# What do library users really want? The application of a market research tool.

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#### Introduction

In order to provide services that the users desire you must first evaluate exactly what users (and potential users) want from the library. This paper discusses how Cranfield University set out to do this in order to shape the future strategy of the library in line with both user needs and internal goals. The LibQUAL+ library survey tool was used to assess what the users want from the library service. The findings from Cranfield and SCONUL are presented with a view to informing library managers of the potential needs of their users.

LibQUAL+ is a rigorously tested web-based survey, the results of which can help libraries assess and improve library services based on the needs and expectations of the users. It arrived in the UK in 2003 and since then 54 different UK and Irish Universities have run, or are running LibQUAL+, arguably making it the leading survey method for academic libraries in the UK<sup>2</sup>.

LibQUAL+ is based on gap theory analysis, with 'gap' being the distance between the users' perceived and desired (or minimum) level of service, making it a powerful market research tool. The results can therefore be used to prioritise an agenda for change based on the needs and wants of the users.

Cranfield University first became involved in LibQUAL+ in the UK pilot phase in 2003. On behalf of the SCONUL Working Group on Performance Improvement, Stephen Town at Cranfield University has coordinated the SCONUL LibQUAL+ consortium since its inception. The survey can be run by institutions annually either within the Spring or Autumn term. Cranfield chose to conduct the survey in Spring 2003 and again in Spring 2005, allowing actions from the 2003 results to be implemented before re-evaluating.

In 1984 the MOD awarded a contract to Cranfield University for the provision of academic teaching, support and research. Today this unique faculty undertakes the education of armed forces, civil servants and industry personnel from all over the world. The Shrivenham campus of Cranfield University is certainly not typical of the majority of UK Higher Education, but the methods used by the library for customer understanding do reflect the experience of other quality driven academic library services in the UK.

#### **Background to LibQUAL+**

The LibQUAL+ survey instrument is adapted from the SERVQUAL instrument, which is grounded in the 'Gap Theory of Service Quality' and was developed by the marketing research team consisting of A. Parasuraman, V.A. Zeithaml, and L.L. Berry<sup>3</sup>. The Texas A&M University, in partnership with the North American Association of Research Libraries (ARL), restructured the SERVQUAL protocol based

on a series of interviews with library users, the results of which formed the basis of the LibQUAL+ questions<sup>4</sup>.

## The LibQUAL+ Questionnaire

The LibQUAL+ survey instrument makes it possible for libraries to canvas their users' opinions with minimal local effort. It employs a web interface to ask users about their library service expectations and experience. Since 2004 the survey has included 22 core questions split into three dimensions of library service quality: 'Affect of Service' (questions on, for example, the effectiveness of library staff); 'Information Control' (questions concerning availability of resources and the ease with which information can be accessed, both physically and electronically); and 'Library as Place' (questions on the physical environment).

Library users are given the opportunity of stating their views in terms of their minimum, desired and perceived ratings for the different areas of library service quality evaluated. The use of gap theory in the LibQUAL+ survey allows us to evaluate which services are important to the users as well as where improvements can be made. The results present the mean score for each question in terms of minimum, desired and perceived ratings, and provide an adequacy and superiority gap score. The adequacy mean is an average of the perceived score minus the minimum expectations, or in other terms how well the library is performing above the minimum standard. A negative adequacy score indicates that the library is performing under the users' minimum expectations. The superiority mean is an average of the perceived score minus the desired score, or in other terms how close the library is to meeting the users' desired level of service. A positive superiority score indicates that the library is exceeding the users' desired expectations for that aspect of service.

The nature of the fixed-question survey enables institutions to compare results directly. Institutions can compare results with other participating individual libraries or with consortia of similar institutions. Since 2003 SCONUL has had a consortium of member libraries participating in LibQUAL+ annually. The results from each consortium member have been compiled to provide a SCONUL average score for each year of participation<sup>5</sup>.

