do it better and cheaper it should be considered. However, there may be occasions where the Chief Information Officer (CIO) finds that due to internal constraints, the only viable option to improve service is to outsource.

So how do you recognise that you have a service problem?

A mature service function will have clear service level agreements in place with specific service measures agreed with the business. They will also have regular service reviews with the stakeholders to gather direct feedback in addition to the regular reporting of metrics. These organisations deal with service issues proactively, they imbed service quality throughout the IT function so it becomes the responsibility of each member of IT and not simply left to the service function.

If the service function is not mature and does not have regular reporting and service reviews, or if service is perceived as being 'poor', then often it is the key business stakeholders who complain about service, or a potential outsourcer may have promised the CEO that they could improve service and reduce costs. In both of these situations it could already be too late for the CIO!

Service issues can sometimes be a matter of perception, however as far as the customers are concerned, perception is reality. The service function may be able to prove that services are meeting required service levels but if the users feel otherwise, then that's their reality!

'...outsourcing should not be seen as the solution to service problems; it would simply fail to provide a clear understanding of the optimum service required and technology solutions desired'

3. The Service Improvement Programme (SIP)

In outline, a SIP is just like any other project except it may never end.

- Appoint a good Service Improvement Programme Manager. He or she will have to provide enthusiastic and inspirational leadership whilst driving through process improvements and instilling a service culture within the organisation. Most good IT Programme Managers can deploy an application or the infrastructure to run it on, but far fewer have what it takes to change culture through winning hearts and minds.
- Provide some dedicated project management resource to support the SIP Manager
- Create a team and ensure it has sufficient resources so that the initiatives don't run out of steam
- Consider whether you have the right skills in-house or whether you need assistance

Gather an initial view of the service status by, for example:

- Surveying key stakeholders
- Surveying callers to the Service Desk
- A comparative assessment of service quality
- Assessing the maturity of existing service processes

Set initial improvement objectives couched in terms so that they are specific, measurable, achievable, realistic and time framed. Aiming for something that is unachievable will be demoralising to the team, far better to set targets that can be achieved then raise the bar once that has been achieved. These targets could include:

- Reducing the frequency and impact of major incidents
- Reducing the number of incidents
- Reducing the mean time to fix incidents
- Reducing the number of incidents caused by change
- Create a draft plan. This seems obvious however, some service initiatives fail due to poor planning.
- Decide on actions and carry them out, review the results, then start all over again.

In a recent example, Xantus undertook a Service Improvement Programme for a major retailer. The client was experiencing poor levels of service on the Help Desk with all major key performance indicators (KPIs) being missed – abandoned call rate, time to answer, mean time to fix etc – together with high Service Desk attrition rates. Xantus followed the above methodology which resulted in a dramatic service improvement, with all KPIs being achieved ahead of the key pre-Christmas and Christmas trading period.

4. IT Service Management

IT Service Management (ITSM) focuses on managing IT operations from the customer's perspective of IT's contribution to the business. Traditionally IT functions have tended to take a technology-centred approach to both IT management and business interaction. Whilst this facilitates technical excellence and cost control, it generally does not adequately support the delivery of a high class service.

ITSM is process-focused and thus has obvious links with such process improvement disciplines as Total Quality Management (TQM) and Six Sigma.

ITSM focuses on providing an overall framework within which to structure IT-related activities and the interactions of IT personnel with business customers and users. The discipline is not particularly concerned with the details of how to use a particular vendor's product, or necessarily with the technical details of the actual application.

'ITSM focuses on providing an overall framework within which to structure IT-related activities and the interactions of IT personnel with business customers and users'

The concept of 'service' within IT may have a distinct operational link, but this doesn't mean that ITSM is only about IT operations.

