

Towards an Integrated Approach for Delivery of Library and Technology Services - Using ITIL to develop a single service desk.

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Abstract

In 2001, Griffith undertook a organisational realignment in the Division of Information Services. The Division wanted to develop a more integrated and streamlined approach to the delivery of Library, Technology and Flexible Learning services. Central to the realignment was the development of an integrated helpdesk (including a phone contact centre) where a client could have all enquiries answered including technology and library issues through a single contact point. The purpose of this paper is to give an overview of our model of service delivery through the single Service Desk and to describe how ITIL has assisted in structuring our services to develop this integrated approach.

Introduction – A new service approach

In 2001 the Division of Information Services (INS) undertook a 'Realignment' of products and services. The division went from adopting a traditional approach to the provision of information services where the Library, IT and Flexible Learning Services were discrete entities to an approach that focussed on the delivery of information products and services. A central feature of this new structure (see appendix 1) involved having a series of information 'Products and Services' each with single manager responsible for the end-to-end delivery. In some cases, the Product and Services crossed traditional boundaries. A feature of the design of this approach is that one person is responsible for planning, implementing and monitoring the service thus leading to an increased focus on end point delivery to the client. Further, it increased the synergies between various elements of the division and ensures that the client does not need to understand the organisational structure in order to get best service.

Under the realigned division, one area of significant change was in the provision of help and information services. In a traditional structure, a range of assistance approaches, usually organised around traditional professional boundaries exists. In a library context, help is usually provided by a reference service or at an IT helpdesk (which may or may not fall under the auspices of library management). Clients in the library may be directed to one or other of the support areas, usually a desk depending on the nature of their issue.

For IT infrastructure problems, the client may be directed to the IT help desk or faculty computing services. Where the university is a multi-campus institution, the clients problem may be exacerbated further as the resolution may only apply to a single campus or faculty or the service point to assist the client may not reside at all locations. This may result in clients utilising a number of different help services in order to resolve their IT or information enquiry or problem.

There are a number of client and organisational problems inherent in this approach. For the client, the issues that may arise could include:

- Time being wasted through unnecessary visits to multiple desks to resolve their information enquiry/issue.
- Incomplete or conflicting advice given from staff who work in different areas.
- Clients may go 'desk shopping' to get alternate opinions/solutions.
- Clients may not get to the correct location and therefore not get their problem resolved despite a structure established to do so.
- Reduced client satisfaction.

For the organization, problems may include:

- Increased risk of misalignment of services.
- A lack of clarity about ownership of the problem between contact person and the area that may eventually resolve the issue. This may lead to clients 'falling between the cracks'.
- Reduced information flow between different parts of the organization and its clients.
- Inconsistent service delivery between different parts of the organization.
- Reduced productivity and sub-optimal (effective and efficient) use of skills and experience (reduced cross skilling).
- Reduced opportunity to balance workloads/client lines across areas.
- Lack of co-ordinated planning and reporting of service issues across the institution.
- Difficulties in estimating the costs of providing these services.

Under the realigned structure, INS has a single service called InfoServices. This service unit is responsible for providing first tier Information Help Services across the division, across all campuses. All initial enquiries, whether via a service desk, phone or email from the traditional areas of Library, Technology or Flexible Learning are directed to this service. Attempts are then made to resolve the enquiry at the first point of contact (our current service target is 80% resolved at 1st tier) thus reducing inconvenience or wasted effort to the client. Where a client's enquiry requires a specialised level of expertise or when the enquiry is long and complex, the client is referred to our second tier support to be addressed by a member of the team from that product or service. Two examples might serve to illustrate this approach:

Example 1. A traditional Library enquiry.

If a client were to ring from home (or a computing lab on campus) with an enquiry about searching a library database, the InfoServices member in the phone contact centre (1st tier) would provide instructions on how to search for the resources they would need. Additionally, the staff member might suggest an Information Literacy workshop to the client and step them to the online booking system. The staff member would also email directions to the site to the student to serve as a reminder. The same process would be followed if the client presented to the desk in the library. The Information Literacy workshops (2nd tier) are run by an Information Literacy specialist and/or Faculty Librarian who are in different parts of the organisational structure to InfoServices. However this is transparent to the client as the InfoServices staff member facilitates the referral process.