# LibQUAL+ at Cranfield University's Shrivenham campus

In 2003 Cranfield University undertook the UK LibQUAL+ pilot along with 19 other UK Higher Education Institutions. 538 surveys were completed at Cranfield University, which includes a total of 166 at the Shrivenham campus. Detailed analysis was conducted on the results to form an agenda for change. Although none of the areas measured fell below the minimum level of service, it was possible to define an agenda for improvement from those questions receiving the lowest superiority means and highest desired means. The desired scores were ranked from high to low (indicating what is most important to the users) and evaluated against the superiority gap (how far the Library is from meeting the users' desired level of service); the results can be seen in Table 1.

Table 1: LibQUAL+ results from DCMT Library 2003.

		Desired		
	_	Rank	Adequacy	Superiority
ID	Question Text	Score	Mean	Mean
IC-2	A library web site enabling me to locate			
	information on my own	1	0.53	-1.11
IC-6	Easy-to-use access tools that allow me to find	2	0.40	1 26
TC 4	things on my own	2	0.48	-1.36
IC-4	The electronic information resources I need	3	0.82	-0.78
IC-1	Making electronic resources accessible from		0.40	4.24
10.1	my home or office	4	0.40	-1.34
AS-4	Readiness to respond to users' enquiries	5	1.27	-0.24
AS-5	Library staff who have the knowledge to		4.06	0.05
70.5	answer user questions	6	1.36	-0.25
IC-5	Modern equipment that lets me easily access	_	0.00	0.04
AC 0	needed information	7	0.80	-0.84
AS-8	Willingness to help users	8	1.39	-0.13
AS-7	Library staff who understand the needs of		1 1 4	0.42
IC-7	their users	9	1.14	-0.42
IC-/	Making information easily accessible for independent use	10	0.89	-0.69
IC-8	Print and/or electronic journal collections I	10	0.09	-0.09
1C-0	require for my work	11	0.77	-0.87
AS-9	Dependability in handling users' service	11	0.77	0.07
75 7	problems	12	1.15	-0.37
IC-3	The printed library materials I need for my	12	1.13	0.57
10 5	work	13	0.72	-0.91
AS-3	Library staff who are consistently courteous	14	1.89	0.42
AS-1	Library staff who instil confidence in users	15	1.58	-0.42
AS-6	Library staff who deal with users in a caring	15	1.50	0.12
7.5 0	fashion	16	1.77	0.34
AS-2	Giving users individual attention	17	1.68	0.07
LP-4	A haven for study, learning, or research	18	1.25	-0.37
LP-3	A comfortable and inviting location	19	1.99	0.22
LP-1	Library space that inspires study and learning	20	1.45	-0.18
LP-2	Quiet space for individual work	21	1.38	0.01
LP-5	Space for group learning and group study	22		
LP-3	Space for group learning and group study	22	1.67	0.44

The analysis highlighted where opportunities for improvement lay, and of these which areas were the most important to the users. Two main themes were identified from the findings forming an agenda for change.

Firstly, accessing and using electronic resources, which included questions relating to the library web site (IC-2), easy-to-use access tools (IC-6), remote access (IC-1) and independent use (IC-7), were all in the top ten desired areas with large superiority gaps. There was an internally recognised need to improve the library web site before the survey was conducted in 2003; however the results helped focus staff resources on the development of a new digital library<sup>6</sup> aimed at aiding the users in their use of electronic information resources.

The second theme identified concerned the provision of subject specialist support. Questions relating to the ability to answer (AS-5) and readiness to respond to (AS-4) users' enquiries both rated highly on the desired scores. Other questions associated

with subject specialist support (AS-7, -9 and -1) all had negative superiority means. Although these had smaller superiority gaps than the 'Information Control' questions, there was still an opportunity to improve. These results coupled with other internal factors caused the library to re-evaluate staff roles and responsibilities. A new post of Information Specialist was developed to replace the previous role of Assistant Librarian, with the emphasis on providing a tailored information service in a defined subject area to specific user groups.

In 2005 Cranfield University decided to repeat the LibQUAL+ survey to assess the impact of the changes implemented. 768 surveys were completed between February and April 2005 at Cranfield, including 237 at the Shrivenham campus. There was a 40% increase in responses in comparison to 2003, attributed to an increase in survey promotion throughout the University. Of the two main areas for improvement identified in 2003, the introduction of Information Specialists had been achieved by the time of the LibQUAL+ survey in 2005; however the new Digital Library had yet to be launched. As a result limited improvement was found in the questions relating to access to and use of electronic resources, as shown in Table 2.

