Bridging the Gap between Service Provision and Customer Expectations

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Abstract

Purpose
The purpose of this paper is to serve as a reminder to all managers that they must understand their customers, from the customers' perspective, and not make assumptions about customer needs.

Design/methodology/approach
Customer Value Discovery workshops are held with undergraduate on-campus students and academic staff at Nottingham Trent University to identify customer values and irritations. Library staff participate in the workshops and vote as they expected their customers to vote. The gaps identified between staff assumptions of customer perceptions of service importance and performance serve as a catalyst for staff engagement in the change process that is necessary to deliver on the value propositions and reduce customer irritations.

Findings
Library staff assumptions of customer perceptions were not always accurate. The gaps identified helped to engage staff in the change process that was necessary to improve perceptions of value and to reduce irritations. By explicitly addressing the value propositions with the aims of adding value and reducing irritation, student satisfaction with library services, as measured by two independent satisfaction surveys, improved considerably.

Research limitations/implications
The research is based on two customer segments of one university library. The research should be repeated after a gap of three-four years to check if the value propositions and irritations have changed in that time. If so, the goals of the library's operational plan would have to change to reflect the new value propositions.

Practical implications
A comparison of the Customer Value Discovery methodology with LibQUAL+™, which is used internationally, and the Rodski Research Group's methodology, used in Australia and New Zealand, is given.

Originality/value
The Customer Value Discovery methodology is most often used in the commercial sector. This paper explores its potential in the not-for-profit sector in the context of a university library service.

Keywords: Customer service management; customer satisfaction; performance measures; university libraries

Paper Type: Research paper

Introduction

The title of this paper raises a number of questions that require answering before addressing the fundamental issue of bridging the gap between service provision and customer expectations. The questions are: Which customers? Which gaps?

Different customers have different service needs and expectations. It is important, therefore, to make sure the research and actions arising from the research address the problems faced by customers. Management responses to any identified gaps between perceived expectations and perceived performance will have to be tailored to meet the needs of the particular customer segments.

It will also be necessary to identify what are the service expectations for the customer groups being researched, for without these there can be no defined gaps in service to bridge. As indicated above, different customers can have different service expectations. Library management may choose to research one service only, and focus on how this service could be improved for the various customer segments that use the service. However, it is more likely that the totality of services need to be considered, and the most important services with the biggest gaps become the focus for attention.

The paper will suggest a number of processes and research methodologies that can be used to identify service expectations and to measure performance that can provide the gap analysis. While this paper will discuss a particular methodology, Customer Value Discovery, in more detail, it will draw upon a broad range of service quality, marketing and library and information science literature, to provide a foundation for embracing the action research required to bridge gaps in service performance and customer expectations.

Finally, the paper will discuss some of the important staffing issues, especially in relation to the service culture, that need to be addressed if changes are to be implemented to reduce the gaps between what is provided and what customers' expect in an ingoing environment of continuous quality improvement.

Which Customers?

A library service has a variety of customer segments and it may not be feasible to address issues for all customer groups. The service quality and marketing literature identify the importance of understanding an organisation's customers. This is particularly important in a service sector such as a library. Different customers mean different service requirements (McKnight, 2000; Wilson, 2009).

For instance in an academic library, the customer segments can be differentiated into broad segments: undergraduate degree and postgraduate coursework students; research degree students; academic staff and university administrators. However, it is possible to further segment any of these groups. For instance, undergraduate students could be segmented by: discipline of study (medicine or law or business etc); mode of study (full-time on campus; part-time on campus; part-time off campus); demographic characteristic (international students; local students; school leavers or mature students; female and male students; disabled students; first in a family to attend university; etc).

A public library service would have a wealth of customer segments: infants; young children; teenagers; young adults; adults; older citizens; people with disabilities; parents; business and community members; etc. A special library would also be able to identify different customer segments. In fact, any type of library could identify multiple customer segments.

It is important to identify which customer segments are to be included before embarking on any investigations. Pragmatic decisions may be required to decide on customer groups to be investigated. Which are the largest customer segments served? Which customers are having the most problems? How much money and time is available for the research.

Without seriously contemplating these issues, the research undertaken could be too general to identify useful data for management action. Improving service quality and increasing customer satisfaction, by reducing gaps between customer expectation and perceived level of performance, is an ongoing task. Ideally, all customer segments should be investigated; however, this is unrealistic in most instances. Therefore, research on the various customer segments should be prioritised to maximise return of investment.

Service Quality and Customer Satisfaction

Parasuraman, Zeithaml and Berry (1985) undertook seminal research on service quality and its link to lowering manufacturing costs and improving productivity, which are of particular importance to the producer of the goods or service. They identified three underlying themes: that service quality is more difficult for the consumer to evaluate than the quality of goods; service quality perceptions result from a comparison of consumer expectations with actual service performance; and quality evaluations are not made solely on the outcome of a service; they also involve evaluations of the *process* of service delivery (Parasuraman, Zeithaml and Berry, 1985, p.42). The importance of the process, as well as the actual outcome of the service transaction, has a strong resonance with the findings of McKnight & Berrington (2008, p.37) that in a service industry, such as a library, all interactions and transactions, *the process*, either with a staff member or a resource (e.g. book) or service (e.g. web page), can both satisfy and irritate a customer at the same time.