Example 2. Technology Enquiry.

If a student is having trouble connecting to the Griffith University wide, wireless network, they may present at the InfoServices Desk in the Library with their laptop for assistance in making the connection. The staff member (who may be the person who resolved the previous example) may attempt to resolve the issue on the spot by working through the defined processes and knowledge base. Should they be unable to resolve the clients (2nd tier) problem, they would then refer them to the computer wireless networking clinic for further follow up. If the client's enquiry was more urgent, they could speak to the remote access staff from the InfoServices desk who would attempt to fix the clients issue over the phone. In both cases, details regarding the client's enquiry would be recorded in the information system and passed to the second tier, if needed, to improve consistency and to save the client needing to repeat their story to multiple people.

The benefits of this centralised approach to the delivery of help services allows Griffith to address many of the shortfalls of a more decentralised model. Clients now approach one service to raise a request for information, report an incident, problem or issue or make a request for change. Additionally, the organisation is able to collect consistent data on presenting issues, the timelines for resolution and follow up the client where appropriate or necessary.

Underpinning this model is a standard set of processes, a knowledge base and a data collection system based on the ITIL framework.

ITIL – A philosophy of Service Management in a new business model.

“The ITIL philosophy adopts a process driven approach which is scalable to fit both large and small ... organisations..... It considers Service Management to consist of a number of closely related and highly integrated processes” (Cambray 2003, p.4). Emanating from the IT world, where it is seen as a de-facto standard, this quality management approach defines a common vernacular, identifies common critical processes and suggests key data sets required to meet the service objectives of the business. It suggests these business objectives include:

- Aligning services with the current and future needs of the business and its customers.
- Improving the quality of services.
- Reducing the cost of service provision.

(Cambray 2003, p.4)

At the heart of ITIL are two core areas of Service Support & Service Delivery. “Service Support generally concentrates on the day-to-day operation and support of service while Service Delivery drives the long term planning and improvement of service provision” (Cambray 2003, p.6).

Table 1 presents a high level view of the components of these two core areas.

Table 1 - ITIL Core Components

Service Support	Service Delivery
Service Desk	
Incident Management	Service Level Management
Problem Management	Financial Management for IT Services
Configuration Management	Capacity Management
Change Management	IT Service Continuity Management
Release Management	Availability Management

The central function in the ITIL Services Management philosophy is the Service Desk (this term can be used generically in ITIL to incorporate call-centres, help desks, service desks, customer hotlines, email and IM services). The primary purpose of the desk “is to manage, coordinate and resolve Incidents ..[problems and questions] as quickly as possible and to ensure that no request is lost, forgotten or ignored” (Office of Government Commerce 2002, p.21).

The common characteristics of the Service Desk include:

- They represent the service provider to the Customer and to the User (internal or external).
 - They operate on the principle that customer satisfaction and perception is critical.
 - They depend on blending people, processes and technology to deliver a business service.
- (Office of Government Commerce 2002, p.29).

Using ITIL, Griffith implemented the service desk approach through four major activities:

1. Standardising processes and workflows for incidents, problems and requests for change.
2. Developing a knowledge base of common approaches for resolution.
3. Implementing a data capture and management system.
4. Adopting a standard reporting approach.

Standardising processes and workflows

A key challenge in implementing a cross divisional single Service Desk approach was the development of a standard set of processes and workflows. Different professional cultures have evolved differing approaches and philosophies to servicing client needs, often steeped in its own vernacular and with its own underlying assumptions. ITIL, with its clear definitions, stated assumptions and client service based approach, provided a sound platform for engaging in conversations about service delivery approaches and processes across the range of professional disciplines. Workflows for common incidents, problems and requests for change (RFC) based on ITIL were developed and applied.

