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The use of benchmarking in academic helpdesk service provision.

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ABSTRACT

As the English Higher Education system responds to changes in funding and student choice, there is increased expectation on universities to provide higher quality services to students and to function more efficiently and effectively. One of the key areas where universities need to rise to these challenges is in their internal helpdesk service provision (Palaneeswaran and Kumaraswamy, 2000), where lessons can be learnt from private sector service provision.

This paper therefore discusses the commonalities and differences of service provision between the public and private sectors, the particular distinct circumstances and difficulties associated with operating helpdesks in academic environments (Middleton and Marcella, 1996), and finally the paper identifies best practice and benchmarking standards within private sector helpdesk provision which can be applied to university helpdesks and potentially to other public sector organisations. The best practice standards and frameworks referred to in this paper are SDI (Service Desk Institute) standards, ITIL (Information Technology Infrastructure Library) Service Management, and COBIT (Control Objectives for Information and related Technologies), and provide opportunities for benchmarking to be applied within academic helpdesks.

Keywords: Benchmarking, Best Practice, Helpdesk, Public Sector, Private Sector, Service Provision. ITIL, COBIT, SDI, Incident Management, Prioritisation.

PRIVATE SECTOR AND ACADEMIC HELPDESKS

Is it possible to use benchmarking and best practice frameworks in order to effectively improve academic helpdesk provision? A critical review of the current literature concludes that so far there has been little research undertaken to answer this question and furthermore that there is a gap in the literature regarding academic institutes and their helpdesks (Middleton, 1996; Middleton, and Marcella, 1996). Wasser (1997) highlighted the key issue in developing high quality academic helpdesks as being a lack of integration between private sector helpdesk companies and public sector helpdesk use.

Expanding on this Middleton and Marcella (1996) have highlighted the following academic helpdesk related issues:

- Helpdesk professionals in the academic community have voiced their concerns over what they say is a gap between their needs and the support which is currently being provided by the associations and the vendors in the helpdesk and user support industry.
- The way in which academia fit into the helpdesk industry as a whole i.e. as a contributor and a consumer.

Since then very little research has been conducted in this area. Palaneeswaran and Kumaraswamy (2000) found that public bodies who want to improve efficiency and effectiveness of their helpdesk are restricted by costs, probity constraints and public accountability and Chamberland (2005) concluded that public sector procurement (academic) is more regulated than private sector procurement and therefore there are more rules, regulations and policies to comply with. In order to implement change, and hopefully in time self-optimisation, public sector agencies need to incorporate the latest modern private sector management tools and technologies to cope in the service industry, remain competitive, and maximise the use of scarce resources. To better understand the benefits of adopting private sector practices it is informative first to consider and compare service provision between public and private sector helpdesks, which can be split into five key areas of commonality and difference.

Adoption of Benchmarking and Best Practice Frameworks

Whilst the private sector is the market leader for best practice framework uptake (Camp, 1989; APM, 2010), there is starting to be an uptake within the public sector, especially within governmental departments (Jantti, 2002). The reason why private sector uptake is superior is due to the environment in which it operates i.e. a customer-led one. Customers of utility companies for example demand high standards of service from their service provider. Utility companies therefore adopt internal procedures and regulations to meet customer needs as well as demanding similar service levels from their IT helpdesk providers. Using best practice frameworks and adhering to standards allows the private sector to promote themselves as an evolving compliant helpdesk.

Public sector IT service management tools by contrast are less customer driven, and are more cumbersome, complex and much slower to evolve. Lack of managerial support and insufficient resources mean best practices are rarely adopted and little incentive or reward is available for employees who participate in benchmarking work (for example by obtaining best practice certification). A lack of standardisation is also an issue within academic helpdesks especially where Bring Your Own Device (BYOD) initiatives are promoted. The additional workload associated with a plethora of different devices creates further challenges for academic helpdesks in terms of what they are able to support (Raths, 2013).