SERVQUAL, developed by Parasuraman *et al* (1988; 1991) takes into account the perceptions of customers and the relative importance of service attributes. It was informed by the research undertaken by Parasuraman *et al* in 1985 on the gap model of services. The methodology of SERVQUAL involves surveying customers against key service dimensions and then comparing the outcomes against an organisation that is 'excellent'. SERVQUAL was used widely in service industries, including some library services. Nitecki (2007) provides a list of publications describing empirical research on the application of SERVQUAL in libraries. A key university library application of SERVQUAL was at the Texas A&M University, where Cook and Heath undertook research involving service quality perceptions of sample library customers in 1995, 1997 and 1999. As a result of their experience in using SERVQUAL, they developed LibQUAL through the auspices of the Association of Research Libraries in 2000. (Cook and Heath, 2000; 2001)

The development and use of LibQUAL and LibQUAL+™ is described by Thompson (2009). LibQUAL and its derivatives have had a profound impact on benchmarking and improvement of library and information services worldwide. There have been many publications describing the use of LibQUAL+™ in libraries and a comprehensive list is included on the LibQual website at <http://www.libqual.org/Publications/all.cfm?PubType=3>. Included in this publications list is one of the author's publications, McKnight (2008), which includes a comparison of LibQUAL+™ and Customer Value Discovery research which is the methodology of focus in this paper.

Research has identified a strong link between customer value, service quality and customer satisfaction. (Rust and Oliver, 1994; Spreng and MacKoy, 1996) “The result on the value-satisfaction link suggests that to enhance customer satisfaction, a service provider can spend its effort on improving the value perceived by customers. … By focussing on attributes with high importance rating, a service provider can tackle those critical weaknesses that severely hamper its efforts to enhance customer value. By working on those weaknesses, a service provider could improve value and hence customer satisfaction” (Lam *et al*, 2004, p.308). These observations by Lam *et al* are fully supported by the Customer Value Discovery research discussed in this paper. Indeed, the research found that customers identify irritants or weaknesses related to services that they also value. “There is a direct correlation between many of the irritants and values. Therefore, by focussing on reducing irritation, there is a corresponding improvement in value for the customer”. (McKnight and Berrington, 2008, p.40)

The library professional literature has many references to library service quality and customer satisfaction (for example: Andaleeb and Simmonds, 1998, Audit Commission, 2002; Cullen, 2001; Hiller, 2001; Phipps, 2001; Ryan, 2006), and performance measurement in academic libraries (for example: Brophy, 2006; Chim, 2007) as a means of assessing whether library services are fit for purpose. LibQUAL+™, the quality service instrument already mentioned, is frequently referred to in the context of customer satisfaction in library literature (for example: Dole, 2002; Gatten, 2004; Thompson, Cook & Kyrillidou, 2005).

While not explicitly describing customer satisfaction, the measurement of service quality has been used as an indication of customer satisfaction (Holbrook, 1994, p.76; Bolton and Drew, 1994, p.179). This is particularly important in the discussion on the use of service quality instruments in the context of library and information services, as the service quality scores can be construed as indicators of customer satisfaction (Woodberry, 2006).

Morris & Barron (1998), Cullen (2001) and Woodberry (2006) claim that measuring customer satisfaction is the most commonly used indicator of library performance. However, it is possible to receive high scores in customer satisfaction surveys and still not be fulfilling the expectations of library customers (Audit Commission, 2002. paragraph 26). ‘Satisfying the customer’ is not enough (Schneider and Bowen, 1999) and this is supported by Spreng and MacKoy (1996). Customers can say they are satisfied with a product or service but do not remain loyal to the provider. Degrees of satisfaction and consideration of all elements contributing to satisfaction are therefore important, given that Schneider and Bowen (1999) identified that "totally satisfied" customers are six times likely to be loyal than a "satisfied" customer.

A further criticism of focussing on 'just' customer satisfaction is that the impact of the measurement may not illicit the responsiveness from library managers and library staff that will lead to continuous improvement in services and resources (Applegate, 1993, p.535). Measuring customer satisfaction is important, but it is not a single one-off event. The notion of continuous improvement has to be embedded into the culture of any library as the environment is rapidly changing and the expectations of customers change over time. Understanding customer *value* enables that ongoing focus on service improvement as service objectives and ongoing strategies and actions can be developed to deliver on these values without the constant need to be measuring satisfaction per se. (McKnight 2006; 2007a; McKnight and Berrington, 2008).

Which Processes and Methodologies?

The research methodology employed must be capable of identifying gaps in service delivery, illustrating the difference between what customers expect from the service and the assessment of current performance for that service or suite of services. Ideally, the process would also engage library staff in the research process so that there is a greater degree of understanding of customer perceptions.

A comparison of LibQUAL+™, the Rodski Research Group service quality instrument (which has been used in Australia and which is similar to LibQUAL+™), and the Customer Value Discovery methodology, is provided below, based on personal experience of use of all three methodologies. The organisational requirements were defined by the author in the capacity as library director.

