Total quality service at the Victoria University of Technology library

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Abstract

The Victoria University of Technology Library has implemented a Total Quality Service (TQS) Program. The initial client market research, strategy, formulation and staff training have been completed, process improvement procedures established and mechanisms for measuring the success of the program identified.

A methodology based on the work of Karl Albrecht and developed further by the project consultants, Austin Thompson and Associates, has been used. The project has been successful in identifying Library priorities and involving staff in an ongoing planning and quality improvement process.

The Rationale for a Quality Program

The Library's formal quality program began in late 1993 in response to a need to improve planning and procedures for resource allocation and service delivery. In the early days of the amalgamation consultation took place with users and a Library Plan was completed. The value of this plan was limited as it aimed to be comprehensive in defining the Library's services without addressing the issue of priorities and its language failed to convey a challenge that might excite staff or clients. The university increased the amount of funding to the library in 1994, but there was a need to ensure that the available funds were used in the most effective way possible to meet user needs. There was also a need to address the interpersonal and organisational issues that arise from an amalgamation in an environment of rapid growth. While the staff of the two former Institute libraries had been reorganised into one new organisational structure, little attention had been paid to the need for team–building and improved decision making techniques.

The TQS approach to quality appeared appropriate for the Library because it had been specifically developed (by Karl Albrecht and others) to cater for organisations that provide both products and services and to overcome known disadvantages of other methodologies. Quality management first originated in the 1960s when the primary concern was with quality control of the physical product through physical inspection. In the 1970s W Edwards Deming and others developed the Quality Assurance approach which aimed to prevent the occurrence of errors and problems. During the 1980s Total Quality Management (TQM) methods were developed to provide a structured approach, primarily in manufacturing but with some use in service areas. During the eighties there was also a major focus on service, best practice and competitive advantage. (Peters and Watermen, 1982).

The TQS approach builds on previous experience of quality management but shifts the focus to the customer and the customer's perception of the value of both the products and the services provided by the organisation. It provides a methodology which is relatively simple to implement and which has been used in a number of service organisations,

including some in Australia. At the time of commencement of the Victoria University programs, Macquarie University Library had already commenced a quality program using this method and appeared satisfied with the initial results.

Most libraries already express a commitment to the quality issue and to the involvement of their 'users', 'customers' or 'clients' in the development of products and services. Some libraries had already developed quality programs whilst others had used elements of quality philosophies in surveys which compare staff and client perceptions of priorities or 'value'.

The Concepts

The TQS approach defines service as work done by one person for the benefit of another. All Library staff can therefore be seen as providing a service either to other library staff as 'customers' or direct to end–users. The senior management of the library can be seen as providing support to library staff as well as to end–users. Internal service departments, such as Technical Services, can be seen as providing support to the front line service departments. Front line service departments such as Loans and Information Desk staff provide a direct service to end–users. (Figure 1)

FIGURE I — CUSTOMER VALUE
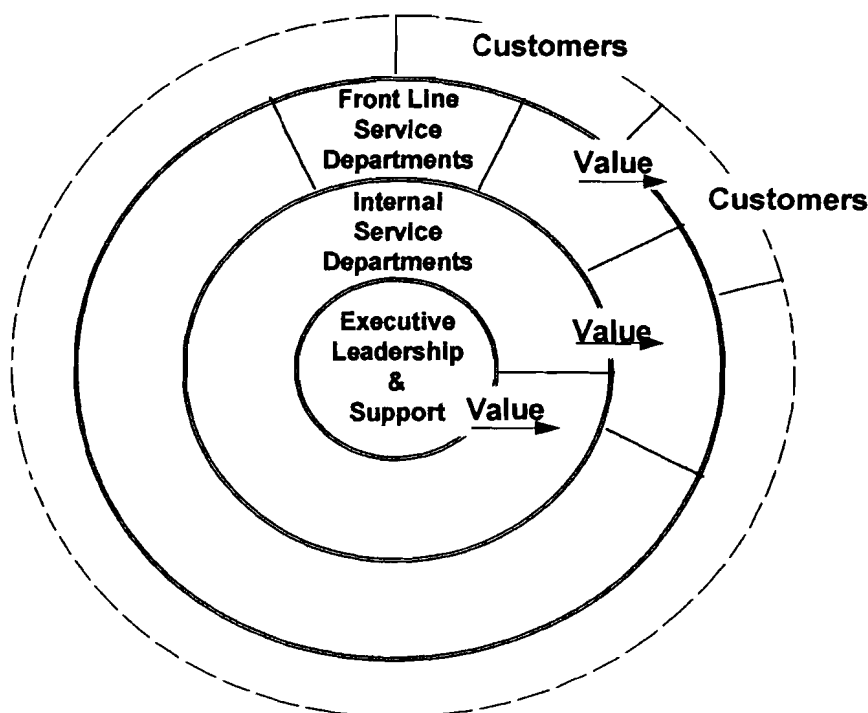
Quality is defined as the extent to which a thing or experience meets a need, solves a problem, or adds value for someone. Total Quality Service is a state of affairs in which an organisation delivers superior value to its shareholders, its customers, its owners and its employees.