Another challenge facing public sector helpdesk management is their 'federal structure' i.e. individual school's operating individual helpdesks (Martin and Dean 1996), whereas private sector helpdesks are working as a single helpdesk also known as a Service Management Centre (SMC). In order for the public sector helpdesk to bridge the gap it needs to move towards a 'Central Hub' for all helpdesk related issues (Middleton and Marcella, 1996).

Incident Management

Public sector helpdesks regularly employ students, but experience high turnover as there are fewer promotion opportunities within academic helpdesks compared to the private sector (Rumburg and Zbikowski 2012). Private sector helpdesks also retain staff by offering financial incentives following technical certification. Therefore public sector helpdesks have less qualified staff, higher turnover and less knowledge available to resolve and manage incidents (Lomas and Sandy, 1996).

Use of ITSM consultants

The private sector employ the use of external consultants (working for a Benchmarking company) to audit their helpdesk operations whilst the public sector lean towards internal auditing (internal project team) as this is a cheaper alternative but studies suggest that results can often be biased (Jantti 2002). The extra costs of undertaking external auditing of helpdesk operations can be offset by the resulting improvements in performance, creating improvements in overall efficiency and effectiveness as well as in collating and disseminating knowledge (Nyberg, 2013).

Finance and budgetary constraints

Private sector competitive position is led by cost i.e. if something is a strain on resources then it needs to be removed but if something can save the organisation money it requires more resources and time spent on research and development. The public sector tends to adopt a more reactive approach, and it is common for senior managers to view helpdesk investment costs negatively, rather than seeing the benefits of a new system.

Customer feedback

Rigorous and regular customer satisfaction surveys are common in private sector helpdesks in conjunction with customers being assigned account managers to oversee any issues between the service they are receiving and what they are paying for. The use of a Customer Services Plan (CSP) is essential as it acts as the contract between the helpdesk and the customer. Academic helpdesks generally do not employ such methods instead providing generic support for all customers, which is neither tailored, specialised or meet their needs. Private sector helpdesks tend to operate a *continental style of support* (providing 24 hour 7 day support) (Sykes, 2002). Whilst academic helpdesks are moving towards this style of operation, evidence suggests more collaboration between academic helpdesks is possible *ibid*.

USE OF BENCHMARKING IN HELPDESKS

In terms of helpdesk performance, benchmarking is the key performance improvement activity (Nandi and Banwet, 2000) which has several definitions and common themes as shown in Figure 1.

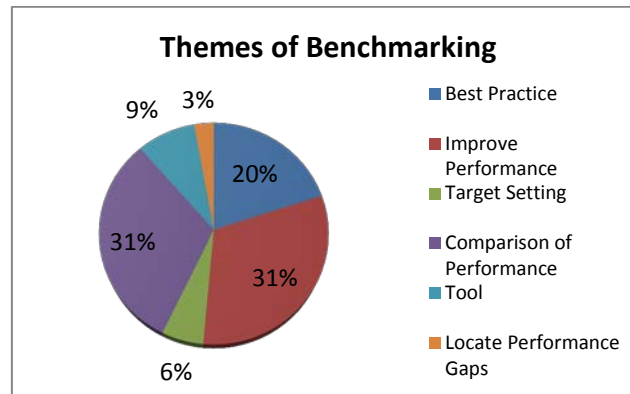


Figure 1 - Common themes of Benchmarking

The three key themes highlighted in Figure 1 are 'Comparison of Performance', 'Improve Performance' and 'Best Practice'. These reflect a substantial body of work stretching over three decades (Camp, 1989; Francis and Hallway 2007). For example, the above themes were used historically by Xerox (Kaplan, 1983; Anand and Kodali, 2008), Motorola, Texas Instruments, General Motor and AT&T (Fritsch, 1993; Baker, 1995) to improve performance. The use of benchmarking is also evident in sectors as diverse as manufacturing, insurance, health services, construction, government, financial services etc. (Jarrar and Zairi, 2001; Maire et al., 2005).