Table 1: Comparison of Library Performance Methodologies against Organisational Requirements

Organisational Requirements	**LibQUAL+™**	**Rodski**	**Customer Value Discovery**
Identified what the customer described as an ideal service	Not explicitly; the customer answers pre-defined	Not explicitly; the customer answers pre-defined	Yes

	questions, but can add comments	questions, but can add comments	
Identified existing practices that annoyed and irritated the customer	Not explicitly; the customer answers pre-defined questions, but can add comments	Not explicitly; the customer answers pre-defined questions, but can add comments	Yes
Provided a gap analysis between the current performance and the desired level	Yes	Yes	Yes
Required the active involvement of the client's staff in the discovery process	No	No	Yes
Provided a gap analysis exposing the difference between customer desires and irritations and what the client's staff thought these would be	Partially; gaps are identified from the perspective of the customer only	Partially; gaps are identified from the perspective of the customer only	Yes
Provided simple, easy to read reports that included Hierarchies of Value and Irritation, capturing all the customer feedback in thematic schemes	No – complex	No – complex	Yes
Supported decision-making about actions to take as a result of evidence	No	No	Yes, facilitated by the Interactive Value Modelling process

As identified in Table 1, the reporting of results in LibQUAL and Rodski instruments is complex. Others have criticised the complexity of LibQUAL+™ reporting. Rozkowski, Baky and Jones (2005) titled their paper "So which score on the LibQUAL+™ tells me if library users are satisfied?" highlighting the difficulty in interpreting the data and charts provided by the LibQUAL+™ instrument. Samples of the Customer Value Discovery charts are provided in Figures 1 and 2, and these highlight the ease with which these can be understood. The Customer Value Discovery process is more expensive than the other two processes, due the use of two external facilitators and the participation time required by library staff.

Figure 1: Sample Diagram of a Student Hierarchy of Value - Performance

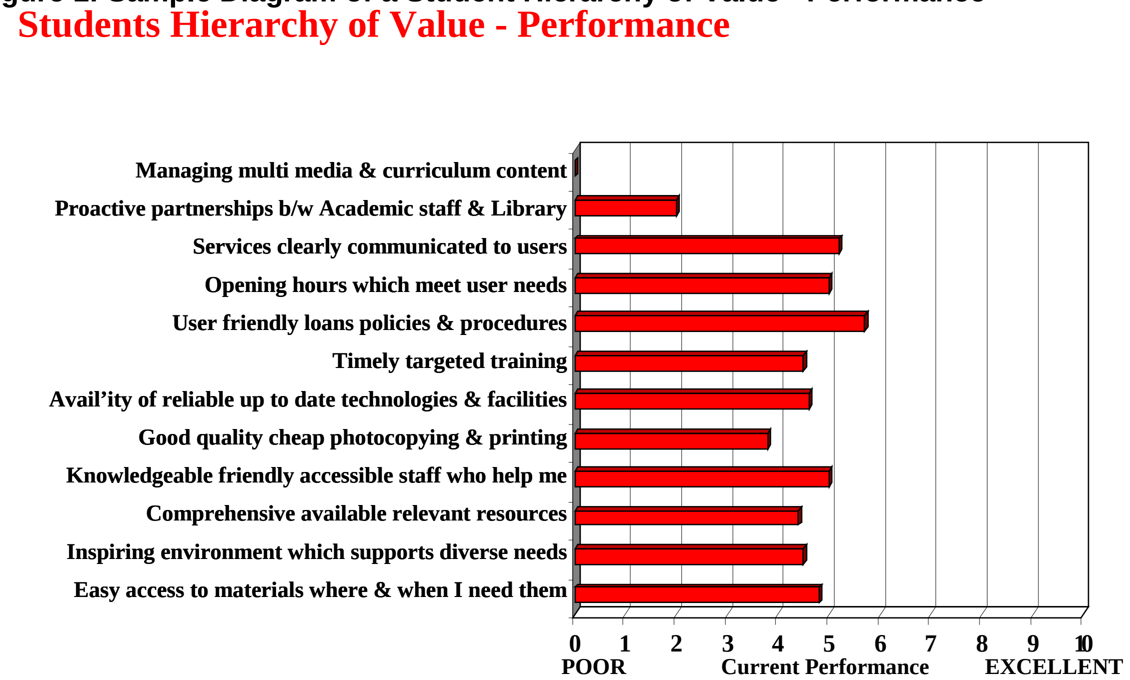
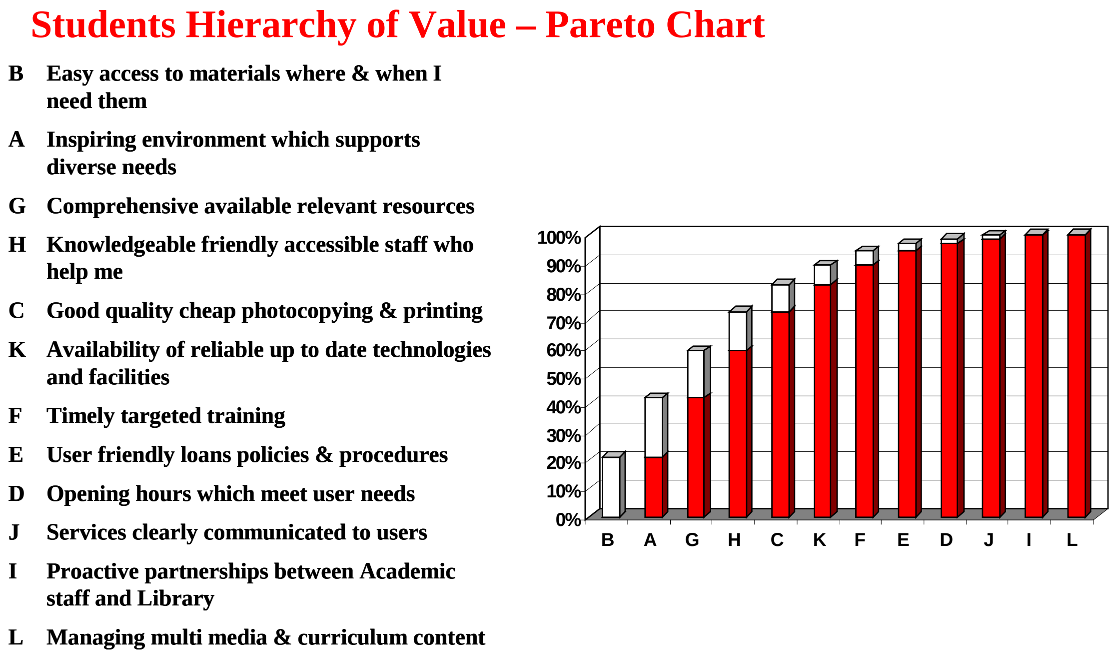