Developing knowledge base

Underpinning the standardised processes and workflows is an ever expanding knowledge base. As each product or service is implemented, commonly occurring incidents, problems, requests for information and requests for change are identified. Resolutions or work around approaches are developed or escalation paths for referral identified so that when clients approach InfoServices they receive a common response for resolution. As new incidents arise, new entries are developed and put into production. Initially this knowledge base was done on paper but is now implemented electronically through knowledge base systems which ensure a greater consistency of response across all 7 locations. As each new service is introduced, part of the key work in implementation is creating the knowledge

base entries including solutions to problems, known errors and work arounds in the database.

Data Capture and Management System

Supporting both of these activities was the implementation of an ITIL compliant computerised service desk tool set (CA Service Desk). While the computerised tool is able to log and track incidents, 'electronic management allows for improved efficiency, accuracy, and fast access to past solutions, known errors, call histories and management information' (Office of Government Commerce 2002, p.43) The tool adopted allowed for the capture of data, management of workflows and integrated with other products including the knowledge base (part of CA suite), the phone system, email system and reporting engine. The purpose of the Service Management System is to 'manage, track and monitor service requests, contractual obligations, staff resources and workflows' (Office of Government Commerce 2002, p.43). The Office of Government Commerce (2002, p. 44) suggests that computerising the Service Desk will provide additional benefits, namely:

- everyone knows what's happening, because requests are accessible by all support staff
- the turnaround of customer requests is faster, yielding improved efficiency
- request tracking, escalation and workflow is improved
- better information is available in the form of online access to:
 - known errors, solutions and request histories
 - external knowledge sources
- management information is more accessible and accurate
- duplicate, lost or forgotten requests are eliminated
- skilled staff and resources are better used
- complex support tasks and calculations are made easier

Standard Reporting

The final activity in implementing the ITIL Service Desk philosophy was the development of standardised reports. Building on the standardised workflows and data sets, the computerised service desk tool is able to generate a series of alerts, escalations and management reports on triggered or timed cycles. A diversity of information is available from the system. Operational reports include workflows such as alerts that IT systems are compromised, outstanding jobs that have not been assigned to a work group and jobs that are at risk of breaching agreed resolution timeframes. Management reports include monthly client satisfaction measures, numbers and percentages of differing presenting requests and summaries of service breaches. This information is used both to drive operational workflows and to feed into other ITIL Service areas.

Challenges in Implementation.

In implementing this approach, challenges existed in implementing both ITIL and more broadly the service desk approach. In implementing ITIL, a significant challenge to be overcome was one of general applicability. Given its historic roots, ITIL is IT centric and needed to be adapted to fit a broader information agenda. For example, the ITIL Service Desk framework has an assumption that clients usually present with an 'incident' that is triggered by a need for service. In the Library and Flexible Learning areas however, clients may not have had an incident that triggered their approach for support. They may be requesting some information or seeking directions on how to access some materials or services. In implementing our approach this led to the creation of an additional category being developed incorporating a 'Request for Information'. This category allows

InfoServices to capture data on client presentations and build workflows around supporting these activities.

At a broader level, as with any considerable change agenda, encouraging staff to think in new ways that are outside professional boundaries and established approaches presents significant challenges. Having to learn a whole new lexicon and shifting from a problem focus to a service focus in order to start on the journey, required training, patience and creativity. Not only was this required for InfoServices staff but for staff through-out the division as we started along the ITIL path. This required many staff from across the division to attend formal training courses in the ITIL framework and some rework of documentation and work procedures to fit the new approach. All this needed to be done while maintaining service to the clients on a daily basis.

Another notable challenge in implementation of the service desk approach was managing the huge diversity of presenting client enquiries and incidents. It is impossible to employ or develop and maintain staff who have the expertise to be able to address even a significant majority of the presenting clients incidents or requests. Developing a strong procedural approach and a broad knowledge base based around electronic tools (together with regular training of staff) is critical to maintaining the information and processes to meet service targets.

Key Learning's

While the process of implementing ITIL is ongoing, some key learning's have emerged that can roughly be divided into three categories; management learning's, staff learning's and client learning's.