The reasons for using benchmarking have also been well documented, with some authors pointing towards financial constraints, such as Hoffman (1999), who advised that IT professionals must better understand how business processes are analysed financially in order to meet the growing pressures of running and maintaining IT departments.

Companies implementing benchmarking need to measure the costs of achieving a specific goal. They also would benefit from developing a learning mentality when implementing change, i.e. learning what other successful companies have undertaken and how it can be implemented in their own organisation to improve performance (Glanz and Dailey, 1992; Leavitt 2006). Surveys carried out amongst the Fortune 1000 companies' show that 65% of organisations use benchmarking as a management tool to gain competitive advantage, with 50% of the companies using benchmarking regularly, and 80% considering it as an effective approach to change (Korpela and Tuominen, 1996; Maire et al., 2005). Although the above statements are of importance to this research paper, Daniels (1996) offers a far more interesting and relevant reason for using benchmarking and that is to identify best practice standards and possible improvements. In order to achieve these improvements changes in products, processes and services need to be made, enabling organisation to *sustain performance superiority* (Fong et al., 1998).

A popular form of undertaking external benchmarking in a helpdesk environment involves comparing the costs of supporting a particular operation between companies in the same industry (Hoffman 1999). This form of benchmarking is typically evident within private sector organisations tendering for their services with future prospective customers. The advantages of benchmarking against competitors allows for the sharing of best practice and discovering new techniques to deliver services and support. Daniels (1996) also adheres to Hoffman's idea of competitor benchmarking and discusses advantages such as understanding the factors that make a successful organisation, identifying problem areas and where improvements can be made. Not all agree with this view as Camp (1989a) suggests that benchmarking involves a goal setting process and focuses on the organisation itself and not its external competitors. Fong et al., (1998) discuss that there is difficulty in obtaining sufficient data from organisations that have previously used benchmarking as these organisations maybe competitors and therefore would not want to share the data in sufficient detail.

The underlying concept of benchmarking is to propagate the sharing of best practices among organisations and the term best practice is a technique or methodology that through experience and research has proven to reliably lead to a desired result (Visser et al., 2008). Ungan (2004) reports that although many organisations are involved in benchmarking, the adoption of best practices is not often practiced. A critique of this would suggest that organisations are happy to benchmark their performance but actually adhering to change and implementing best practices seems to be a difficult barrier to overcome.

POTENTIAL BENEFITS OF BENCHMARKING IN ACADEMIC HELPDESKS

Whilst further work needs to be conducted for public sector companies implementing benchmarking, Bernstein (2001) and Bowerman et al. (2002) have identified an important motivation for analysing how benchmarking can be used in public sector organisations. Their view of benchmarking in the private sector is of a voluntary activity used to satisfy owners or meet financial demands, whereas in the public sector benchmarking becomes compulsory due to external accountability and other information responsibilities. It is therefore important for an organisation in the public sector to gain superior performance as described in the Benchmarking Objective Diagram (Figure 2). Here the process of benchmarking results in changes to current helpdesk activities which in turn improve products, processes and services (Booth, 1995).

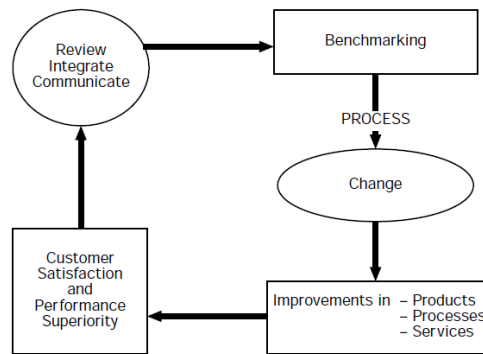


Figure 2 - Benchmarking Objective Diagram. Booth (1995)