Figure 2: Sample Diagram of a Student Hierarchy of Value – Pareto Chart



Which Gaps?

Matthews (2007, p.263-264) adapts research undertaken by Wisniewski and Donnelly (1996) to identify five service quality gaps. The *service gap* arises from the difference between the perceived service and the expected service, requiring the customers to have a prior perception of what excellence looks like for the service being researched. The *understanding gap* is the difference between customer service expectations and the service provider's understanding of customer expectations. The *design gap* is the gap between the service provider's understanding of customer expectations and the design and specifications of service quality. The *delivery gap* is the gap between the specification of service quality and the actual service delivered. The *communications gap* is the difference between what is actually delivered and what has been promised compared to the pervious experiences of the customer with similar services.

The importance of these observations is that reliance on instruments such as LibQUAL+™ and Rodski may not provide all the data that is possible to be obtained from customers about the particular gaps in service delivery that exist from their perspective. Instruments for measuring service quality and performance that use set survey questions are only as good as the quality of the wording of the questions and also the appropriateness of the scope of the set questions. Although the author's research has identified that the value propositions identified by customers through the Customer Value Discovery process are similar to the dimensions covered in the LibQUAL+™ survey instrument, customers do articulate a variety of nuances that are not scoped in LibQUAL+™(McKnight, 2008). Also, these nuances and oral feedback captured throughout the Customer Value Discovery workshops help inform actions that can be used to bridge any of the five types of service gaps.

Customer Value Discovery

Albrecht and Austin (1999) describe value modelling as "a special method for discovering the *critical success factors* for any venture by eliciting views of a selected group of experts (where the experts are the customers) in a structured feedback meeting." A major difference between this methodology and those such as the SERVQUAL, LibQUAL+™ and Rodski instruments is that there are no predefined survey questions; the process starts with a blank sheet of paper and allows the customer their own voice to describe service excellence.

Customer Value Discovery workshops are held for each unique customer segment, so that participants in a workshop all come from the same basic group (e.g. undergraduate students; postgraduate coursework students; postgraduate research students; off-campus students; international students; etc). There are a maximum number of 15 customers at each workshop because of the need to maximise effective discussion at various parts of the workshop.

In the first part of the Customer Value Discovery workshops, the participants, in silence and individually, use a workbook to identify the top irritants that they perceive about the existing services. The customers then transfer the top priority Irritants onto specially printed sticky notes and score each Irritant in severity (Scale of 1-9) and frequency. These Irritants, on the sticky notes, are gathered immediately for analysis after the workshops.

Then the participants are led through a visioning exercise, where they are asked to imagine what excellence looks like from their perspective, whether it is about a service or product. The workbooks are used to capture thoughts and ideas, and then the individual participant's top issues/ values are transferred to custom printed sticky notes. The participants are then invited to place their sticky notes, with one idea per note, onto a blank wall, where the facilitator leads a process to create thematic sets using an affinity diagram, which makes meaningful lists of similar ideas that resulted from the participants' visioning exercise (Six Sigma, a). The facilitator then seeks a heading for each theme set from the customers present.

The Customer Value Discovery research methodology utilises two key software packages: OptionFinder® is an audience response system, utilising wireless technology and an interactive keypad system that combines audience voting, polling, cross-tabulation, and data reporting tools; and iThink® that is used to help create models that simulate business processes and scenarios; pointing out the impacts of a new service, procedure or policy.

Any wireless audience response system could be used as long as there was the functionality for 'forced choice comparisons', whereby each identified Value is paired with all other Values in turn and the customers required to vote for the more important item from each pair. Researchers often use a priority and performance evaluation or PAPE survey, utilising a Likert scale, to establish priorities (Matthews, 2007, p.260) and this has also been referred to as Analytical Hierarchy Process (AHP) where the relative importance is ascertained by pair-wise comparisons. (Bayraktaroglu and Özgen, 2008, p.333) However, using the software to force customers to choose the service element provides a robust method of creating a hierarchy of value propositions (and irritations). As not all value propositions are as important as others (though all are important) the definition of the Hierarchy of Value or Irritation helps to define areas for service improvement. Figure 3 demonstrates another way of representing the hierarchies, in addition to the Pareto Chart version, and example of which was provided in Figure 2.

