Chapter 4

In-house library surveys

Chapter overview

In this chapter we will discuss the use of locally designed and administered surveys and how they can be used to improve libraries. One of the key concepts discussed in the previous chapter on standardised surveys is echoed here – the use of survey methodologies to evaluate customers’ expectations and perceptions – but the two approaches have different advantages and disadvantages. Standardised surveys are designed by a team, and often some level of analysis is conducted by the tool, saving the library time and money. Library staff design and analyse in-house surveys. And whereas a standardised survey provides a generic set of questions to enable comparisons to be made between institutions, an in-house survey can provide greater insight by focusing on local issues. Before you embark on a local or a standardised survey, we recommend you identify your strategic needs and determine which methodology suits your library best.

This chapter presents four case studies on how local surveys have been developed and implemented to improve customers’ experience at academic libraries:

- Case Study 4.1 Beyond answering questions: designing actionable surveys to guide assessment, make decisions and support ongoing analysis (Jackie Belanger, Maggie Faber and Steve Hiller)
- Case Study 4.2 Taking users’ opinions into account when managing an academic library: a decade in retrospect (Lizanne Sanchez)
- Case Study 4.3 Giving students voice: a biennial user satisfaction survey at Duke University Libraries (Emily Daly, Duke University)
- Case Study 4.4 Listening to the student voice at Library and Learning
Services at Kingston University (Davina Omar and Simon Collins, Kingston University).

The University of Washington (UW) Libraries has a strong history of applying library assessment techniques to improve its service to customers. This forms part of the long-standing culture of assessment at the library, using evidence to shape and inform strategic developments. In Case Study 4.1 Belanger and colleagues discuss the large triennial survey used at UW Libraries since 1992, which has led to an evidence-driven culture of continual improvement. In providing examples of how librarians can act on survey results and how internal improvements in the assessment process can enable more effective use of results, the authors aim to provide librarians with ideas they can apply to their own surveys and service improvement efforts.

In Case Study 4.2 Sanches from Lisbon University also emphasises the importance of encouraging a continual improvement culture. She describes how regular assessment, analysis, action and evaluation have led to improvements in library customer satisfaction in key areas. Changes in the physical environment, collection management and promotion, library training provision and strategic planning have all been implemented based on the feedback received from surveys, to the benefit of the customer.

Duke University Libraries took the decision to move from using a standardised tool to developing an in-house library survey, as presented by Daly in Case Study 4.3. Following the lessons learned in their survey’s first iteration, library staff sought to improve the response rate when running the survey for the second time. Following expertise from the Duke Center for Advanced Hindsight, they implemented a regret lottery method, increasing their responses from 735 to 3,467.

We have found few examples of in-house academic library surveys in the UK. One reason for this is the institutional desire for students to complete the compulsory National Student Survey (NSS; www.n Biosurvey.com) and to avoid ‘over-surveying’ students. Despite this, Kingston University has run an in-house survey annually since 2004, which has helped to establish a continual improvement culture and student satisfaction rise from 72% in 2004–5 to 94% in 2016–17. Case Study 4.4 by Omar and Collins provides insight into the use of a long-established in-house survey.

Survey design
The key strength of a locally designed survey over a standardised survey is the ability to explore local issues in depth. The essential starting point is to have a clear goal in mind for what you want to find out and how to use the information gleaned. If you are not willing or able to do anything with the results, do not embark on a survey.

Designing a survey and writing survey questions to gain insight into your customer needs and expectations requires advanced skills in qualitative and quantitative research methods. Depending on your institution, you may already have these skills within your library team; if not, bring in expertise to support you if you plan to develop your own survey. Seeking advice from survey administrative units or academic experts within the organisation, or even giving social science students a practical example that they could use in their assignments, could aid the development of your survey.

The growth of online survey tools has made large-scale locally designed surveys more obtainable and easier to administer. SurveyMonkey provides a free account for small-scale surveys or a reduced-cost professional account for students and academics. Before using SurveyMonkey seek advice from your institutional survey office as you need to consider data privacy issues (see below). Qualtrics (https://www.qualtrics.com/) and Jisc Online Surveys (previously known as Bristol Online Survey) provide similar functions to SurveyMonkey for a fee. In recent years these tools have become more prevalent and are often provided with an institutional licence; they overcome any privacy concerns as respondent data is stored locally rather than in cloud storage. These tools have similar characteristics allowing you to develop complex surveys with skip logic, multiple question formats, data analysis and reporting.

Before embarking on any survey, however, you must consider the ethics and data privacy issues raised. Many institutions have central administrative departments responsible for overseeing student data collection. In universities in the USA these are commonly known as an institutional review board; in the UK there is no standard naming convention but student survey steering groups, committees and/or departments are common and should be consulted. Local survey administrators have a responsibility to ensure that data is managed ethically and in accordance with privacy laws. Depending on the nature of the information collected and where it is stored, you may need to comply with the Swiss–US Privacy Shield Framework or EU–US Privacy Shield Framework. Again, your local survey administration unit, research ethics board or committee will be able to advise you.

Survey implementation
Once you have designed your survey in line with your strategic aims, it is vital to distribute it effectively to gain an appropriate response. For large-scale
surveys e-mail is the preferred route of distribution, with follow-up e-mails sent at regular intervals until the survey closes. Incentives can increase response rates, and as Daly outlines in Case Study 4.3, 'orgret lottery' messaging can be effective. Any incentives offered should be proportional and in line with the organisational culture. Providing a prize draw to win a round-the-world cruise would be seen as disproportionate, especially in times of increasing student tuition fees and institutional budget cuts. Sometimes less is more, with chocolate, a free coffee or print credits all being used effectively to boost student response rates. Promoting your survey in an eye-catching, engaging manner is also important. Like many universities, Kingston University has used a combination of social media, posters and online promotion and encouraging students and staff to promote the survey on its behalf (Case Study 4.4).

**Survey analysis**

The analysis stage of an in-house survey requires staff with appropriate skills in qualitative and quantitative analysis techniques to ensure data is evaluated appropriately. You or your team members may already have these skills, or you may need to invest in staff development or buy in specialist expertise, depending on your circumstances. Again, as with writing survey questions, you may be able to source expertise and support from faculty colleagues who specialise in data analysis.