Frameworks and Standards

ITIL¹ is considered to be the de-facto standard. There are several other well documented frameworks which we should consider first:

- CoBIT² – Control Objectives for Information and related Technology, provides a set of guidelines for IT processes, practices and controls and focuses on reducing risk based on an auditing methodology
- MOF – Microsoft's Operational Framework
- The Helpdesk Institute (HDI) has produced a support centre focused approach to Service Management loosely based on ITIL
- There are a variety of proprietary approaches available from IT service providers, consultants, and research firms

In addition there are several other guides that need consideration:

- ISO17799 – the security standard beloved of internal and external auditors. It is quite specific on its guidance that information security should be achieved by implementing controls including policies, processes, procedures, and organisational structure as well as software and hardware solutions. The controls have to be established, implemented, monitored, reviewed and improved. It has a number of intersections with ITIL best practices particularly the control of assets and incident management. It makes clear that information security cannot be achieved by technical means alone and hence supports the ITSM process-led approach to service delivery.
- ISO9000 – This focuses on repeatability and process consistency. ISO9000 is actually a family of generic standards that apply to how an organisation or function goes about its work rather than focusing on the product or outcome. It is primarily concerned with what the organisation does to fulfil the customer's quality requirements, applicable regulatory requirements while aiming to improve customer satisfaction and achieve continual improvement of its performance. It defines eight quality management principles:
 - Customer focus
 - Leadership
 - Involvement of people
 - Process approach
 - Systemic approach to management
 - Continual improvement
 - Factual approach to decision making
 - Mutually beneficial supplier relationships

The best documented and most widely used overall framework is that owned and issued by the IT Infrastructure Library (ITIL).

The other frameworks are worthy of consideration and use in combination with ITIL in a Service Improvement Programme. For example CoBIT can drive the auditing with ITIL setting the guidelines for the required processes and ISO17799 covering the security aspects with a Six Sigma approach providing a data driven methodology to aid in defect reduction.

1 ITIL® is a Registered Trade Mark, and a Registered Community Trade Mark of the Office of Government Commerce, and is Registered in the U.S. Patent and Trademark Office.

2 The Control Objectives for Information and related Technology (COBIT) is a set of best practices for information management created by the Information Systems Audit and Control Association (ISACA), and the IT Governance Institute (ITGI) in 1992.

'Most service delivery professionals agree that implementing ITIL aligned processes is the key to delivering IT service in line with business requirements'

Given its general acceptance, the remainder of this guideline will focus on delivering service improvement using the ITIL framework as the basis.

5. ITIL – The IT Infrastructure Library

Most service delivery professionals agree that implementing ITIL aligned processes is the key to delivering IT service in line with business requirements.

Since the mid 1990's ITIL has gained steady acceptance as the de-facto standard for delivering quality IT services. Overseen by the Office for Government Commerce (OGC), which is an independent office of the Treasury, ITIL has its foundations in the guidelines developed by the Central Communications and Telecommunications Agency (CCTA). The CCTA became part of the OGC in April 2001.

ITIL disciplines cover the typical activities or processes that an IT Service Department must carry out effectively in order to deliver on its service level agreements.

The disciplines or processes are:

- Change Management
- Incident Management
- Problem Management
- Configuration Management
- Capacity Management
- Availability Management
- Service Level Management
- Financial Management
- Service Continuity Management
- Release Management

ITIL also gives guidance for how a Service or Help Desk should operate.

ITIL has many supporters and, as expected, software suppliers have been quick to produce 'ITIL compliant' products. However, purchasers should not expect buying software packages to solve their service issues as the 'ITIL compliant' badge alone is not a guarantee of quality.

The ITIL recommendations and documentation set is not a prescriptive solution. ITIL provides an overall framework and then 'best practice' for each of the recommended processes. These should be seen as guidelines and used pragmatically; slavish adherence to ITIL guidelines could place a burden on IT that it is not justified.

It is just as important to recognise that people deliver IT service, they just happen to use processes and tools to help them. Great processes and slick tools will be of little value unless the people using them have a passion for delivering great service.