The headings from the themed sets are then keyed into OptionFinder® and the wireless keypads are used to capture the customers' responses (votes) by pairing each heading/Value with all the others through the forced pair comparison function of the software. This leads to the identification of the products/services in a hierarchy of importance or Hierarchy of Value. These Values (and Irritants in a separate exercise) are normalised and ranked, with the highest scoring Value or Irritant rated as 100, and the rest of the Factors then expressed as a percentage of the top scoring Factor.

The participants are then asked to rate the current performance of the existing service/product in the research exercise. This results in a Hierarchy of Value elements and a gap analysis on perception of current performance, which is later analysed at the analysis workshop to identify strategies to close the gaps. The gap analysis between what is important and the customers' perception of current performance is very useful to identify potential under or over servicing.

During the workshop, a small group of the client's staff (no more than five) participate in the proceedings, but in silence. They vote during the workshop as to how they expect the customer to vote, thus generating a gap analysis between what the customers value and the customers' perception of performance and the assumptions from the client's staff. This is a defining characteristic of the methodology, and the researcher attributes the effectiveness of library staff engagement with the analysis and subsequent actions resulting from the research data because of the personal involvement in the workshops, and the stories or narratives that result from their participation.

A variety of graphical outputs are produced: Hierarchy of Irritation; Hierarchy of Irritation – Frequency; Hierarchy of Irritation – Frequency Gaps; Hierarchy of Irritation – Pareto Chart; Hierarchy of Values; Hierarchy of Values – Gaps; Hierarchy of Values - Performance; Hierarchy of Values – Performance Gaps; Hierarchy of Values – Pareto Chart. An example of a Hierarchy Gap Chart is provided in Figure 3 and a Performance Gap Chart is provided in Figure 4.

Figure 3: Sample Student Hierarchy of Irritants - Gap Chart

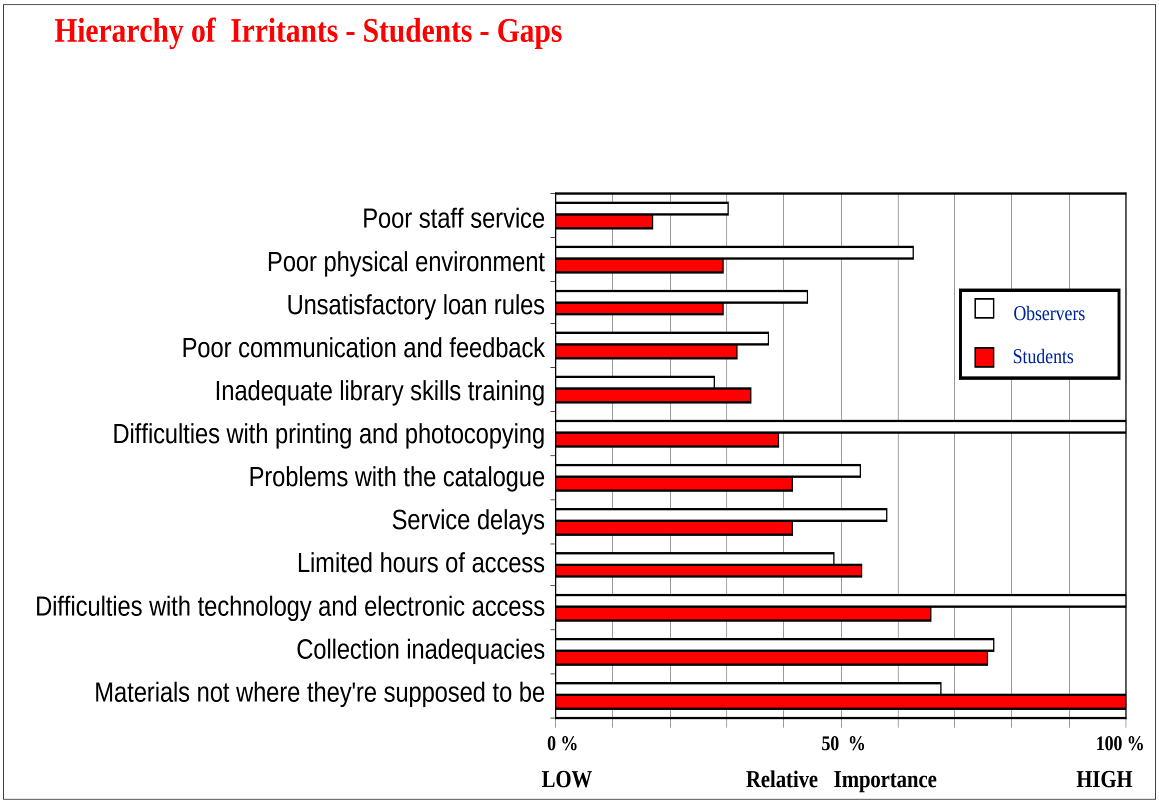
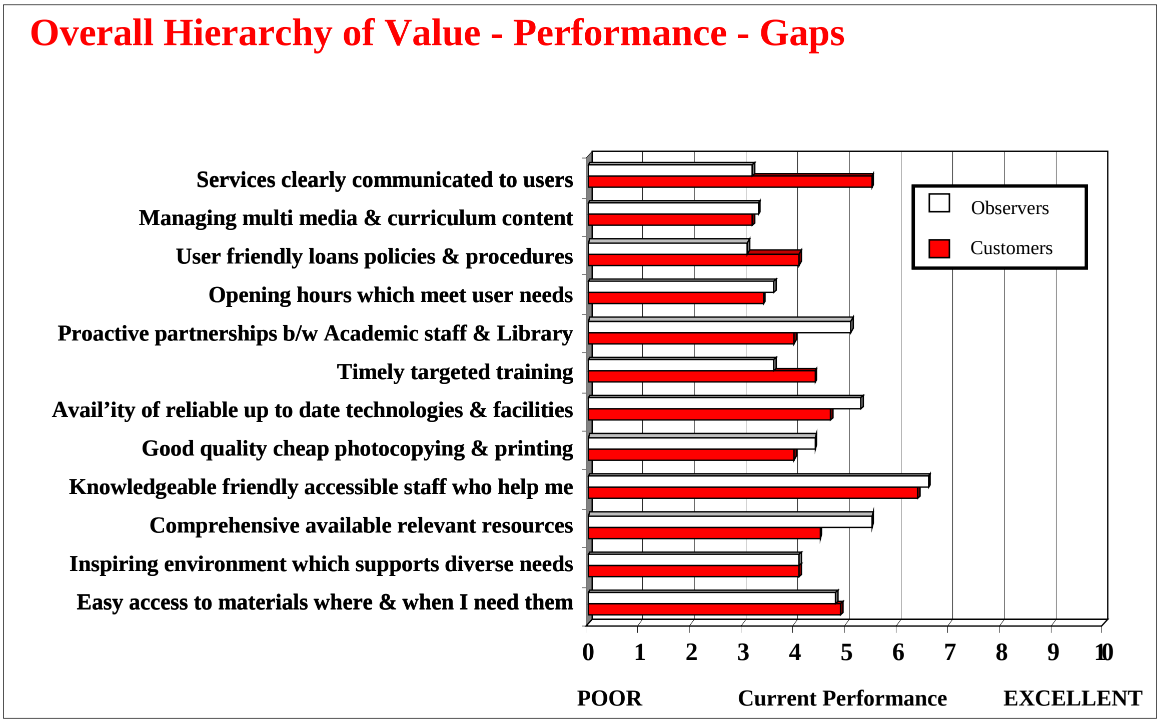