Appropriate data analysis should be structured around the initial information need you identified before designing your survey. What is it you need to ascertain? How will the data answer this question? Who is the audience and what do they need to know? Framing your analysis to focus on the identified strategic needs will ensure that you do not spend time analysing data with little or no value.

Software used for quantitative analysis has been dominated by Microsoft Excel for years. The common use of this package for a variety of business functions has led to relatively mature skill sets in its capabilities among library staff members. With appropriate skill levels, it is possible to conduct analysis suitable for most in-house survey needs. Online survey providers such as SurveyMonkey have in-built sophisticated quantitative analysis tools allowing you to analyse the data within the platform. Within the interface, weighted means, cross tabulations, survey comparisons and data graphing can be achieved quickly. All of the providers allow data export into Excel to enable further analysis.

In recent years data visualisation has evolved, with data dashboards becoming increasingly common. Tableau, SAS (formerly Statistical Analysis System) and Microsoft Power BI are all becoming prevalent, and examples are outlined in some of the case studies below. Tableau is used increasingly because of its ability to combine data sets quickly and create customisable data dashboards. Tableau Public enables you to use the product for free, but you need to be aware that all data sets are available to anyone, so this would not be suitable for sensitive data. If your institution has a licensed version of Tableau, data can be stored and shared securely, with a free reader version available to enable all staff to access your visualisations. The power of data visualisation to explore data in new ways provides us with more opportunities to answer research questions.

For qualitative analysis, similar software tools can support detailed evaluation of the data. In a later chapter on qualitative research we discuss the use of NVivo in developing a customer feedback database. This and similar tools allow staff to analyse, tag, code and identify connections in unstructured data. Qualtrics and SurveyMonkey also contain text analysis features within their platforms to enable analysis of qualitative data. These are not as sophisticated as advanced software such as NVivo, but depending on the information needed and the investment required in learning how to use qualitative software, they may be a better alternative. Regardless of the product chosen, the time required to conduct qualitative analysis can be significant, even for small-scale surveys, and should be factored into the planning process.

**Survey action**

The final stage of implementing an in-house library survey is action planning for change. This could involve stakeholders from across the library service or institution, or externally depending on the focus of your research. Identifying what actions need to be taken, by whom and when is crucial to this process. It is vital that you communicate your results to stakeholders who can help you formulate an action plan in a manner that is suitable to the audience. Sharing insight in an engaging way without overwhelming team members with data that is too detailed is essential to the action planning process. Actions could include lobbying for increased funds to improve library collections, space and/or services; redistributing resources to improve aspects of the service the customers care about the most; or improving workflows, policies or processes.

Beyond sharing your results with the stakeholders engaged in action planning, it is also essential to communicate your findings and subsequent action plans to wider audiences such as senior administrators within your institution, faculty colleagues and library customers. Closing the feedback loop by communicating findings and action to the survey participants is fundamental. Ensuring that respondents are aware that their views have been heard and will be acted on will
build trust in the service and encourage continued participation in future research projects. Sometimes this will include sharing with customers the news that their suggestions cannot be acted on at this time. There is often a reticence to disclose to customers what might be viewed as bad news, but giving bad news builds more trust and goodwill than ignoring customer concerns, especially if you are able to explain the barriers to implementing their suggestions.

Once your data has been collected, your analysis completed, your actions actioned and your findings shared, it is time to repeat the process. It is essential to check if the actions you have put in place have had the impact on the customers that you anticipated. Follow-up evaluations may not necessarily take the form of another survey; choose the right methodology depending on your information needs. This will then form the basis of your continual improvement culture.

**Case Study 4.1** Beyond answering questions: designing actionable surveys to guide assessment, make decisions and support ongoing analysis at the University of Washington
Jackie Belanger, Maggie Faber and Steve Hiller

**Introduction and background**

This case study highlights key improvements made at the University of Washington (UW) Libraries as a result of quantitative and qualitative data collected through a large-scale user survey. In addition to discussing the concrete improvements arising out of survey results, the authors explore the ways in which changes to the process of developing the survey and communicating its results strengthened staff buy-in and willingness to act on the data.

The UW is a large, comprehensive research university with a main campus located in Seattle, Washington, and two smaller branch campuses within the metropolitan region. The UW ranks in the top three US public universities in external research funding ($3.3 billion in 2017–18) with internationally recognised research programmes in the health sciences, global studies and science, technology, engineering and maths (STEM) disciplines. In 2017 the UW was ranked as one of the top 25 research universities in the world by the Times of London (Times Higher Education, 2017) and the Academic Rankings of World Universities (Shanghai Ranking Consultancy, 2018). In 2017, student enrolment at the three campuses was approximately 42,000 undergraduates and 16,000 graduate and professional students. UW Libraries includes 16 libraries across the three campuses with a staff of more than 400 and an annual budget of $45 million. The UW Libraries is consistently ranked in the top ten US publicly funded academic research libraries by the Association of Research Libraries (ARL; www.arl.org) (ARL, 2018).

UW Libraries has run a large-scale user survey every three years since 1992, and the Triennial Survey, as it came to be known, is the longest-running cyclical survey in US academic libraries (Hiller and Belanger, 2016). It is distributed to all faculty and graduate students at all three campuses, to all undergraduates at the smaller Bothell and Tacoma campuses, and to a sample of 5,000 undergraduate students at the Seattle campus. Survey instruments and results (including dashboards and details about response rates) are available on the UW Libraries assessment website (www.lib.washington.edu/assessment/triennial). For additional background on the Triennial Survey and assessment at the UW Libraries see Hiller and Wright (2014) and Hiller and Belanger (2016).

Results from the Triennial Survey are used to make improvements to spaces, services and resources, and for budget and advocacy purposes. One of the challenges of moving from results to meaningful action in such a large system is that while library assessment staff (who currently include the director of assessment and planning, an assessment librarian, and a temporary data visualisation and analysis librarian) can gather and communicate survey data, it is largely the responsibility of staff in specific units to implement changes based on the results. Assessment staff are continually considering how they can enable staff to make improvements by gathering the best data and helping them work with the data in the most effective ways possible.