A major Financial Services organisation recently refreshed all of its processes and tooling supporting Incident, Problem, Change and Configuration Management leading to measurable improvements in service. The single largest investment required was in training for the teams who would use the new processes and tools – not just 'what' or functional training, but more importantly 'why' training, so everybody understood how the model worked and why their role in it was so vital.

'PDCA is relatively easy to understand but can be difficult to accomplish on an on-going basis due to complacency, distractions, loss of focus, lack of commitment, re-assigned priorities, lack of resources, etc'

6. Process Improvement Methodology

Given the dependence on process it is inevitable that process review and improvement will be needed so we will review that before going into the detail of ITIL.

There are a number of process improvement methodologies but perhaps the most easily used are

The Plan-Do-Check-Act cycle (PDCA)

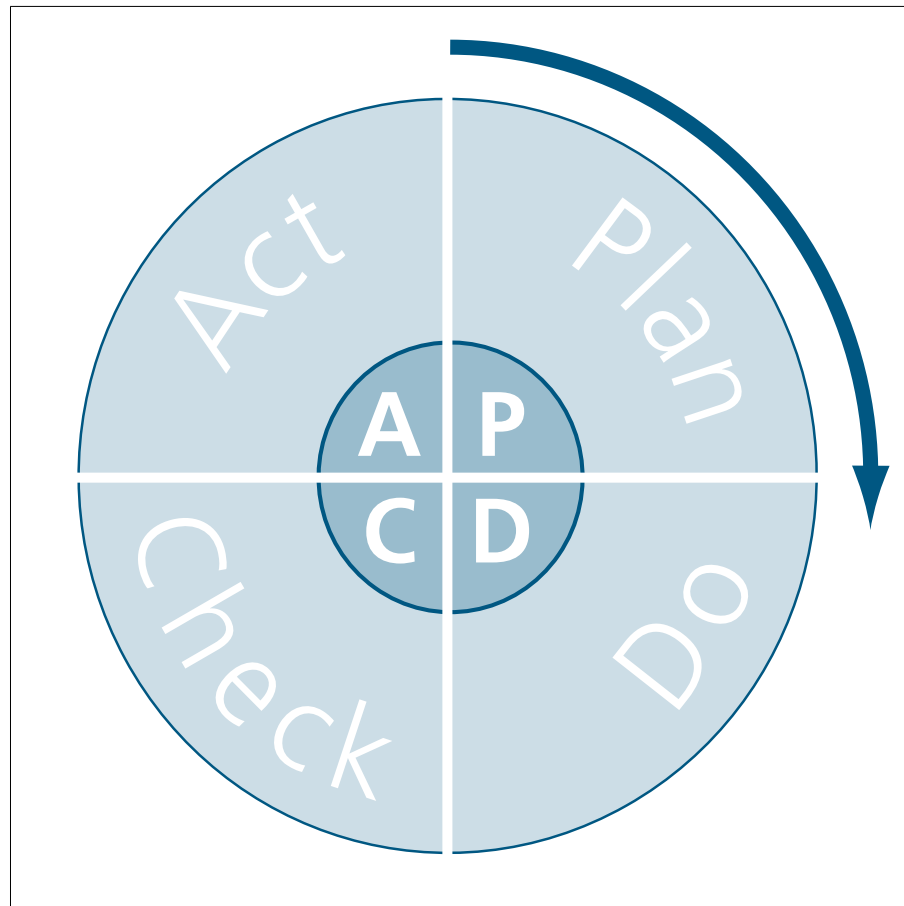
and

FOCUS, which is an acronym for Find, Organise, Clarify, Uncover, and Start.

The Plan-Do-Check-Act (PDCA) cycle is an improvement/problem resolution tool documented by Bell Laboratories in the 1930's. In the 1950's it was popularised by Dr. W. Edwards Deming and it became known as the Deming Wheel. Six Sigma derives its Define-Measure-Analyse-Improve-Control (DMAIC) cycle from PDCA.

PDCA is relatively easy to understand but can be difficult to accomplish on an on-going basis due to complacency, distractions, loss of focus, lack of commitment, re-assigned priorities, lack of resources, etc.