Figure 4: Sample Library Hierarchy of Value – Performance- Gap Chart



Research by McKnight and Berrington (2008) has demonstrated that there can be a close relationship between identified Values and identified Irritants. Irritants are often expressed by customers as the opposite state of the Value proposition. This is useful when considering how to bridge the gap: focussing on removing irritation is an aspect of reducing the gap; in addition, adding further value to the service in the Hierarchy of Value will help to further reduce the gap between performance and excellence. However, Garvin (1987) stressed that "quality means pleasing consumers, not just protecting them from annoyances" so it is not appropriate to just focus on removing irritations.

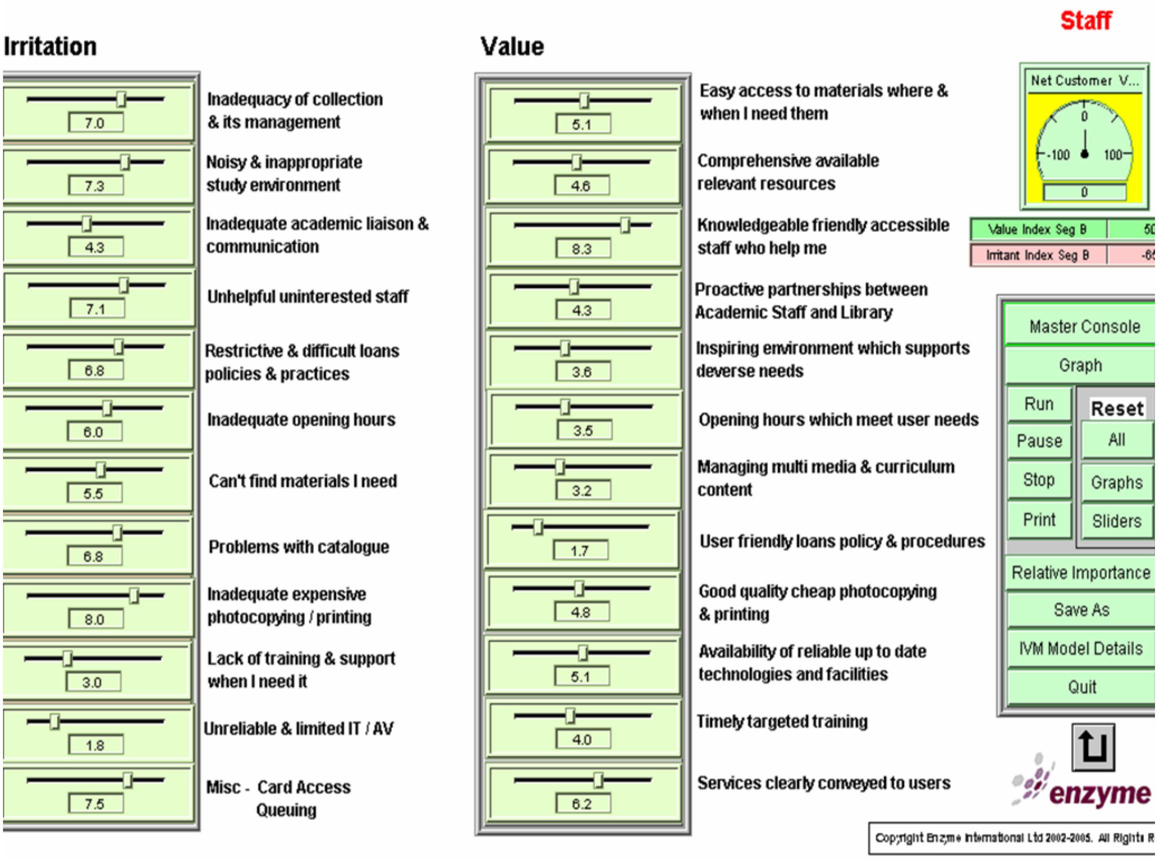
Which Expectations?