**Survey development and communicating results**

Before discussing the improvements themselves, it is worth pausing to provide some background on the changes to the 2016 survey and the process of survey development and implementation that enabled many of these improvements to take place. One of the major changes in 2016 involved a shift in the focus of conversations with library staff during the survey development process, which has always involved a lengthy consultation period with library staff, and discussions occasionally centred on the survey itself and whether various groups would see their concerns reflected in the survey. In 2016, the assessment librarian and the director of assessment and planning reframed their discussions with library staff by asking broader questions about what staff wanted to know about library users. Removing the constraint of focusing on the survey instrument allowed staff to generate a range of questions about users. These were brought to an appointed survey development committee, which worked with assessment staff to determine which questions might be best suited to survey methodology. The questions that were not appropriate for a survey were then used to inform plans for assessment in 2017–18. This enabled the assessment librarian to gather creative ideas for the survey that were genuinely rooted in staff needs and communicate to staff that any questions that were not addressed on the survey could still be part of other projects using methods such as interviews and focus groups.

As a result of this revised process, there were new questions on the survey that provided more concretely actionable data for staff (e.g. on electronic books, users' preferences for various search tools, and libraries' support for teaching and learning). Survey questions were closely aligned with libraries' strategic priorities between 2014 and 2017 in key areas such as scholarly communication. This alignment and the overall revised process were critical for generating increased buy-in from staff when they began to
explore survey results and consider how to make improvements accordingly. While the UW Libraries has a strong track record of using results for improvement, the 2016 iteration further tightened the link and the timeline between the survey development process and taking action on results.

Figure 4.1 shows how we integrated the survey design process with annual planning and communication procedures. Depending on the stage of the process, stakeholder groups are asked about questions they have about users or those they would like to explore further from the results, which are used to inform follow-up assessment projects.

![Diagram](image)

**Figure 4.1** The integration of the survey design process with annual planning and communication at UW Libraries

Several revisions were made to the process of communicating survey results to library staff. In previous years, survey data had been made available to staff largely in the form of reports focused on campuses and major user groups (e.g., faculty). In 2016, assessment staff decided to create more customised, topic-specific reports for key stakeholder groups. They provided stakeholder groups with a detailed understanding of the results that mattered most to them, thereby increasing the likelihood that staff would be willing to act on those results. As a complement to the static reports, the data visualisation and analysis librarian developed a suite of interactive dashboards, which helped staff explore relevant results in greater detail and compare patterns across groups (Figure 4.2 opposite). In making the qualitative and quantitative results more accessible, these dashboards attempted to empower staff to act on survey results themselves. These various reporting models opened up new ways for units to integrate the survey results into ongoing service reviews and further assessment plans.
The dashboard in the upper left of Figure 4.2 shows the quantitative data, while the dashboard in the lower right shows the qualitative comments. Both are interactive and can be filtered to show answers from a particular subset of users or answers on a particular topic or service.

Acting on survey results

Data from the 2016 Triennial Survey has resulted in a number of service improvements. In all cases, changes arose after assessment staff provided survey data and comments to specific stakeholder groups, who then acted on the results. This model was key in ensuring that staff who best understood their own areas of user support had the data to make robust decisions about service changes. One key example arose in survey responses from undergraduates about the need for electrical outlets and space to charge personal electronic devices. A Likert scale question asked students to rate the importance of various spaces and the technology within them. Outlets emerged as one of the most important categories, receiving a mean score of 4.4 on a 5-point scale. The number of students requesting additional outlets was so high (about 24% of undergraduates’ comments on library spaces and about 12% of their comments overall) that it was assigned its own comment code. As a result, a number of libraries, including Odegaard Undergraduate Library, made a successful funding request for additional charging stations in the libraries.

Beyond using quantitative data from the surveys to demonstrate the demand for making particular improvements there are a number of examples of staff acting on qualitative survey data to change collection policies and spaces. For example, comments from students on the challenges they faced in accessing and using e-books re-enforced to library collections staff the need to improve access to locked content, which they had often encountered in person. As a result, collections staff decided to prioritise digital rights management (DRM)-free subscriptions to reduce access limitations and other restrictions on e-books. This decision prompted a cancellation of a pilot subscription with one platform in order to realise funds to another, and collections staff routinely now consider whether a resource is DRM-free as part of their ongoing decision-making process.

A number of faculty comments about fines on overdue library materials resulted in recommendations for service improvement. As part of a wider review, members of the Access Services Committee explored survey data and comments, focusing on users’ criticisms such as the imposition of fines on the faculty. They noted that respondents had often commented on how UW fine policies compared unfavourably with those at other research institutions and investigated fines policies at peer institutions, resulting in them recommending that overdue fees for renewable items should be eliminated. Student feedback about library spaces also gave rise to improvements. For example, graduate students’ comments about furniture and cleanliness at one of the UW Libraries were shared with the appropriate facilities department. Together, libraries and facilities staff identified low-cost upgrades to furniture that would refresh some of the spaces and agreed on a more frequent maintenance schedule for areas such as high-use study rooms.

These more focused instances of improvement operate in tandem with library-wide use of survey data. One of the most important of these is in the libraries’ Institutional budget request, in which survey results are used to highlight critical areas such as the ongoing importance of collections funding and key staff positions to support emerging areas of need such as scholarly communication. Over the course of 2017, survey results were also used as the basis for marketing efforts in order to ensure that users are aware of the range of library services, resources and spaces available to them and the changes made by the libraries in response to their feedback. Survey results formed the basis for more detailed follow-up assessments and ongoing improvements as well. For example, follow-up assessments using design thinking are being used to generate options for changes based on users’ needs identified in survey results (such as a project to improve citation management support services) or to explore unexpected results in greater depth.

Conclusion

Although surveys are a popular assessment method in libraries, it can be challenging to move from data to action, especially in larger library systems. The changes implemented at the UW Libraries during the 2016 iteration of the Triennial Survey were critical in supporting staff to make improvements based on survey results. Changes include a revised process for gathering staff input during survey development and a greater emphasis on enabling staff to work with the results most useful to their areas of focus through customized reports and dashboards. The authors believe such approaches can be scalable in different library contexts, depending on the size of the library and resources available. For example, while creating a number of different dashboards might not be possible for all libraries, creating a customizable template to use for a variety of topic-specific reports can be a sustainable method of communicating effectively. Although time consuming, investing effort in gaining staff buy-in during the survey development process and communicating results to staff in more targeted ways pays significant dividends by encouraging staff to engage with survey data and think about potential improvements for users.