This recognises the employer's need for cost–effectiveness and the employee's need for reward, in addition to the needs of the customer. TQS assumes that all quality standards and measures used in the organisation are customer referenced. It recognises the importance of subjectively perceived quality as well as objectively perceived quality and provides both quantitative and qualitative measures.

TQS takes the concept of customer value beyond the objective characteristics of tangible products to encompass the customer's reaction to the total experience of using the product and service. The customer value package provides for environmental, aesthetic, interpersonal, procedural, informal and financial aspects to be taken into account in considering the delivery of service. (Figure 2)

FIGURE 2 — THE CUSTOMER VALUE PACKAGE
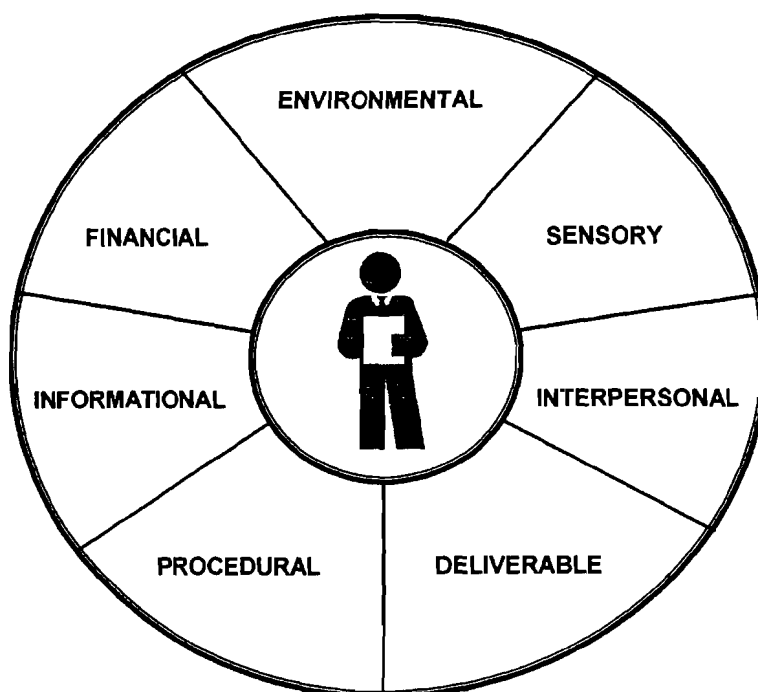
A hierarchy of customer value can be developed which enables customers' needs to be categorised into basic, expected and desired. It also allows for library staff to develop new and unanticipated services in response to perceived needs. The successful organisation is meeting basic and expected needs and is operating at the level of desired and unanticipated needs. The basic element of service quality in TQS is the concept of the 'moment of truth' at which a customer comes into contact with an organisation and gets an impression of its service. In libraries there are many such 'moments of truth' in transactions such as the reference interview or the inter–library loan request which combine to create cycles of service. The Total Quality Service approach encourages every member of staff to think like a customer.