Many times there may be no quick fix but PDCA provides a method for systematic improvement. It can be used to analyse processes with the goal being to identify errors or omissions that cause the output of the process to fall short of expectations. PDCA is useful anywhere the objective is improved performance.



The four steps of PDCA are:

- **Plan:** Recognise an opportunity or issue and plan a change. Establish the objectives and processes necessary to deliver results in accordance with the specifications. Use some form of brainstorming or cause and effect diagramming to determine the problem.
- **Do:** Implement the processes, test the change; often with a small-scale pilot.
- **Check or Study:** Monitor and evaluate the processes and results against objectives and specifications and report the outcome. Review the test, analyse results and identify what's been learned.
- **Act:** Take action based on what you learned in the Check step. Apply actions to the outcome for necessary improvement. Review all steps (Plan-Do-Check-Act) and modify the process to improve it.

If the change didn't work, go through the cycle again with a different plan. If successful, incorporate what you learned into wider changes.

FOCUS

FOCUS is an acronym for Find, Organise, Clarify, Uncover, Start and when combined with PDCA can improve the overall results.

The 5 steps of FOCUS are:

1. **Find** an opportunity for improvement. Select a process or activity that you want to improve such as handling incident calls to the Service Desk.
2. **Organise** a team. The best ideas come from those doing the work, so involve them. Find those that understand the opportunity and related systems or processes.
3. **Clarify** the opportunity or issue.
4. **Understand** the causes. Try to identify why, where, or how the undesired activity or result occurs.
5. **Start** the PDCA cycle by choosing a single modification to the process.

Other tools and techniques can also be used, such as Fault Tree Analysis (FTA), Component Failure Impact Analysis (CFIA), Pareto Analysis and others, to plan to improve operations by determining what is going wrong and developing potential solutions.

Six Sigma is a statistical process improvement methodology [originally developed by Motorola] which focuses on quality from the customer's viewpoint. The method involves defining, measuring, analysing, improving and controlling to improve a process. Aimed primarily at manufacturing it has been adapted for IT processes and embraced by certain IT service providers.

In addition, the Capability and Maturity Model can be used to assess the level of maturity of existing processes on a scale of 1 to 5. Resources are freely available that assist in carrying out such a maturity assessment and a number of commercial organisations also carry out such assessments.

The typical 1- 5 levels are:

1. Initiation – characterised by words but no deeds
2. Awareness – reactive, standardisation to gain control, focused on tools
3. Control – active, formal planning, management reports
4. Integration – clear direction, active inter-relation between processes
5. Optimisation – proactive, continually monitored improvement, innovation

The goal is to move to level 5 over time. The emphasis here is on time; it could take a complex IT organisation 18 months of service improvement activity to move up a level. There are also no short cuts – organisations don't just jump from level 2 to level 5.

7. The IT Service Desk

ITIL covers recommendations for how a Service or Help Desk should be organised and run.

The Service Desk is the human face of IT and is a key component in ongoing service delivery and service improvement activity. For the majority of IT customers in an organisation their only contact with IT is with either the Service Desk or with the engineer who comes to fix a problem. So a customer with an issue (incident) will call the Service Desk and it is how the desk deals with that incident, that will have the greatest influence on how the caller views IT and the service it provides.

ITIL guidelines recognise that organisations will take different organisation and staffing approaches to Service Desks; however it is often believed that in practice, those that adopt a centralised approach with skilled staff generally provide better service. They are better able to both cover the range of potential calls that may come in and to deal with them effectively.

Service Desks can be organised in several ways – usually scale and the complexity of the IT base are the determining factors. In a small or fairly simple IT function a single level Service Desk may be appropriate, whereas, in a larger or more complex function it may be necessary to have a dedicated call taking team, backed up by second level technical teams.