Acknowledgements

The authors wish to acknowledge UW colleagues whose work was critical to implementing the 2016 Triennial Survey and subsequent actions on survey results: Chele Batchelor, Karen Brooks, Jewel Evenson, Ann Gleason, Corey Murata, Heidi Nance, Denise Pan, Kirsten Spillium and Jennifer Ward.
Case Study 4.2 Taking users’ opinions into account when managing an academic library: a decade in retrospect from Lisbon University
Tatiana Sanches

Introduction
The University of Lisbon is the biggest university in Portugal, with 18 schools (faculties and institutes) and around 50,000 students, 3,500 teachers and 2,500 staff. It is governed by values of intellectual freedom and respect for ethics, innovation and the development of society, democratic participation, and social and environmental responsibility. There are 22 academic libraries, organised by themes according to the education and research of each autonomous unit. Two of these schools, specialising in psychology and education, frame the present study. The mission of the Faculty of Psychology is to offer training and conduct research in psychology and cognitive science. Currently it has about 950 students. The Institute of Education, currently with about 900 students, is devoted to conducting research and teaching in education and training in Portugal. The Library in question previously supported a single institution, the Faculty of Psychology and Educational Sciences, until the two separate institutions, the Faculty of Psychology and the Institute of Education, were created in 2010.

The Library of the Faculty of Psychology and Institute of Education at Lisbon University is reader-focused and open to change and innovation. This spirit has been fostered over the years by a working culture based on management tools. Thus, it has been crucial to define a mission, produce regulations and build a solid working structure rooted in a strategic plan.

In 2007, the management board challenged the library staff to undergo a reflective review, which led to a systematic observation on the general environment, human resources, collections, services provided and equipment, material resources and spaces. The first diagnosis pointed straightforward to the need to create and implement a regular methodology to evaluate the quality of the Library. Although this evaluation had been carried out on other occasions, it had not been done systematically and therefore did not provide a comparative analysis that would allow intervention in more critical aspects. In fact, strategic planning and evaluation are not regular tasks and only have a real bearing when they change into processes that are capable of changing according to the agreed objectives circumstances and accumulated experience (Puentes, 1999). Thus, evaluation is warranted in view of the need constantly to improve the provision of services to users, so that services are more satisfactory, efficient and effective.

Listening to users
Apart from previous diagnostic studies, we instigated an evaluation of services, spaces and resources of the Library, to be carried out in a simple, regular manner in collaboration with users. We used a satisfaction scale from 1 (less satisfied) to 4 (more satisfied) to cover the areas of library services, asking questions on its document collection, customer service and the staff’s relationship with users, users’ autonomy and accessibility of resources, the physical environment or space available, and the extent to which respondents appreciated the Library in general. An extract of the survey is presented in Table 4.1.

Table 4.1 Extract from the reader survey of the Library of the Faculty of Psychology and Institute of Education at Lisbon University

<table>
<thead>
<tr>
<th>PHYSICAL ENVIRONMENT</th>
<th>Level of satisfaction</th>
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<td>1</td>
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<tr>
<td>01. Cleanliness</td>
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<td>02. Temperature</td>
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<td>03. Lighting</td>
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<td>04. Furniture comfort</td>
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<td>05. Noise level</td>
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<tr>
<td>06. Atmosphere and decoration</td>
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The first survey took place in February 2008, when we sampled 10% of the total school population of 1,500 students, which was equivalent to about 150 surveys. This proportion of students surveyed remained consistent over the years. But in 2016 a major change was introduced in the way surveys are gathered: from that date they have been distributed online. This change led to a significant increase in the number of responses, with 211 surveys collected in 2016.

Analysing data and acting on the results
Data analysis confirmed our first impressions. Generally speaking, the survey results have revealed an 80% satisfaction rate regarding the quality of the library services. Reasons for such positive results may lie in the efforts of the team, management and users themselves to improve spaces and services for all, each one making a specific contribution. However, in some cases concrete data provided the impetus for change and evidence of its impact: the spaces, the collections and their promotion, information literacy training and strategic planning.

Changes in spaces
In 2008 the least positive results concerned the comfort of furniture. We concluded that the furniture for study and consulting documents had to be replaced. Besides the aesthetic aspect of having different types of furniture, other matters of ergonomics, comfort, safety and user-friendliness arose. Changing the furniture also led to global changes as we increased the number of study spaces. When we reopened the Library in January 2009, we
waived expectantly for users’ reactions. Initial comments were reassuring and very positive. But it was only when we formally analysed the data of the 2009 survey that we realised how much impact these changes had: the satisfaction rate for furniture comfort went from 69.75% to 88.5%, the biggest climb of that year. Our readers truly appreciated the way we invested in new furniture: they now had around 30 more seats, which were more comfortable (padded and ergonomic), individual electrical and web connections, and table lighting – all designed for their comfort during their research and study. Details of these changes are in Sanches (2010).

Changes in collections and their marketing
In 2011, the surveys on user satisfaction highlighted the need to promote the collections more, as there was a need 64.75% satisfaction rate in this area. This led us to define a strategy that not only promoted the collections but addressed collection management as a whole. We sought to give greater visibility to the collections by improving the information we provided on them, diversifying our means of communication, and projecting a dynamic, professional image to our users. We did this by creating new leaflets describing our resources, mounting thematic exhibitions, requesting reading suggestions, publicising the historical collection, presenting new acquisitions, and introducing a quarterly newsletter, institutional web pages and a Facebook page. As a consequence of these changes and more consistent publicising of new acquisitions, the following year user satisfaction ratings on collection management rose to 73.55% and in 2013 to 76.35%. Since then we have invested in publicising digital collections and improving access to them, guiding users towards these resources. Sanches (2016) recently described the impact of diversifying the collections.

Changes in information literacy training offer
Over the years, the survey has enabled us to evidence students’ perceptions of the importance of library training sessions on their academic success. In 2012 there was a 75.40% satisfaction rate with our ‘training offer for readers’. During the year that followed we strove to improve our training, some sessions of which were fully booked. At the same time, the Library continued to provide training in the classroom context at the request of teachers. In 2013 satisfaction had risen to 80.79%. We feel this evaluation showed the consolidation of our training practices and staff’s personal commitment to help users develop their skills in information literacy. Details are described in Sanches, Revez and Lopes (2015).