Regardless of the research instrument, it is obvious that library management action needs to focus on the service areas that are highly valued by customers and where there is a significant gap in performance. To do otherwise may result in wasted effort and resources for little benefit for the customer. The Pareto Chart gives an excellent view of which value elements warrant investigation to ascertain whether changes to service can be delivered. The top four values in Figure 2: Sample Diagram of a Student Hierarchy of Value – Pareto Chart account for 70% of all value, whereas the bottom six values account for only 10% of customer value. Focusing on the later service areas would not deliver significant improvement for customer perceptions of service excellence.

The Customer Value Discovery charts do not give a total level of satisfaction, but, through the Interactive Value Modelling process, library staff assumptions on their capacity to reduce Irritants and add Value according to the two Hierarchies, are modelled using the iThink® software.

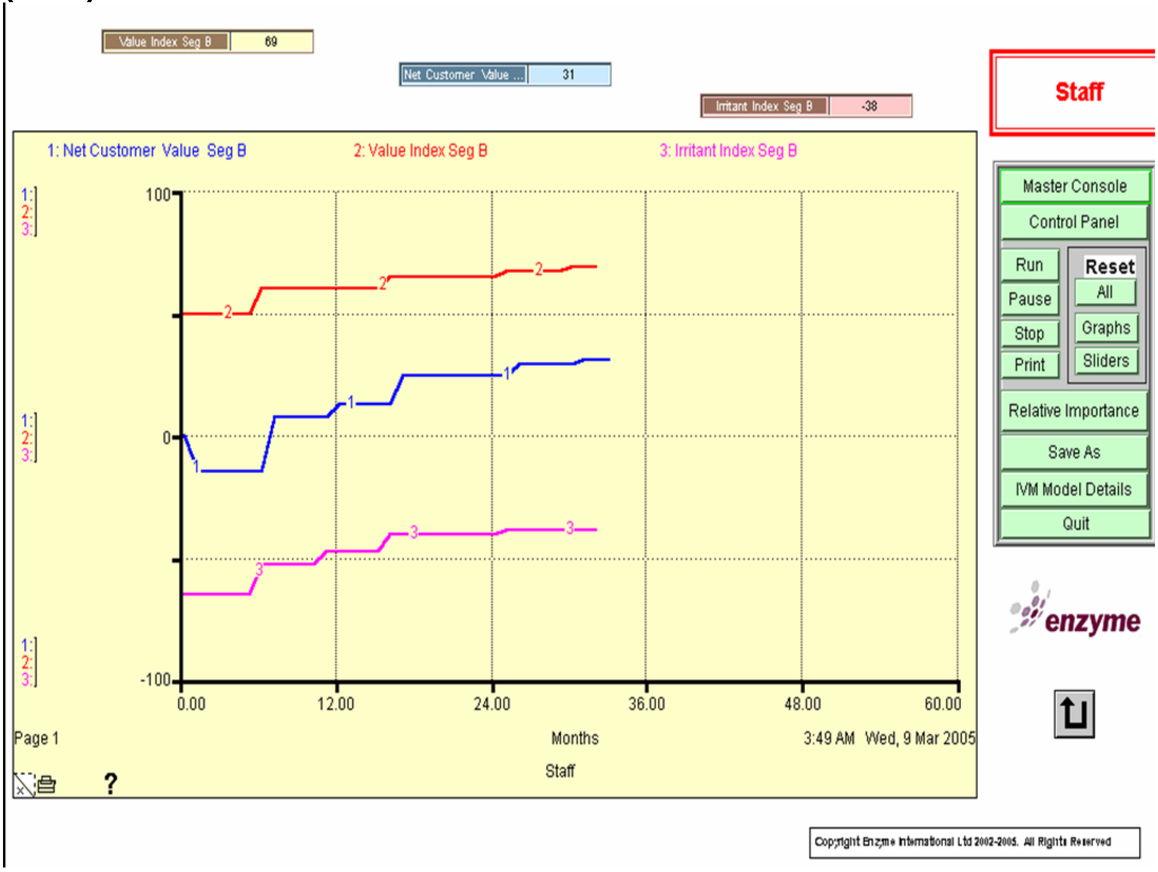
Value runs from the Origin to +100 and Irritation Index runs from the Origin down to -100. The line in the middle is the net value position, calculated by subtracting the Irritants (lower line) from the Values (upper line). The various steps in the lines indicate where the value model was adjusted to include the client interventions based on their assumptions on their capacity to reduce irritation and add value. The model is re-run many times to demonstrate the overall impact of the potential interventions. This is a more sophisticated model for predicting customer satisfaction than is possible with a single survey question, such as the Enterprise Service Quality index (ESQi) (Reichheld, 2003).