Whatever the organisation, the Service Desk will not be able to resolve all incidents and must escalate to resolver groups sitting in other IT areas or escalate to suppliers. This escalation process should be documented and agreed so that the respective parties understand their obligations to one another. A resolver group will expect to only have escalated to it incidents that the Service Desk could not fix, it also will expect to have full details of the incident.

The Service Desk owns the incident management process and the goal of incident management is to restore normal operations as quickly as possible, thus reducing the impact and cost of the incident. Failing to provide the Service Desk with the resources it needs can therefore, be a false economy. Whilst striving to lower the cost per call is admirable, greater benefits can be gained by focusing on reducing the total cost per incident, factoring in not only the IT costs but the business costs. Efficiency is of course important to the Service Desk and many best practice organisations save internal costs as well as allowing for a better class of service. As a result, some of the traditional 'call centre' KPI's don't apply in the same way to a well run Service Desk which is minimising overall IT cost; a longer average call time might actually be as a result of improvements in initial fix rates or better diagnosis to assist resolver groups.

One of the strengths of an ITIL based approach is its stress on the interaction with other key service processes, such as change and configuration management. The following all make the Service Desk more efficient and save internal costs:

- Ensuring the asset register is up to date and accurate
- Ensuring the 'people' asset base is up to date and accurate
- Linking changes, incidents and problems to asset details
- Improving the knowledge base for known fixes
- Investing in training
- Investing in diagnostic tools
- Ensuring that asset registers, tools, and knowledge is updated as part of delivery of each and every project or IT change

Service Desk Toolsets

It is all too easy for IT professionals to focus on technology solutions to service problems, however thorough evaluation of their effectiveness and the true value-add, needs to be conducted.

There are many excellent Service Desk products in the market place and the better ones support the integrated approach to the key service disciplines

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documented by ITIL and incorporate a CMDB (Configuration Management Database) model.

However, if the processes and procedures are not put in place to ensure that the required data is available within these systems, then their true potential cannot be exploited.

For example, when customers call with issues relating to hardware do you really want them to have to search for the item serial number and other details that to them seem obtuse? This is not uncommon even in large organisations and wastes Service Desk personnel's time as well as being off-putting for the caller – especially if they have to do it each and every time. The Service Desk tool should be able to look up all details for an asset by the entry of a single asset number.

8. The Main ITIL Service Disciplines

Some ITIL implementations fail due to being over ambitious. Asking the service function to review and potentially revise all its processes simultaneously as well as cope with their standard day-to-day activities may be impractical.

Most organisations will gain maximum value most quickly by focusing initially on Incident, Problem, Change, Configuration and Availability Management.

8.1 Incident Management

The goal of incident management is to get the caller back to work as quickly as possible. As such, an efficient help desk service to take the call, to record incidents, to carry out first stage diagnosis and to fix or handoff to the appropriate resolver group is essential in any Service Improvement Programme. The Service Desk may also handle or be involved in other activities encompassed by ITIL. Ideally a centralised Service Desk should be in place so that IT customers have a single point of contact for all IT issues.

Accurate and consistent recording of all incidents is vital for service improvement and, equally importantly, for demonstrating service improvement.

8.2 Problem Management

ITIL makes a distinction between incidents and problems. Incident management aims to resolve the incident as quickly as possible and get the customer back to work, whereas problem management is about looking for underlying cause, putting in place permanent fixes and making changes to ensure the same incident does not occur again.

In practice it is not always easy to separate incident and problem management as the main inputs to problem management (incident records, configuration details) are generated by the Service Desk who are the owners of incident management.

8.3 Change Management

Change is a fact of IT life, changes are needed to fix problems, to implement legislative changes and of course, to implement those changes required to reflect business initiatives or indeed to reflect service improvement initiatives.

The aim of change management is to protect the service function whilst enabling essential change to be performed. Poorly prepared or poorly implemented changes are a major cause of service outages and following some simple rules, can improve service levels.