Changes in strategic planning
The Library has sought to maintain a versatile service and communicate with the academic community that it serves and is a part of. We understand and demonstrate our commitment to teaching, research and science by responding adequately to users’ needs and expectations. The implementation of a strategic plan for the Library since 2012 allowed us to define a new vision, reorganised into projects. All the tasks developed thus far and new activities were reframed according to this vision. Team members were empowered as projects were assigned to co-ordinators while more effective ways of controlling and assessing work could be put in practice. Each project was related to the Library’s intervention areas and determined actions to be developed, timelines, performance indicators and expected results, and its position regarding the Library’s global strategy (Sanches, 2014). Clarifying how each task fitted in the global vision motivated and gave meaning to the pursuit of individual work. In qualitative terms, our criteria were surpassed, with our customer service provision rated by users at around 90% every year since then.

Conclusions
It is important to stress that the systematic improvement of services is effective only when based on high quality assessment tools, whether surveys or other instruments, hence the crucial need to evaluate them regularly. On the other hand, this evaluation is all the more important and credible if it corresponds to real changes with a view to actually improving service performance. The data presented, and implementation of recommended measures, must be analysed comparatively in order to assess if there has been a change in users’ perception of the quality of library services. We continue to strive to support research and teaching, seeking to meet our users’ needs, and improving our individual performance and satisfaction, internal communication, working routines and, above all, user satisfaction.

In truth, even our worst ratings had an acceptable level of satisfaction. Nevertheless, we felt we could make proposals and recommendations for concrete action to improve this satisfaction rate and the quality of our services in specific areas. We did, and continue to do so.

Case Study 4.3 Giving students voice: a biennial user satisfaction survey at Duke University Libraries
Emily Daly

Background
Duke University is a relatively young institution, but is consistently highly ranked and considered a peer to other prestigious US research universities (Shanghai Ranking Consultancy, 2018). Duke has over 15,000 students, including approximately 6500 undergraduates and 8700 graduate and professional students in fields including business, divinity, engineering, the environment, law, medicine, nursing and public policy. Duke has strong connections to the surrounding community of Durham, North Carolina, and is active internationally through the Duke-NUS Graduate Medical School in Singapore, Duke Kunshan University in China, and numerous research and education programmes across the globe. Duke’s students and faculty take advantage of unique service-learning and
research opportunities in Durham and around the world in order to advance the University’s mission of using ‘knowledge in service to society.’

The Duke University Libraries seek to support the University’s mission by anticipating the needs of faculty, students, staff and members of the public. We provide convenient access to a broad range of digital information yet do not lose sight of our most basic commitment to preserve scholarship in print form. Library spaces are a hub of learning, teaching, research and collaboration. Six libraries form the Duke University Libraries, and separately administered libraries serve the schools of business, divinity, law and medicine. Together, Duke’s campus libraries form one of the nation’s top ten private university library systems (ARL, 2018).

Duke University Libraries staff have long been committed to learning more about the evolving needs of researchers and then implementing innovative services, developing new collections and building new spaces in response to users’ demonstrated interests. Like many libraries, staff have conducted multiple university-wide surveys in an attempt to learn more about researchers’ perceptions of the services, spaces and collections available to them. We administered LibQUAL+ (https://www.libqual.org/) in 2002, 2005 and 2007 and LibQUAL+ Lite in 2011 and were prepared to conduct another university-wide user survey in 2013.

In late 2012, assessment and user experience staff considered the possibility of administering a survey other than LibQUAL+. While we appreciated the potential for benchmarking and comparing results across libraries that also use the LibQUAL+ framework, we found that we never actually made use of this feature. Perhaps more importantly, we heard from respondents and librarians alike that they found the survey to be too long (prompting our shift to LibQUAL+ Lite in 2011), the question format difficult to understand and the results cumbersome to understand and analyse. It was time to consider an alternative. After reviewing numerous in-house and consortia surveys from academic research libraries across the country, we opted to design our own survey, as we knew this would allow us to incorporate extensive branching and Duke-specific answer choices. While assessment and user experience staff members were motivated by the customised options and answer choices on an in-house survey, we were even more excited that a locally designed survey would enable us to involve staff at every stage of the survey design and implementation. We hoped that Duke-specific survey data would enable staff to make service design changes and help set the direction of future projects. By engaging staff in the survey project from start to finish, we hoped staff would be more likely to use survey data to inform changes and improvements to library services they provide or oversee.

Survey design, take 2

Analysing the results of the 2012–13 survey of Duke University Libraries helped achieve the goal of learning more about users’ experiences with the library and enabled us to make improvements based on what we learned. We also identified improvements we could make to the survey itself. For instance, the survey response rate was fairly low, especially among undergraduates. We were also concerned that the meanings of survey questions and answer choices were unclear to respondents, thereby undermining the validity of survey findings. In the 2015–16 survey cycle, we endeavoured to strengthen the validity of the survey instrument and reach a broader base of potential respondents. We were also able to focus our survey on a core group of users this time around. In 2013–14, we had included faculty, undergraduate students, graduate students, staff and the general public in our survey sample. Because we implemented the Local Faculty Survey of Ithaka S+R (www.sr.ithaka.org/) in fall 2015, we did not target faculty respondents in recruitment for our January 2016 user survey. We opted this time to focus recruitment efforts on undergraduate and graduate students. As we knew our respondents would primarily be students, we were able to focus our survey structure and questions on this population. Another change is that we shortened the 2016 survey considerably by reducing demographic questions. We bypassed this section entirely by recording a unique identifier for each survey respondent and then worked with Duke’s Institutional Research Service to collect aggregate participant data, including respondents’ academic programmes and majors or minors, year at Duke, sex, race and international status.

Overall, we found that the structure of our 2012–13 survey worked well, so we preserved the flow: we first asked users which library they visit most frequently or if they choose not to visit a library. It was particularly important to liaison librarians in the sciences to hear from our users who do not visit a physical library; we followed up by asking why they opt not to visit physical libraries. We then focused our core questions around particular services, collections and spaces we were most interested in learning about. We asked questions we felt would help us gather information about users and, more importantly, prompt us to imagine and prioritise possibilities for services, collections and spaces.

The next section gave respondents an opportunity to share what they view as most important to their teaching, research and learning. We then asked that they indicate their level of satisfaction with the services, collections and spaces provided by Duke Libraries. In 2016 respondents had an opportunity to tell us what resources or help they did not know were available through Duke Libraries (e.g. data visualisation services, streaming audio, digital maps).