The TQS Model and its Implementation

The Total Quality Service model is a continuous process of research, implementation and feedback. Market and customer research is carried out, strategy is formulated, education and training of staff is carried out and process and service improvement takes place. The success of the change is measured and the results fed back into service improvements. New cycles of client consultation are carried out leading to further improvements in strategy, process and service. (Figure 3)

FIGURE 3 —THE TQS MODEL

The first stage in implementing the TQS model at Victoria University was to hold information and consultation sessions on the method with the Library staff on each campus and with the Library Committee. The Library staff response has been generally enthusiastic although, as one would expect, there was some initial scepticism about a top–down process and some expression of the view that a further increase in funding rather than a quality program was needed. Most Library Committee members were supportive of the project but some strong concerns about the application of a business model, which refers to customers and shareholders, were expressed. As a result of these sessions some changes to the timetable were made and a decision was made to use the term 'client' rather than 'customer'.

A grant to assist with the project was obtained from the University's Quality allocation from DEET, and Austin Thompson and Associates Pty Ltd were employed as consultants. The consultants had no previous experience of working with libraries but had extensive experience of implementing TQS programs in hospitals, banks and other service institutions and were working with the senior management of another Australian university. A particular attraction was the consultants' development of Option Finder software for use in these projects.

The Library Staff Committee was given the role of establishing the Quality Program. This Committee comprises managers, supervisors and other staff and represents all campuses and functional areas of the Library. A workshop was held to identify the library's clients and determine priorities for study. It was agreed that consultation with academic staff and students on a campus basis was the highest priority. Detailed consideration of other client groups was deferred.

Focus group workshops were held for students on all five campuses of the University and two workshops were held for academic and teaching staff from all campuses. Participants were identified through advertising in newsletters, e-mail and contact with student organisations. Students were also encouraged to attend by being offered a free photocopy card through sponsorship by the photocopy supplier. Up to 20

client participants attended each session. In addition, five Library staff from the relevant campus attended as participant observers.

The aim of the workshops was to determine the factors about the existing library service which irritated library users and to determine their vision of a good library service. Subsidiary aims were to measure the current performance of the library service and to measure gaps in perception between clients and library staff. (Examples of the results are given in Figure 4, 5 & 6). Following each workshop, the library staff attending examined the irritants and developed action plans to deal with problems which could be dealt with easily. These reports summarised the irritants, values and performance for each group in diagrammatic form.

FIGURE 4: HIERARCHY OF IRRITANTS — FOOTSCRAY STAFF

Hours of access inadequate
Lack of awareness of new publications
Environment not conducive to study
Frustration with staff attitudes
Restrictions and delays due to procedures
Frustration with technology and equipment
Difficulties finding materials in-house
Book collection weakness
Inadequate journal collections

Customer

0 10 20 30 40 50 60 70 80 90 100
Low   RELATIVE IMPORTANCE %   High

FIGURE 5: HIERARCHY OF VALUE — WERRIBEE STUDENTS

Access to high quality photocopying service
Positive attitude of staff
User friendly admin system
Physical access and support
Knowledge and expertise of staff
User friendly fast technology
Quiet areas for study and work
Up to date vertical files
Ease of access to electronic services
Reliable high quality computer labs
Extended hours of access
Prompt reliable delivery of information
Access to journals
Comprehensive current accessible collection

Students

0 10 20 30 40 50 60 70 80 90 100
Low   Relative Important   High

FIGURE 6: HIERARCHY OF VALUE — ST ALBANS STUDENTS PERFORMANCE GAPS

| | Lib Staff | Stud |

Sponsoring cultural activities
User provider cooperation
Empowered staff
Improved physical and equity of access
Improved loans process
Environment conducive to study
Extended opening hours
Speed of access to internal resources
Approachable, expert staff
Assistance readily available
Ease of access to resources
Electronic access
Comprehensive range of journals
Efficient photocopying service
Quality and quantity of books

0 1 2 3 4 5 6 7 8 9
Very Poor   Expected   Delighted

The summary findings were as follows:

Irritants

► By improving the quality and quantity of the collection the major irritant will be eliminated for all groups.