For example:

- Changes should be classified according to a combination of risk (i.e. likelihood of the change failing) and impact (i.e. business implication if the risk materialises). The organisation can use this to focus its efforts on those changes that need most attention. For example, changes with high risk and/or impact should have clearly defined back out plans in the event of failure.
- The earlier that notice of change is given the better and it seems obvious to state that the bigger or riskier the change, the more notice should be given.

Typically the change management function operates through a Change Advisory Board. It is important that this body has sufficient authority to reject under-prepared changes and also, that it has representation from all involved areas of IT; in particular the IT service delivery function should have a right of veto. IT Executives need to resist the temptation to overrule the change management function as not only can this lead to service disruption, it can also have the effect of undermining a fundamentally important discipline.

One common failure of the change management function is a tendency to look at too short a future time-frame. Ideally a 13 month forward schedule of change should be built up and should include business and other events as applicable (e.g. budget day, tax year end) as well as software and hardware changes. In this way a more complete picture of events that could potentially impact on service delivery can be built up.

As an example of the power of effective change management, Xantus helped a financial services client to implement a more effective change management methodology, which resulted in a reduction by 50% in the number of Severity One incidents during the following six month period.

8.4 Configuration Management

There is a common misconception about configuration management that it refers to how physical IT assets are linked to each other i.e. that it reflects the technical topology. In ITIL terms, configuration management refers to configurable items and records of what has or is planned to happen to them i.e. changes, incidents and problems. Perhaps a better term would be enhanced asset management as the foundation is an accurate and up-to-date asset base.

Such a base is vital for effective functioning of the Service Desk as well as ensuring that maintenance is not paid inappropriately for assets no longer in use or worse, some essential assets are not covered by the appropriate maintenance agreements.

The Configuration Management Database (CMDB) is built over time through the accurate recording of change (either planned or reactive to resolve an incident) and becomes the central source of information for Service Management functions.

8.5 Availability Management

The ITIL discipline of Availability Management is arguably the least understood given that it does not always easily map onto an organisation structure. However, the concepts are key to both understanding and resolving service issues that extend beyond simple incident and problem management.

The concept is based on:

'If you don't measure it, you can't manage it. If you don't measure it, you can't improve it. If you don't measure it, you probably don't care about it. Finally if you can't influence it, then don't measure it.'

Measuring for measuring sake is a common error; in order to drive service improvement based on efficiency and effectiveness, measurements must be value-based and focused on what needs to be accomplished.

There are some recommended simple metrics such as:

- Mean time to repair (MTTR)
- Mean time between failures (MTBF)
- Mean time between system incidents (MTBSI)

ITIL also details the techniques that can be used for fault analysis including:

- Component Failure Impact Analysis
- Fault Tree Analysis
- CCTA Risk Analysis and Management Method CRAMM

'If you don't measure it, you can't manage it. If you don't measure it, you can't improve it. If you don't measure it, you probably don't care about it. Finally if you can't influence it, then don't measure it'

- Service Outage Analysis

Details of these techniques are beyond the scope of this paper.

9. The Role of Service Level Agreements and Operational Level Agreements

What is poor service? It can be defined as 'service that fails to meet customer expectations'. However the customer's expectations may be unrealistic when other aspects are taken into account such as the technology base, cost constraints, change frequency etc. Be that as it may, these reasons will not stop the customer from taking his or her business elsewhere.

Running IT as a service orientated business encourages cost reduction and service improvement. Adopting a Service Catalogue approach to documenting the services that IT provides and utilising a charge back mechanism (be it actual or virtual) further supports this. Many organisations would seem to believe that a Service Catalogue approach is either daunting or unnecessarily bureaucratic. But it is only with this level of formality that the service offerings can be defined so that they are understood by the provider and by the customer. Service Level Agreements play a key role in delivering service; they should frame the service to be delivered, the quality of the service, the relative responsibilities of the provider and customer, the service cost, allowable exceptions, contingency actions in case of failure, key contacts for decisions etc.