Figure 5: Sample Library Service iThink® Dashboard © Enzyme International (Aust.)



The facilitators build the model prior to the Value Modelling workshop based on the Value and Irritant data that was generated at the Consolidation Workshop. Using the slider bars, assumptions are made by the library staff as to their capacity to reduce irritation and add value on the various factors identified by the customers.

Figure 6: Sample Library Service iThink® Value Graphs © Enzyme International (Aust.)



Cultural and Managerial Frameworks for Success

The uniqueness of the Customer Value Discovery process has been emphasised with regard to the engagement of library staff in the workshops, voting as they think the customers will vote on all votes. The software delivers charts showing the gaps between how the staff voted compared to the customer vote. As clearly demonstrated in Figures 3 and 4, the outcomes can challenge staff assumptions. Although, in the examples shown, the vote of Value Performance propositions is largely consistent between staff and customers, the observer gaps are pronounced in the Irritants chart.

By involving library staff in the Customer Value Discovery research process and the subsequent interactive value modelling, they gain an understanding of why changes are necessary and are committed to the change strategy that they developed as a result of the research. Library staff assumptions are challenged by the gap analyses generated in the workshop voting process.

McKnight (2002) identified that “involving staff in this customer research, by seeking their analysis of the research findings on what adds value for the customer, by their participation in teams established to define what change is required within the organisation to deliver the customer value package, we create an internal environment that is not only ready for change, but which is driving the change from the ground up, rather than imposed from management above. In this way, there is a much greater chance of staff “buy-in” and the change process is much more likely to be successful and sustaining.

Frameworks such as operational or action plans with regular performance monitoring are required to make sure there is formal follow up on any actions taken to bridge the identified gaps in service delivery and performance. Individual performance development and review plans for individual staff also provide the formal support and training required to enable the development of new skills required for enhanced or changed service delivery. These practical issues are acknowledged by Matthews (2007, p.331-332) and Ladhari and Morales (2008, p.362-363) as being important.

The importance of developing and enacting a communication strategy that starts before and continues after the research is undertaken is also stressed. It is important for customers, who want to understand what has happened as a result of the research. “External communications can affect not only consumer expectations about a service but also consumer perceptions of the delivered services”. (Parasuraman *et al*, 1985, p. 46) However, it is also important for library staff to see the commitment to actions and the linking of the actions to improved customer satisfaction.

Conclusions

The research described involves the concept of narrative based librarianship as described by Brophy (2004; 2007). The methodology of Customer Value Discovery requires the active participation of library staff that leads to the *telling of stories* within the library service; the linking of actions to the defined values and irritants of customers; the cognitive positioning required for a change of culture that places the customer at the centre of the library service and the acknowledgement that customer experiences and perceptions are their *reality* (McKnight, 2007b). Brophy (2006, p.30) claims that “when the goal of investigation is either increased understanding or purposive action, stories have always been powerful”. The narrative is interested in meaning, the significance of the findings, rather than the hard data itself (Brophy, 2007, p.149).

It is particularly important when differentiating the impacts of this research against those of conventional customer satisfaction survey results. Because library staff participate in the Customer Value Discovery processes, they have a personal and emotional involvement with the outcomes; they speak about their experience of listening to customers; of the insights they gained through the process; about the impact the experience has had on them professionally and on the service. This is to be compared and contrasted to the experience of receiving the results of an internal university student satisfaction survey or the results of a LibQUAL+™ survey. Although the customers can provide comments, the narrative is lost to all but those few staff who analyse the results of the survey; and so too is lost the important factor in successfully engaging library staff in cultural change as a result of analysing customer satisfaction results.

In Table 1, the cost of conducting Customer Value Discovery research was identified as a barrier to its use. However, given the importance of engaging library staff in the change process, the cost could be viewed as “learning as an investment, not as an expense” (Slater and Narver, 2000, p.125).

Singh (2009) identifies the importance of marketing and customer focussed culture amongst library staff for delivering service quality. Library staff engagement in the Customer Value Discovery process and the follow-up actions, and the creation of the narratives that accompany the research outcomes, helps foster this vital organisational culture.

At Deakin University, Library User Value Statements were created for every market segment researched reflected the actual words used and emphasis placed by the customers, thus personalising the charters (McKnight, 2000). These charters or Value Statements provide a goal to be strived for over time. At Nottingham Trent University the customer values are captured as objectives in annual operational plans, with actions undertaken each year to bridge the gap between service delivery and excellence as defined by the customers themselves. By using the values in this way, the focus on bridging the gap is embedded in a public statement of intention.

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