► Dramatic improvements to photocopying services/facilities will eliminate a major irritant for all student groups.

► By attending to electronic services and facilities at each campus, a more uniform and higher quality library service will result.

Values

► Collection issues need to be addressed.

► Document delivery needs to be addressed at campuses where there is high use.

► There is a need to evaluate electronic links/facilities and make improvements if necessary.
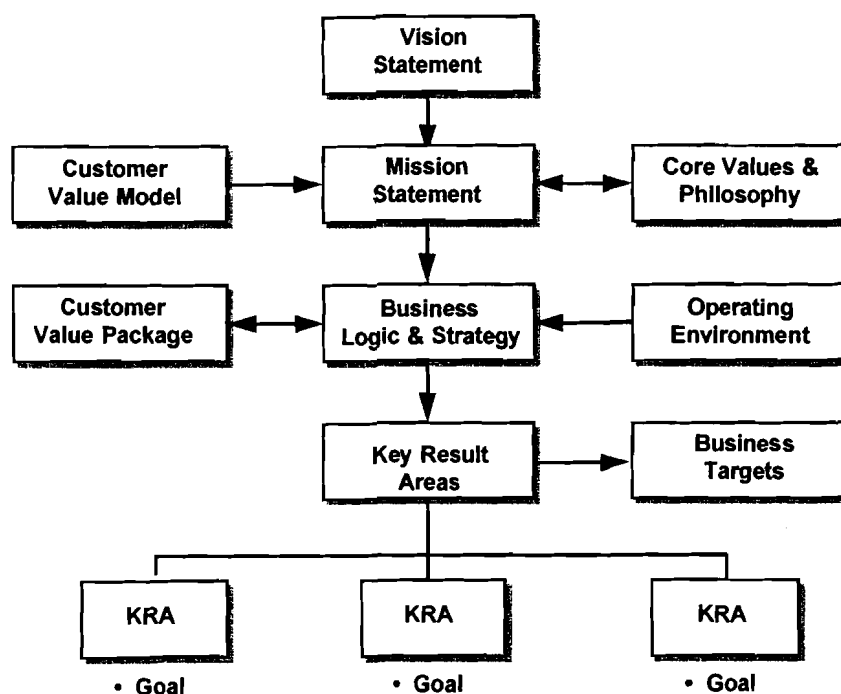
Performance

► Performance was below expected in all areas except the knowledge and approachability of staff.

► A focus on improving performance in the key areas of library stock, up–to–date technology and electronic links is desirable.

Gaps

► *Procedures:* Review and monitoring of procedures (eg inter–library loans, acquisitions, loans) is required.

▶ *Electronic Links:* Library staff tend to overestimate the current performance of electronic links. Reasons for the different perceptions of performance need to be investigated, eg lack of communication about services and integration with information technology services.

▶ *Collections:* There is a high degree of consensus about the importance of the collection in general, but Library staff overestimated their performance in providing a current, comprehensive collection and have underestimated student demand for journal access. The reasons for this difference needs further investigation and action.

FIGURE 7

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                    ┌──────────────┐
                    │   Vision     │
                    │  Statement   │
                    └──────┬───────┘
                           │
                           ▼
┌──────────────┐    ┌──────────────┐    ┌──────────────┐
│   Customer   │───▶│   Mission    │◀──▶│ Core Values &│
│ Value Model  │    │  Statement   │    │  Philosophy  │
└──────────────┘    └──────┬───────┘    └──────────────┘
                           │
                           ▼
┌──────────────┐    ┌──────────────┐    ┌──────────────┐
│   Customer   │◀──▶│   Business   │◀───│  Operating   │
│Value Package │    │Logic & Strategy│  │ Environment  │
└──────────────┘    └──────┬───────┘    └──────────────┘
                           │
                           ▼
                    ┌──────────────┐    ┌──────────────┐
                    │  Key Result  │───▶│   Business   │
                    │    Areas     │    │   Targets    │
                    └──────┬───────┘    └──────────────┘
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    • Goal             • Goal             • Goal
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The next step was strategic planning. Karl Albrecht's methodology for developing strategic plans was used. (Figure 7). This involved developing a vision and mission statement based on the customer value model derived from the customer workshops and a core values, or statement of philosophy, developed by the Library staff. A customer value package was developed from these statements.