Table 2: Changes in superiority means for questions relating to access to and use of electronic resources.

ID	Question Text	Superiority Mean 2003	Superiority Mean 2005	+/-
IC-1	Making electronic resources accessible			
	from my home or office	-1.34	-1.26	0.08
IC-2	A library web site enabling me to locate			
	information on my own	-1.11	-1.13	-0.02
IC-6	Easy-to-use access tools that allow me to			
	find things on my own	-1.36	-0.93	0.43
IC-7	Making information easily accessible for			
	independent use	-0.69	-0.71	-0.02

In the area of subject specialist support a more positive impact was realised, as shown in Table 3.

Table 3: Changes in superiority means for questions relating to subject specialist support.

ID	Question Text	Superiority Mean 2003	Superiority Mean 2005	+/-
AS-1	Library staff who instil confidence in users	-0.42	-0.35	0.07
AS-4	Readiness to respond to users' enquiries	-0.24	0.02	0.26
AS-5	Library staff who have the knowledge to			
	answer user questions	-0.25	-0.23	0.02
AS-7	Library staff who understand the needs of			
	their users	-0.42	-0.23	0.19
AS-8	Willingness to help users	-0.13	-0.07	0.06

The new Digital Library was launched in September 2005, and the Shrivenham campus of Cranfield University will be undertaking LibQUAL+ in Spring 2006 to measure the impact of this new service.

## **Comparisons**

Internal and external benchmarking analyses have been applied to Cranfield University's LibQUAL+ results from 2003 and 2005. In general it has been found that the local results (shown in Table 1) differ from the SCONUL average. Although not presented here, the results from ARL Colleges and Universities mirrored those from SCONUL. Analysis of the SCONUL data over a three year period has shown the 'Information Control' dimension to be consistently the most important area of concern, with 'Library as Place' and 'Affect of Service' being joint second; whereas at the Shrivenham campus 'Library as Place' has been the least important aspect in both 2003 and 2005. This could be as a result of the unique nature of the Shrivenham campus and its student body.

Table 4 presents the results from the 2005 SCONUL cohort in desired rank order. The most important aspects to SCONUL users are all associated with their ability to access the information they need quickly, easily and independently. All of the 'Information Control' questions are the most important aspects of library service, with access to print resources being the least important of all the Information Control questions, emphasising the users' shift to electronic access. Despite 'Making electronic resources accessible from my home or office' being the most desired aspect of service, the library as 'A haven for study, learning, or research' still ranks highly. These two aspects appear to conflict with one another and indicate a desire to continue to use the library in a physical capacity.

A national and international trend has been the low desired score on giving users individual attention and instilling confidence in users. The focus of these results appears to show that users desire to be empowered to meet their information needs independently whether working in the library or remotely. It could be suggested that the role for information professionals lies with educating the users to enable them to work with a range of information resources independently.

The other national and international trend which has been consistent since LibQUAL+ was first conducted is the low desired rating for group study space. In the past this has been attributed to the inclusion of postgraduate and academic staff desired ratings in the overall score. Both user groups typically do not have a need for group study space and subsequently give this aspect of the service a low desired rating. Further detailed analysis on the SCONUL results from 2005 have shown however that undergraduates also have a low desired mean for this aspect of library service (ranked 21 out of 22). In this instance, demand may be a better measure than desire. It could be that there is heavy demand for group study space; however in comparison to the other aspects of service measured by LibQUAL+ the desire is low.

Table 4: SCONUL results 2005 in order of highest desired rating.