Finally, we invited our respondents to share which library services or technologies would most enhance their experience using Duke University Libraries. Respondents could choose from options such as specialised study spaces and furniture, expanded data and visualisation services, and support and increased digital access to unique or rare materials, among others. Respondents were also invited to write in additional services or technologies they believe would enhance their library experience or list equipment they wish they could check out from the library. This particular question is a major reason we chose to invest time and resources to design our own survey: we wanted to hear from our community what programming and services they would like Duke Libraries to pursue in the future.

Our assessment analyst and consultant took the lead on building our home-grown survey in Qualtrics, a survey tool Duke licenses university-wide. This was done with input from numerous library staff, potential survey respondents, and university staff and faculty
with expertise in survey design. Using our 2013 survey as a starting point for format and question terminology, assessment and user experience staff led numerous meetings to refine the structure and update the test used in 2013. These changes reflected the resources and services we were most interested in learning more about during this cycle and ensured that question and answer options made sense to our more focused group of student respondents. In addition to leading small group discussions about the format and structure of our survey and questions, we shared our survey with all library staff at library-wide meetings and through e-mail. We wanted no library staff member to feel excluded from the process or be taken by surprise that we were leading this effort.

After weeks of discussion and work in Qualtrics, we had an instrument ready to test and then implement. Our final survey was short, taking users just four to six minutes to complete, but it was complex, featuring extensive branching and customized survey options for each of our library locations (Duke University Libraries, 2016).

Recruiting respondents
Once we had fully tested and vetted our survey with numerous students and library staff, we began to recruit respondents. Duke University’s Institutional Research Office provided a sample of 5,889 undergraduates and graduate students. We directly e-mailed an invitation to these students to take the survey and followed up with reminders twice during the three-week survey window. Additionally, we posted links to the survey on the Duke Libraries homepage and promoted it through social media, student listservs and subject librarians’ departmental e-mails.

At the advice of a university expert in survey design, we opted not to provide incentives for survey respondents during the first implementation of our in-house survey. Because we were disappointed with our overall response rate in 2012–13, however, we decided to provide an incentive of a raffle for a $75 Amazon gift card this time around. Additionally, we worked with the Duke Center for Advanced Hindsight, led by behavioral economist Professor Dan Ariely, to develop a regret lottery (Ariely, 2012). A regret lottery is based on the notion that respondents feel more pain or loss if they believe they were very close to avoiding loss. We developed a survey invitation invoking the idea that students’ names could be picked from the raffle for an Amazon gift card – but they could only claim the prize if they actually completed the survey. Our message included the following language: "Your name has been entered in a drawing for a $75 Amazon gift certificate... If you are the winner of the gift certificate but you have not completed the survey, you are not eligible to receive the $75 Amazon gift certificate! On day one of survey distribution, we sent half of our potential respondents this regret lottery message; the other half received a more traditional survey recruitment e-mail: 'To thank you for your participation, you will be entered in a raffle to win a $75 Amazon gift certificate.' This split approach is known as A/B testing.

In the first 24 hours that our survey was open we received 1,200 responses, nearly all from the survey links we e-mailed directly to students through Qualtrics (four respondents completed the survey by accessing an open link on the Duke Libraries website during this same 24-hour period). Of the responses from the A/B testing, we had twice as many responses from students who received the regret lottery e-mail than from those who received the more traditional message. Within the first hour of sending the survey directly to students, we had 2.5 times more responses from those who received the regret lottery message. The response rate then normalised a bit over the first 24 hours. Because the regret lottery was so effective, we used the regret lottery test in our two reminder messages to all students who had not yet taken the survey. Our overall response rate from our initial sample was 43%, and we had an additional 945 responses to the survey through open URLs, resulting in a total of 3,467 respondents, significantly more than the 733 responses to our first in-house survey.

Analysing and sharing results
Because our primary motivation for designing and implementing a survey entirely in-house was to involve our colleagues in reviewing and responding to findings, it was important that we share initial findings as soon after the close of the survey as possible. After sharing high-level findings with library staff, we formed a short-term team of six library staff who volunteered to review and tag over 1,200 free-response comments using a codebook with nearly 50 different topics.

While we were able to gather useful feedback through the survey and free-response comments, we planned from the start to follow our survey period with a series of focus groups to dig more deeply into survey responses. After spending time reviewing the survey data, we hosted six follow-up focus groups, targeting undergraduate and graduate students to learn more about our researchers’ experiences with particular services, collections and spaces they commented on in the survey. Just as we did when we designed the survey instrument, assessment and user experience staff solicited input from other library staff, this time to determine what we still needed to know from the initial survey.

By this point we had survey data from nearly 6,000 respondents, including over 1,200 coded comments, and notes and themes from six focus group sessions. It was time to share this rich data with our colleagues, which we did through presentations to all staff and follow-up e-mail. Additionally, our assessment analyst and consultant spent significant time using Tableau Public to develop three dashboards providing different ways to explore survey data and comments.

Making survey data visible and usable in so many ways enabled staff from across the libraries to analyse the data on their own. They could also ask assessment and user experience staff to help them delve more deeply into particular questions or slice the data by demographics particular to their areas. We encouraged units and departments to consider survey data and reflect on how library staff might respond to what we learned. We then invited all staff to participate in a workshop to explore the Tableau dashboards and prioritise an initial set of recommendations developed by assessment and user experience staff and departments heads of units across the libraries. There were 47 staff representing technical services, public services, IT, building services and library administration who
registered to attend the session, working in small groups to explore areas of the data most relevant to their work or interests and consider ways they might respond to findings.

Responding to what we learned
After spending significant time exploring the survey data, comments and focus group findings, assessment and user experience and other library staff developed recommendations to follow up on what we learned. We outlined needs for further assessment, including developing targeted user surveys, semi-structured interviews and observation studies to learn more about researchers’ experiences reserving group study rooms and using print and scanning services in the library. We drafted potential improvements to library spaces, services and resources. We also noted services and resources that respondents expressed interest in but appeared to be unaware of — these are marketing opportunities for library staff. In fact, we have established a monthly e-newsletter in response to multiple survey comments requesting more co-ordinated communication from the library. We have used the newsletter to share information about under-used services and improvements to our spaces. We will continue to use this channel to inform users of changes we have made as a result of student survey responses and focus group findings.