To quantify superior performance, tangible factors within single business units or processes are compared with other similar units or processes (Camp, 1989b) through a process known as Performance Monitoring (measurement) (Saad et al., 2005). Whilst there is a lack of literature regarding the use of benchmarking in this way within an academic helpdesk environmental evidence suggests that the public sector is keen to embrace performance measurement and that the need to benchmark and measure performance is becoming greater (Sanchez-Roquiguez et al., 2003; Simpson and Pursglove, 2007;). By benchmarking, academic helpdesks can maintain a continuous level of superior performance through bridging the gap/surplus between the helpdesk's own performance (practice) and industry best practice via a systematic method (Camp 1989a; Mittelstaedt, 1992). Marcella and Middleton (1996) research shows that performance measurement in helpdesks can be measured in a number of ways which include the following,

- Benchmarking: Performed by a consultancy company which compares the Service Desks operations and services against other Service Desks within a formulated 'league table'.
- Call Statistics: Call, volume, capture, length, waiting times, resolution times and number of calls closed.
- Feedback: Includes user surveys or random call follow ups.
- Mystery Caller: Sample questions posed anonymously and evaluated by the caller.

Once these data have been collected they can then be compared to industry benchmarks together with checks that the data measured is complete and represent an accurate summary of helpdesk performance. To do this a number of frameworks and best practice models are available, with the three most widely used frameworks being the Service Desk Institute (SDI), Information Technology Infrastructure Library (ITIL) and Control Objectives for Information and related Technologies (COBIT). The ITIL framework is particularly useful for public sector helpdesks, as the framework is easily integrated into the organisation's operations and can be tailored to suit the needs of the helpdesk (UCISA, 2013). Table 1 provides an overview of all three key frameworks and the comments explain what aspects of the framework can be added to public sector helpdesks to improve efficiency and effectiveness in order to narrow the surplus gap.

Framework	What they do	Benchmarking	Comments
Information Technology Infrastructure library (ITIL)	ITIL provides a cohesive set of best practice's, drawn from the public and private sectors internationally ITIL (2012).	ITIL best practices are made up of five publications which provide a methodical professional approach to IT Service Management ITIL (2012a).	The publication 'Service Operation' contains <i>Incident Management</i> techniques such as Incident prioritisation, identification, logging, categorisation and closure.
Service Desk Institute (SDI) Based on EFQM Model. SDI (2012)	Their standards are aimed at the service desk and IT service desk professionals (analysts & managers).	Model contains the following standards <ul style="list-style-type: none"> • Leadership • People • Policy & Strategy • Resources • Process • People Results • Customer Results • Society Results • Key Performance Results 	An audit based on the criteria contained in the benchmarking column is performed to ascertain the level of Service Desk Certification and can be used to benchmark the public sector helpdesks against their competitors. SDI (2012a)
Control Objectives for Information and Related Technologies (COBIT)	COBIT is detailed as an IT governance framework which includes a toolset that allows managers to bridge the gap between control requirements, technical issues and business risks ISACA (2012).	The framework classifies IT activities and risks into four domains: <ul style="list-style-type: none"> • Plan and Organise • Acquire and Implement • Deliver and Support (DS) • Monitor and Evaluate (ME) 	The framework involves the IT activities discussed in the benchmarking column to be audited and the results compared to competitor helpdesks.

Table 1 Framework use in Public Sector

CONCLUSIONS

Operating helpdesks within an academic environment needs to be tailored to ensure that correct models are chosen and they do not simply follow the private sector as the aims and responsibilities are different. At present no comparison work has been carried out in the public sector and as universities continually use significant resources in supplying their helpdesks they are keen to reduce costs of their helpdesks. Taking into account the commonalities and differences discussed the most cost effective way of improving academic helpdesk service provision and reducing costs is to employ the use of benchmarking and best practice frameworks as these provide real life solutions to real life problems. Bridging the gap between the academic and private sector helpdesk does not have to be a painstaking exercise but rather can be tackled periodically, making small operational changes. Helpdesk studies in the private sector have allowed for key standards to be developed and therefore future work will be focused on developing a model to measure helpdesk effectiveness based on existing private sector standards. The results would be expected to identify approaches to continually improving helpdesk provision and developing a self-optimising helpdesk.

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