Management Learning's

Given that the implementation of ITIL and service desk was a significant cultural change process, a key factor in the success of implementation was support given by senior management. In Information Services this was demonstrated in two ways. Firstly, all the senior members of the division were on the ITIL (Implementation) Programme Board and were project sponsors of other ITIL projects across the division. This was done to send a clear signal to all staff that this was of significant interest to the senior managers of the division.

This was further reinforced by the division allocating significant funds to ensuring that staff were trained to understand the ITIL framework. Money was provided for either introductory ITIL courses or more specialised Service Analyst or ITIL masters training. Through these actions, staff could see considerable resourcing in time, interest and finance was being devoted to the process.

Staff Learning's

From a staff point of view a number of key learning's emerged.

Firstly, it became apparent that service desk staff have an important educative role in establishing a client service ethic. Many staff in tiers 2 and 3 often have a strong technical focus and may have stronger interest in the problems resolution than the client. One critical role of the service desk staff is to ensure that the client's interests are transmitted to colleagues in less client facing services.

Secondly, it is important to establish great (mutually beneficial) relationships between service desk staff and other support layers. The time taken in solidifying relationships between the various groups is rewarded by improved services to clients and better information flows between different service areas.

A third and crucial learning is that staff from the service desk need to be involved in a formalised change management and communication process. If the desk is to be the first point of contact for information and incident resolution, they need to be kept aware of all changes going on in a timely way.

Finally, as with any major cultural change, the process takes time and may require an incremental learning approach. While ITIL is a framework, it is not a prescriptive approach but needs to be adapted to the organisation. In implementing the service desk and ITIL approach we visited many blind alleys and had to rework approaches and abandon some strategies.

Client Learning's

Just as this was a major cultural change for staff, the implementation of the service desk and the ITIL approach presented a significant change for some of our clients. Staff who had previously gone straight to their known 2nd tier practitioner now needed to go through the service desk. Some clients took some convincing that there was benefit in addressing their issues in this different way. This involved all levels working very hard to establish trust and to communicate with clients (and each other) reasonable expectations for service.

Conclusion

In conclusion, this paper has presented an outline of our model of service delivery through a single service desk. It described how ITIL has assisted in structuring the service and outlined a few of the challenges and learning's in implementing the model.