Library staff discussed and prioritised recommendations for expenditure, service improvements, marketing opportunities and assessment opportunities. Library leadership then charged task groups and other library staff to act on findings, and they have accomplished a great deal since the second survey. For instance, we have improved the libraries’ interview rooms; added ergonomic furniture, including sit-stand desks and bicycle desks; and implemented new signage and wayfinding aids. Library staff worked with housekeeping staff to ensure public spaces and computers are clean, added troubleshooting signage to public printers, evaluated the effectiveness of the library locker programme, and made numerous enhancements to the Libraries’ web interfaces.

Following the success of our first two in-house survey cycles, we will conduct another broad-based University-wide user survey in early 2018, which this time targeting students and faculty. In the meantime, we continue to use the significant amount of data gathered from our 2016 survey, encouraging staff to explore the survey dashboards as they consider new services or the needs of particular user groups. We also support staff as they lead follow-up user studies and assessment to develop a deeper understanding of the many ways researchers engage Duke University Libraries’ spaces, services, interfaces and collections.

Case Study 4.4 Listening to the student voice at Library and Learning Services at Kingston University
Davina Omar and Simon Collins

Kingston University is based in Kingston upon Thames in the UK, a busy riverside town on the borders of London and Surrey with just over 17,500 students. It has four campuses within three miles of each other. It has a long history originating from Kingston Technological Institute, which opened in 1899. In 1970 the College of Technology and Kingston College of Art merged to form Kingston Polytechnic with the Gipsy Hill College (education) merging with the Polytechnic in 1975. In 1992 the Polytechnic gained university status. It teaches students from over 140 countries a wide range of diverse subjects in business; science engineering and computing; arts and social sciences; art and design; and healthcare and has a wide research portfolio.

The university has a proud tradition of widening participation and has a large proportion of commuter students. Within this setting Library and Learning Services at Kingston University supports the students and staff in pursuing their learning, teaching and research ambitions. This is achieved by providing:

- four learning resource centres on each of the campuses
- generous opening hours at all sites throughout the year, including 24-hour access (term time) to the learning resource centres at Kingston Hill and Penrhyn Road campuses
- access to more than 350,000 books and audiovisual materials, 270,000 e-books and over 49,000 e-journals
- an archive including specialist collections
- more than 1,800 open access PCs
- subject support through academic engagement teams and dedicated subject librarians.

Student feedback is a powerful reason to drive strategy and Library and Learning Services at Kingston University has run an annual user survey since 2004. At the time the directorate had just been restructured and expanded to provide a more robust and enhanced service to the University. The service fitted the needs of a growing post-1992 university but the directorate still needed to know more about the students they were supporting and gather some forecasting data. Plus a previous survey in 2001 had given us an appetite to do more work in this area. At this stage the NSS did not exist and student feedback was not as prominent in the higher education sector, so there were limited other avenues to acquire this information. Therefore we decided to establish an annual library user survey with our students.

Methodologies
We investigated different methodologies and considered whether using a survey that would allow us to benchmark against comparator universities, such as LibQUAL+, would be advantageous. However, it was felt that having a survey that could be personalised would provide richer data and give us the opportunity to theme sections. This would allow for more detail to be discovered about a particular area which had been identified as a key priority for the service. It was important that we capture quantitative and qualitative data as part of the survey in order to enhance the variety of the data. Hearing students’ own
words can provide very powerful messages as verbatim statements can endorse trends shown in the quantitative data; they also give students the freedom to express their own ideas, which may previously have been unknown to the directorate. These factors continue to be an important rationale for running the survey 13 years on.

Initially the directorate used an external company that was very experienced in survey design. Over time, we took more responsibility for the survey, which allowed us to develop library staff skills in setting questions, running focus groups and conducting one-to-one interviews. This gave us increased resilience and ensured that library staff became more experienced in this increasingly developing area. It was also financially advantageous to the directorate. In 2010–11, we introduced SurveyMonkey (https://www.surveymonkey.co.uk), which allowed us more opportunities to cross tabulate and interrogate the data. We introduced a free-text comments question into the survey, allowing students to set out their priorities for the future. This generated more qualitative data than had previously been possible and had the advantage of students being able to supply a wider range of priority areas, though it led to significant numbers of requests for ‘more computers’ and ‘more books.’ These comments are useful for highlighting an area of concern but lack sufficient detail. One method used to combat this was to ask the students to categorise their comment first, into book, space, computer, etc., which encouraged them to write a more detailed comment. This worked a little better but we still have comments stating ‘more.’ Following university guidance in 2016–17, the survey has moved to Bristol Survey Online (https://www.onlinesurveys.ac.uk), a similar product to SurveyMonkey.

Design
There have been 124 different questions used in the survey over the past 13 years but some key questions have been included every year, which are kept static to enable trends to be evaluated over time and the use of key performance indicators (KPIs) for the directorate. For example, one of our KPIs is how many survey respondents agree with the statement ‘Overall, the LRC (learning research centre) provides a good service.’ Over 13 years the percentage agreeing has risen from 72% to 94%, which allows the directorate to demonstrate to the university that the service improvements and developments are having a positive impact on students’ experience (figure 4.3 opposite).

For the last nine years we have measured the proportion of students who prefer book format to e-book format. For most this period the preference for a print book has remained around 60%, but underneath this headline figure there were significant differences at subject level. In 2015–16, in the Faculty of Art, Design and Architecture, 74% of the students chose a print book compared with 51% in the Faculty of Science, Engineering and Computing. In the most recent survey, 2016–17, the headline figure has reduced to 42% choosing print book format, with 38% choosing e-book format and 20% choosing neither, which suggests we may have reached a tipping point in students’ preferences. If responses in next year’s survey show a continued decline in the number of students who prefer book to e-book, this will have an impact on the collection management policies we develop.

Figure 4.3 The proportion of students at Kingston University who agree with the statement ‘Overall the LRC provides a good service,’ 2004–5 to 2016–17

Themes have been an important part of the survey and examples have included use of e-books, communication methods and use of computers. By having the capacity to ask four to five detailed questions on a topic, we are able to investigate the theme in depth.