The tendency with such documents is to make them overly long, formal and complicated, when the essence can be captured on a single side of A4. The ITIL recommendation is to organise services into a Service Catalogue, in that way common services used by two or more parts of the organisation need only be documented once.

Agreements are also needed between the service function and those other areas of IT that have a responsibility for providing 2nd or 3rd level support. Again these need not be overly complicated.

More formality is needed where the agreement is with a contracted third party. The detail and complexity of a contract document does not lend itself for practical everyday usage by the Service Desk, so it is advisable to use as brief and concise summary of the contractual SLA as part of the Service Catalogue for this purpose (although it is essential that the third party provider delivers monthly service reports based on the contractual service levels and credits which should have been developed by service specialists taking business requirements into account).

Any gap between the service levels agreed with customers and those offered by suppliers effectively sits as a risk with the CIO. That's not to say that this might not be OK provided the risk is outweighed by the benefits (normally reduced costs). However, CIOs should at least understand what this risk is and be comfortable with it. Service organisations need to be able to identify, quantify and articulate this risk for their CIOs.

Due consideration should be given to the key metrics that will be monitored; they should ideally be defined cooperatively however this is not always possible. The level of service to be provided should ideally be negotiated, although again it may be that custom and practice or current achievements sets the initial target level. It is best to keep the metrics simple to begin with otherwise huge efforts will be expended in collecting, analysing and reporting data. For example – an agreement to make available an application for 99.95% of the time between 08.00 and 18.00 averaged across each calendar month, with any Severity One or Two incident being responded to within two hours.

Service agreements should not be seen as static documents and neither should the targets. Regular reviews, perhaps six monthly, should be agreed and target levels amended as required, depending on customer needs and on what can be provided.

10. Project Acceptance

Change management kicks in just prior to implementation, whereas project acceptance from a service perspective should engage with projects at each key phase and at the earliest opportunity. By the time the project or change is ready for implementation it is too late for the service function to have any impact.

The development function should be aware of the requirements of the service function and it's incumbent on the service team to document and communicate what it expects.

The service team should give positive acceptance at each key stage of a project starting at project kick-off. Service can then properly prepare for the forthcoming change.

A well run IT project office can be a godsend to the service function. As well as introducing consistency of approach for project methodologies and reporting and thus providing valuable information to the IT management team, it can provide dispassionate details about the status of projects to service delivery.

Similarly, the IT financial function can provide information on what has been included in the annual IT budget and also if available the three and five year plan.

The service function cannot take a passive approach to project or change acceptance, it has to actively engage with the other IT functions and with the business.

11. The Role of the IT Technology Group

The Chief Technology Officer (CTO) and the technology group have a key part to play in improving service. Technology has to be reliable and so the choice of technologies has to be right, service aspects should be considered as part of the evaluation and procurement process, it's not simply about buying the flavour of the month or the cheapest.

Of greater significance is the range of technologies deployed or rather how the infrastructure can be simplified for service benefit. Generally service management is made easier if the range of technologies can be limited; it also makes the job of the technology group easier too. This applies to software versions just as much as hardware so, for example, review, not just how many different database management systems are run but how many versions of each.

A Technical Strategy should be agreed, documented and communicated within IT so that project teams restrict their technical choices to those on the approved list.

Capacity Management is often seen as a responsibility of the technology group and it is a key ITIL discipline. It seeks to ensure that the technical infrastructure has sufficient resource to deliver the service. It has to factor in business growth, as well as the impact of changes and build in sufficient time for the procurement of any additional physical resources that may be required. Most organisations have annual budgeting cycles and a greater tendency to acquire hardware on three or five year lease cycles and sometimes this can make the acquisition process more difficult, especially if allowances haven't already been made for incremental resource additions. A failure in capacity planning may not have an immediate impact on service delivery, the problems it causes could take weeks or even months to resolve. It can also be expensive as a desperate need for resource doesn't make for easy negotiations with suppliers.