After consultation with the Library Committee, the University Council adopted these as follows:

Vision

The Library aspires to be a client-focused provider of quality information resources and access to knowledge to support the University's teaching, research and learning.

Mission

As part of the University community the Library will:

▶ Strive for excellence in all aspects of our service.

► Ensure that our policies, procedures and processes are client focused.

► Operate as a flexible and client responsive team.

► Provide an environment conducive to meeting client needs.

► Be in the forefront of the application of appropriate and effective technology.

► Provide an integrated cross sectoral service.

► Provide access to a full range of services at all campuses.

► Continuously develop staff skills, knowledge and expertise.

► Work with other staff across the University to promote and develop its functions.

► Ensure that it fully discharges its functions as part of the overall higher and vocational education systems.

Core Values

The Library staff values:

► Equitable access to knowledge for teaching, research and life–long learning.

► Sensitivity to external and internal client perspectives.

► Respect, value and support of one another as Library staff.

► One University, one Library service.
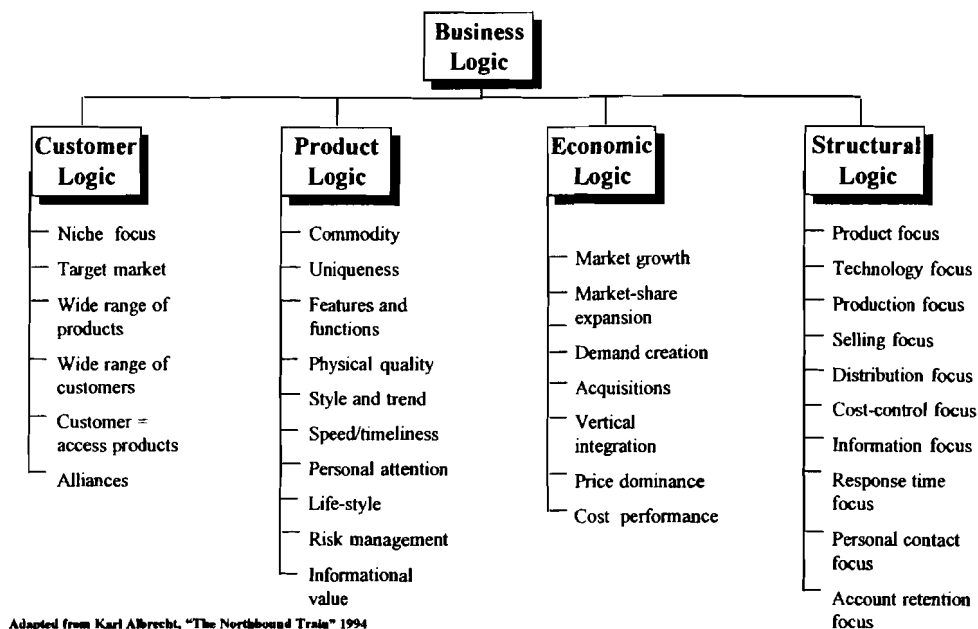
Customer Value Model

Users of the Library value:

► Comprehensive, relevant, on campus collection of books and journals.

► Electronic links and appropriate and effective technology.

► Speedy and accessible document delivery.

► Reliable photocopy service.

► Timeliness and responsiveness of services.

► Sensitivity to client needs.

The mission, customer value model and core values statement have formed the basis of the development of a business logic and strategy for the Library. Karl Albrecht's methodology for developing a business logic has been used with consideration of customer, product, economic and structural factors (Figure 8) (Albrecht, 1994).