		Desired	Adequacy	Superiority
ID	Question Text	Mean	Mean	Mean
IC-1	Making electronic resources accessible			
	from my home or office	8.09	0.12	-1.60
IC-8	Print and/or electronic journal collections I			
	require for my work	8.05	-0.21	-1.63
IC-5	Modern equipment that lets me easily			
	access needed information	8.00	0.25	-1.13
IC-2	A library web site enabling me to locate			
	information on my own	7.96	0.38	-1.09
IC-6	Easy-to-use access tools that allow me to	7.04	0.07	
70.4	find things on my own	7.94	0.27	-1.14
IC-4	The electronic information resources I	7.04	0.12	1.26
TC 7	need	7.94	0.13	-1.36
IC-7	Making information easily accessible for	7.01	0.21	1 10
LP-4	independent use	7.91	0.31	-1.10
IC-3	A haven for study, learning, or research	7.85	-0.07	-1.66
1C-3	The printed library materials I need for my work	7.84	0.17	1 [2
LP-2	Quiet space for individual work	7.83	-0.17	-1.53
LP-1	Library space that inspires study and	7.63	-0.24	-1.60
LL-I	learning	7.81	-0.22	-1.87
AS-4	Readiness to respond to users' enquiries	7.80	0.48	-0.84
AS-3	Library staff who are consistently	7.00	0.40	-0.04
A3-3	courteous	7.80	0.51	-0.83
AS-5	Library staff who have the knowledge to	7.00	0.51	0.05
75 5	answer user questions	7.79	0.48	-0.84
AS-8	Willingness to help users	7.73	0.54	-0.86
AS-7	Library staff who understand the needs of	7.73	0.51	0.00
, 10	their users	7.68	0.39	-0.97
AS-9	Dependability in handling users' service	7.00	0.00	0.07
1.0 5	problems	7.65	0.32	-1.02
LP-3	A comfortable and inviting location	7.63	0.37	-1.19
AS-6	Library staff who deal with users in a		2.07	
	caring fashion	7.51	0.64	-0.80
AS-1	Library staff who instil confidence in users	7.48	0.73	-1.17
LP-5	Space for group learning and group study	7.05	0.33	-1.15
AS-2	Giving users individual attention	6.93	0.56	-0.94

#### **Conclusions**

In conclusion LibQUAL+ has been successfully applied at Cranfield University's Shrivenham campus. It has enabled the library to create an agenda for action on the basis of users' wants and needs where opportunities for improvement were found. The positive results of some of these actions were realised at the repetition of the survey in 2005, with the further actions due to be evaluated in Spring 2006. It is hoped that this example of how a market research tool was applied at Cranfield will provide other libraries with inspiration on how similar activities could help to improve their service.

Users' needs do differ at Cranfield's Shrivenham campus in comparison with the SCONUL and ARL results. The SCONUL results indicate a strong desire from users for

electronic resources which are comprehensive enough to meet their information need whilst being simplistic enough to enable independent use. They have been presented in this paper to provide library managers with information on the potential wants and needs of their users, presuming that the SCONUL average can be applied across institutions. The author hopes that the preliminary findings and conclusions will spark debate in the area of users' needs; this work is ongoing and comments or contributions are actively sought.

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<sup>1</sup> LibQUAL+(™) -- Charting Library Service Quality (2005) Available at: http://www.libgual.org/ (Accessed: 1 December 2005).

<sup>&</sup>lt;sup>2</sup> Town, J. S. & Lock, S. A. (2005) 'LibQUAL+ in the UK and Ireland: three years' findings and experience', *6th Northumbria International Conference on Performance Measurement in Libraries and Information Services.* University of Durham, Durham 22-25 August. Awaiting publication. Available at: http://hdl.handle.net/1826/951

<sup>&</sup>lt;sup>3</sup> Zeithaml, V. A., Parasuraman, A. & Berry, L. L. (1990) *Delivering Quality Service*. New York: The Free Press.

<sup>&</sup>lt;sup>4</sup> Cook, C. & Heath, F. (2001) 'Users' perceptions of library service quality: a LibQUAL+ qualitative study', *Library Trends*, 49(4), pp. 548 – 584.

<sup>&</sup>lt;sup>5</sup> Lock, S. A. & Town, J. S. (2005) 'LibQUAL+ in the UK and Ireland: three years' findings and experience', *SCONUL Focus*, Number 35, Summer / Autumn, pp 41 – 45.

<sup>&</sup>lt;sup>6</sup> DCMT Digital Library (2005) Available at: http://diglib.shrivenham.cranfield.ac.uk/ (Accessed: 1 December 2005).