Reference List

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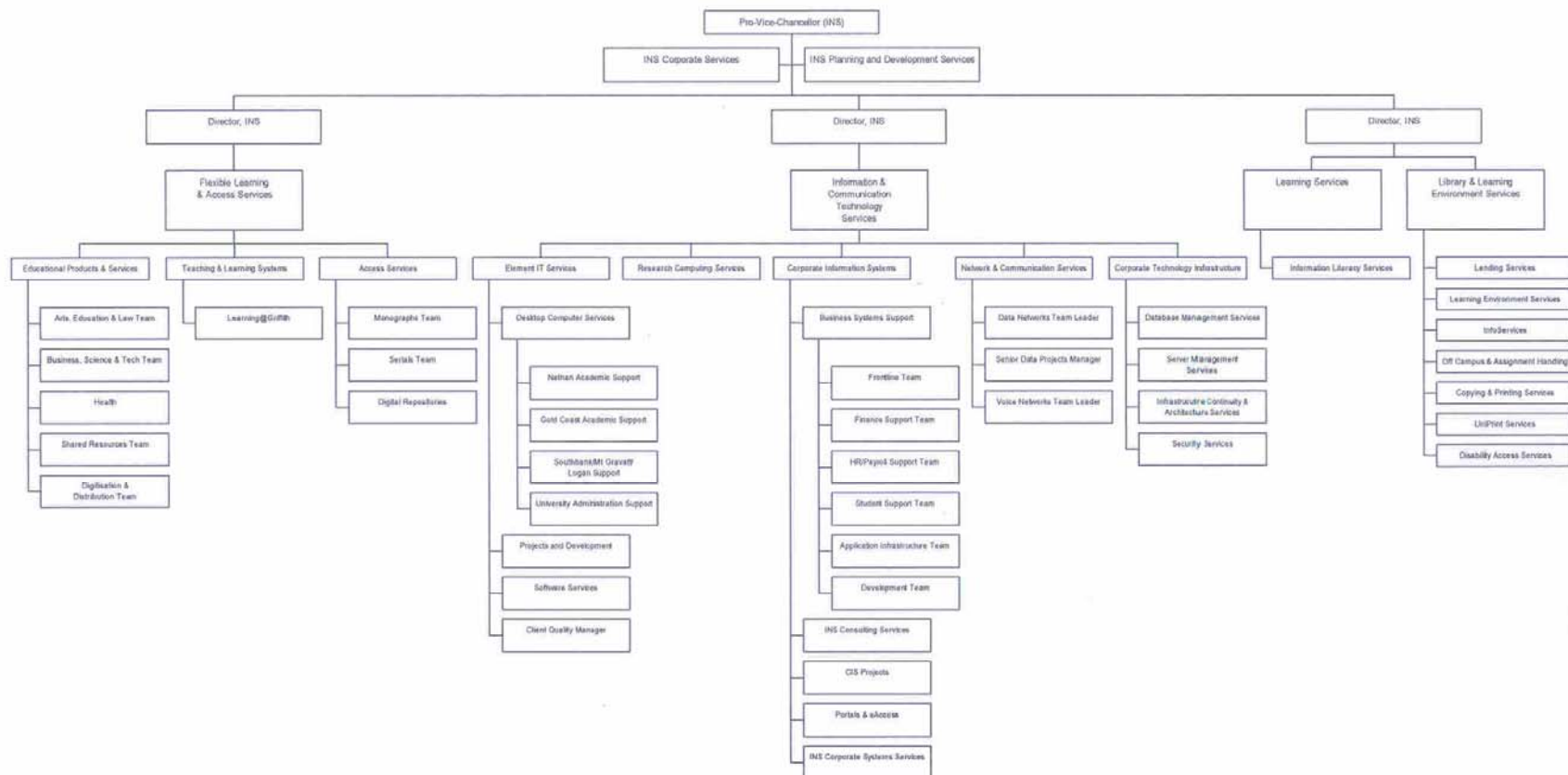
Appendix

Griffith University is a university of approximately 33,000 students across 7 locations, geographically spread over 100km. INS provides an InfoServices service point through the library on all campuses together with a phone contact centre for clients unable or unwilling to make it to one of our service desks.

The Division is organised around 3 service groups as presented in Figure 1.

Figure 1 - INS Organisational Chart.

Division of Information Services



The Division offers a broad range of products and services to our clients. A sample of these is presented in Table 2.

Table 2 – A sample of INS Products and Services by Service Group.

Flexible Learning & Access Services (FLAS)	Information & Communication Technology Services (ICTS)	Library, Learning Environment Services & Learning Services (LLES & LS)
Acquisition and Cataloguing of Library Information Resources	Business Systems Support	Assignment Handling Services
Digital Repository Services	Computer Accounts for Griffith staff and students	Audio Visual Equipment Hire
Digitisation & Distribution Services	Email – Students	
	Executive Home Support Service	CD & DVD Copy Services
Faculty Librarians	Griffith Website Management	
Learning@Griffith LMS	Griffith@anywhere	Copying - Staff
On-line course design	Griffith@home	Copying - Students
Print & Digital Library Collections		Disability Access Services
		Document Delivery
	Internet Access	External Examinations Service
		Information Literacy
		InfoServices
		Inter Campus Loans
		Inter Library Loans
	Off-Campus Access for Staff	Laptop Hire & Library Loans
	Off-Campus Access for Students	Learning Assistance Services
	PDA's and Smart Phone Support	Library Cashier Services
		Library Lending Services
	Phone Services	
	Research Computing Services	Off Air Broadcast Recording and Broadcast Media Duplication Service
	Student Computing in School Facilities	Staff Copying
	Software Services	Student Computing in Common Use Facilities
	Staff Desktop Support Services	Student Copying
	Staff Email	Student Printing
		Uniprint – University Printing
		Videoconferencing Services