FIGURE 8

Business Logic

Customer Logic
- Niche focus
- Target market
- Wide range of products
- Wide range of customers
- Customer = access products
- Alliances

Product Logic
- Commodity
- Uniqueness
- Features and functions
- Physical quality
- Style and trend
- Speed/timeliness
- Personal attention
- Life-style
- Risk management
- Informational value

Adapted from Karl Albrecht, "The Northbound Train" 1994

Economic Logic
- Market growth
- Market-share expansion
- Demand creation
- Acquisitions
- Vertical integration
- Price dominance
- Cost performance

Structural Logic
- Product focus
- Technology focus
- Production focus
- Selling focus
- Distribution focus
- Cost-control focus
- Information focus
- Response time focus
- Personal contact focus
- Account retention focus

These factors have been defined as follows:

Target Customer Base

► Students enrolled in Victoria University of Technology award courses.

► University staff engaged in teaching award courses.

► University staff engaged in research in strategic areas.

► Administrative and senior Executive staff managing, promoting and developing award courses and research in strategic areas.

The two major aspects of our Product Logic are:

► Information Value – access to, production of and delivery of information.

► Speed and timeliness – including:

   direct and remote access.

   instructing, tutoring, coaching and facilitating.

The two major aspects of our Economic Logic are:

► Market Growth

► capitalising on the potential in the under–graduate and research areas.

► Cost Performance

   improving our processes to maximise use of resources.

The two major aspects of our Structural Logic are:

► Information Focus – organising around the creation, manipulation and movement of information.

▶ Distribution Focus – getting things where they need to be, when they need to be there.

Action plans have been developed by evaluating current performance against the business logic and the customer value package.

Quality Action Teams have been formed to address key result areas. The Library Staff Committee is performing the role of a quality council.

A Staff Development program has been put into place to facilitate the quality process. Training in teamwork development, decision making tools (Figure 9) and in conducting effective meetings has been provided to members of the Library Staff Committee.

FIGURE 9: PROBLEM-SOLVING TOOL KIT

Core			Intermediate			Advanced	
1 Flow chart	56	9	Activity network diagram	3	20	Control charts	36
2 Brainstorming	19	10	Gantt chart	3	21	Matrix diagram	85
3 Affinity diagrams	12	11	Check sheet	31	22	Prioritisation matrices	105
4 Cause & effect	23	12	Data points	52	23	Process capability	132
5 Histogram	66	13	Force field analysis	63	24	Run chart	141
6 Pareto	95	14	Interrelationship diagraph	76	25	Process decision program chart	156
7 Nominal Group technique	91	15	Problem solving model (PDCA)	115			
8 Moments of truth	*	16	Radar chart	137			
		17	Scatter diagram	145			
		18	Tree diagram	156			
		19	Service blueprint/ function deployment	*			

Library staff have themselves conducted further client focus workshops in 1995 and have run in–service staff training programs to ensure that the skills required to continue the program without the use of external consultants are maintained.

An annual Quality Award has been established for Library staff to enable outstanding performance in the Quality Program to be recognised.

Performance indicators have been identified and action begun to put them in place. The indicators developed by the Council of University Librarians (CAUL) will be used to measure client satisfaction and some aspects of timeliness. Additional measures are also being developed internally.

Conclusions

The TQS methodology and its application at Victoria University have been successful to date. Some reservations have been expressed about the business orientation of the concepts and terminology, but on the whole the University's academic community has welcomed the opportunity to participate in the Library's planning process. Library staff have displayed some scepticism about management intentions in introducing the program, but overall there has been strong enthusiasm to participate, an enthusiasm which is increasing as more levels of staff get involved and changes begin to be implemented.

The consultants' knowledge of other service industries has been an advantage since it assisted in getting clients to talk in their language and using their concepts without a framework predetermined by librarians. The use of consultants has also provided Library staff with professional training in quality tools.

The results of the client workshops have been of assistance in achieving consensus amongst Library staff on budget priorities and have been invaluable in the strategy process. They have forced a rethinking of some basic assumptions about the way we operate and of our perceptions of our clients. These include the demand from undergraduates for electronic information services which is more often associated with research, the dissatisfaction with the photocopy service (although it was not dissimilar to that provided in most Australian libraries) and the concern expressed by some students about our Library policies, procedures and communication.

Our Quality Program is new and it is too early to assess its full impact on our collections and services, but at this stage it appears to have been worth the investment.

References

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