'No matter how well defined the process and how aligned to ITIL they are, without the people to make them work they are documents on a shelf'

12. People

When dealing with technology and processes it's all too easy to forget about the people element however, they are the glue that makes everything work. No matter how well defined the process and how aligned to ITIL they are, without the people to make them work they are documents on a shelf. Take the process away and the people will continue to work, perhaps not as effectively, but they will work nevertheless.

For service delivery to be effective however, the overall goal and the actions required to achieve it need to be clearly documented and agreed with the individuals tasked with carrying them out. This means ensuring that job descriptions clearly spell out service objectives and performance agreements and reviews are aligned to service objectives and to job descriptions. This should not be confined solely to those directly involved in service operations; it should cover developers and technical support staff as well and be specific as to their contributions in helping to achieve service goals.

Remuneration and bonus schemes can also be aligned in a similar fashion. The best analogy here is a football team; even if the strikers score five goals, if the defence concede six then the game is still lost. Similarly in IT, no matter how professional the Service Desk is in taking calls and assigning them for action, if the support teams are tawdry in picking up and resolving assigned trouble tickets then again the game is effectively lost.

Organisation structures need to be examined so that process ownership is clear and the respective functional responsibilities are understood and unambiguous. We've already covered the use of operational level agreements in helping to clarify respective responsibilities. Inappropriate structures can introduce inconsistency and as much as anything, consistency is needed within service management.

13. Role of the CIO and IT Management Team

No project can succeed without leadership and direction. The Service Improvement Programme Manager can deal with the detailed activities but he or she will need help, especially with business engagement and dealing with suppliers.

The CIO must set and communicate the service improvement mission and clearly articulate it to all. A communication plan needs to be developed so that regular feedback on the improvement work can be given. Also staff may feel threatened as they will think that improvement will lead to cost cutting and job losses.

Service is often seen as the responsibility of the service function however everyone in IT has a part to play in delivering first class service. Project acceptance procedures can be implemented as a 'hurdle' to be overcome but integrating such procedures into the project and development methodology will yield better results.

The required resources also need to be put in place as the work will need finance and people and these may need to be diverted from other planned projects or brought in from outside. The CIO and his/her direct team have to convince the business that resources must be allocated to producing quality products, after all, service is just another IT product.

14. Final Thoughts

Improving service is not easy and it's sometimes a thankless task and it's particularly hard to keep the momentum going. There will be diversions along the way and no doubt, resistance to overcome, but the benefits will outweigh the heartache as:

- Your internal business users will be happier
- IT staff will be happier – no one wants to play for a losing team
- Costs will reduce – perhaps not direct IT costs but time and money lost to IT failures

Top Tips from Xantus

- Assign a full time Service Improvement Manager to lead the programme
- Provide the SIP Manager with some dedicated project management support
- Make sure you provide enough resource to the programme
- Consider external assistance if you don't have the skills or bandwidth in-house
- Don't confine service improvement to the service function
- Get support from your key business stakeholders
- Use a standard process improvement methodology
- Use the ITIL framework but look at the other methodologies as well. The full value of ITIL comes from having an integrated approach to the delivery processes
- Fully evaluate the appropriateness of 'ITIL Compliant' toolsets
- Invest in your Service Desk – they are the first point of contact for your customers.
- Look at ITIL training and accreditation for your service staff – it will help to motivate them as well as instruct them in the best practices
- Don't be over ambitious on initial targets – raise the bar in increments
- Be patient – service will not improve overnight and sustainable improvements may take months or even years
- Look at longer-term initiatives as well as short-term fixes
- Set up a regular communication programme
- Don't compromise on quality – it will cost more in the long run
- Don't use outsourcing as a solution – use outsourcers and peer reviews as a means of comparing your service and progress
- Use service level and operational agreements to document what will be delivered but keep them brief
- Understand and be comfortable with the level of service risk you are managing
- Give Service Delivery a greater voice in IT decision making.





The National Computing Centre
Oxford Road
Manchester
M1 7ED
www.ncc.co.uk/principia
e-mail: principia@ncc.co.uk

Principia 