We aim to have around 10% of the student population complete the survey – approximately 1,800 students. Although 10% is only a small proportion of overall student numbers, it is felt that this gives a large enough response rate to provide meaningful and worthwhile data. We track responses to the survey while it is running by subject and campus to ensure there is a proportional distribution. For subjects and campuses with low response rates, we focus on more additional marketing and promotion.

Marketing
Encouraging students to fill in any survey is challenging; we used a chocolate incentive which worked well. Alongside this there has always been a prize draw, which previously was for an iPad mini but most recently was a £100 Amazon voucher. Anecdotally, it is felt that the prize draw is not a major motivator in encouraging students to complete the survey and that most of them are genuinely willing to give their feedback once approached.

Library staff who actively encourage students to fill in the survey at stands in the learning resource centres and the help desks have a greater effect on the response rate than chocolate and the prize draw. The survey stands move between campuses’ learning resource centres and are altered for the needs of the specific campus. The University has four campus learning resource centres of varying sizes. The stand is erected in the foyer of
the two larger ones. Staff use tablets to ask students to complete the survey as they move in and out of the centres. Originally the stands had been staffed by a cross section of library staff but on evaluation we found that using learning resource centre assistants proved more effective, perhaps because they are students at the University and the peer-to-peer relationship works well. At the smaller sites, the learning resource centres are the social hub of the campus so there is less movement of students in and out. We are therefore more flexible in how we approach the students to complete the survey. The library staff also have a more personal relationship with students, which aids the likelihood of the students completing the survey.

In addition to promoting the survey within the learning resource centres, we put posters up in academic buildings, student offices and the Student Union, and advertise it via the virtual learning environment, intranet and plasma screens across the University (Figure 4.4). Student reps are contacted via e-mail and all academic staff are asked to promote it to their students. Instagram (https://www.instagram.com/ku_lrc), Facebook (https://en-gb.facebook.com/kuLRCs), blogs (https://blogs.kingston.ac.uk/sec/library) and Twitter (https://twitter.com/ku_lrc) (Figure 4.4) are used. It is not certain how effective these measures are in encouraging students to complete the survey but 15% of survey responses are submitted after the learning resource centre promotion is completed so we know they are having some impact. More evaluation work is needed in this area.

Figure 4.4 Example of publicity for the learning resource centre user survey

Analysis
The survey is analysed at University, faculty and department level using multiple demographics. Reports are produced and highlighted at University and faculty learning and teaching committees and shared at departmental student meetings. Actions from all the survey reports are pulled into a directorate action plan as well as departmental and faculty action plans. The directorate Student Voice Action Plan is an amalgamation of the survey actions and actions from the NSS and other feedback mechanisms. This has proved to be effective following previous separate plans and feeds directly into the directorate’s planning document.

Every September, the directorate produces a leaflet called We Listen, which highlights the main results and actions from the previous academic year completing our feedback loop. Using individual students’ comments, we explain how the action plan has addressed their needs on plasma screens across the university, on the intranet and in hard copy, taken to student meetings. This method of feedback is now used commonly across the University in a ‘you said, we did’ format as the University management thought we provided best practice in this area.

The survey data was invaluable in gaining and retaining the Customer Service Excellence (www.customerserviceexcellence.uk.com)/standard. The survey demonstrates our commitment to understanding our customers’ desires, wants and needs, and understanding our customer segmentation also allows us to assist the University in its work on the student voice and experience. One such example for the future is the initiative investigating the attainment gap between black and minority ethnic (BME) and white students; we have nine years’ worth of data on the library experiences of BME students that we can contribute to this initiative.

Challenges
There are a number of challenges with the survey including how to encourage non-users of the learning resource centres to complete it. We have tried several techniques to increase this number including making the survey stand out of the learning resource centres, holding one-to-one interviews outside the main lecture theatres, working with the student reps and the Student Union, links within the virtual learning environment, and most recently within the Kingston University mobile app. These techniques have so far had limited results. Another challenge is that we have to be careful in the planning of the survey to ensure that we ask students to complete it at a different time from the NSS. The survey has been held at various times throughout the year but experience has shown that November to January is the optimal time. Students frequently comment that the survey is too long (35 questions in 2016-17), which presents a challenge, but it has proved difficult to reduce its length as the directorate requires certain pieces of data to be included and we need to analyse trends. To help reduce its size, we have run smaller focused questionnaires or focus groups for key customer groups – for example, postgraduates and assistive technology users. We also recently introduced ethnographic studies to complement the survey.

It is a challenge to manage over-surveying and survey fatigue relating to the NSS. However, University managers support us in running our own annual survey as well, as it yields rich data. This data also supports other directorates, in particular IT, due to the
similarities in the services we provide, but also academic faculties, whose staff learn more about their students' interaction with academic sources. The longevity and maturity of the survey supports our case with the University, as we have a strong reputation for making changes to our services and resources based on the results. The survey has informed numerous developments and improvements made by the directorate including 24-hour opening, library design and layout, laptop loans, collection development, and the forthcoming landmark building incorporating a new library at the Penryn Road Campus.

Future changes
We generally score higher in our own survey satisfaction questions than for the NSS question on satisfaction with library provision. Further investigation is needed for why this occurs. In 2016–17 we matched the wording of NSS question on library provision in our survey. This will allow analysis on different demographics and year of study.

Conclusions
The survey throughout its history has informed the directorate of the way forward for its departmental plans and priorities. It has proved time and again a useful vehicle for articulating reasons for change, improving and developing services and, when appropriate, bidding for increased funding. It has also enabled the directorate to consider other methods of collecting data about our students – for example, customer journey mapping – as we understand the benefits of listening to students’ concerns. University managers believe the directorate provides an example of good practice for our proactive approach and commitment to instigating change based on our findings. Our knowledge of our student population has increased significantly since 2004 and listening to the students is now embedded in our methods of working.

Conclusions
We have seen in this chapter how successfully developed and implemented in-house library surveys can help library service staff identify and implement actions that will improve customers’ experience. Designing a survey to meet the strategic needs of the library can be difficult; question design and testing require skills. Similarly, data analysis and presentation are also complex. In-house surveys require significant time for design and implementation, but the reward of obtaining rich, library-focused data for action planning and change can justify the cost in staff time. As with any assessment activity, it is vital that you clearly identify your information needs and how the information will be actioned before commencing a survey with your customers.

References