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# Measurement and milestones - sustaining improvement

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## Abstract

Collection and interpretation of information and data were key elements in a planned change management strategy which, over a period of six years, transformed the University of Wollongong (UOW) Library's capacity to deliver sustained organisational improvement. Early initiatives in strategic planning, performance management and staff development had delivered a number of improvements to an essentially conservative organisation. Perceptions of Library services were mostly favourable. Success was difficult to measure and promote, however, due to the lack of robust performance indicators and measures. Performance measurement focussed on inputs and outputs, primarily those considered mandatory for reporting purposes, with little or no emphasis on the effectiveness or quality of services offered. In 1994, the decision was made to investigate the potential of the quality movement to underpin the Library's goal of differentiating itself through external recognition for quality and service excellence. To achieve this ambitious goal, it was imperative to develop the tools which would enable the demonstration and communication of outcomes and the impact of change strategies. The selection of the Australian Business Excellence Framework (ABEF) as the management framework to drive and support transformational change led to the development of a new cultural paradigm. A key feature of this cultural shift was the identification of measurement activities, including the implementation of client surveys and other feedback mechanisms. Although the evidence of performance and success provided by these measures was relatively crude, initial results were sufficient to challenge staff perceptions that had previously relied upon anecdotal evidence. Staff involvement in measuring and analysing results provided the foundations for a change management program which aimed to redress unfavourable client and stakeholder perceptions and to build on perceived strengths. This process was fundamental to the success of UOW Library's 'Quality Journey'. Evaluation of data and information can be a powerful catalyst for a change agenda as the assessment process has the potential to provide evidence of what needs to be improved at all levels of the organisation. In our case, recognising and addressing the opportunities for improvement introduced new vitality and innovation in the development, management and delivery of quality services and resources to clients. Within a few years, the Library was positioned for external scrutiny and underwent assessment by third party evaluators using nationally and internationally recognised criteria of business excellence. By the year 2000, the Library was recognised with the prestigious Australian Business Excellence Award. The goal of developing and fostering a culture valuing measurement and evidence had, to a large extent, been achieved. A key outcome of the continued use of the ABEF and other best practice standards has been the ability to sustain commitment to ongoing evaluation and assessment through regular internal and external scrutiny of performance, including benchmarking. The impact of ongoing improvement initiatives, informed through careful analysis of results has been demonstrated through positive trends in client and stakeholder satisfaction with services and access to resources; benchmark comparisons, significant improvement in processing efficiency and costs, enhanced staff satisfaction and morale and the capacity to develop new areas of service offerings to support the research, teaching and learning needs of the University.

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*The selection of the Australian Business Excellence Framework (ABEF) as the management framework to drive and support transformational change led to the development of a new cultural paradigm. A key feature of this cultural shift was the identification of measurement activities, including the implementation of client surveys and other feedback mechanisms. Although the evidence of performance and success provided by these measures was relatively crude, initial results were sufficient to challenge staff perceptions that had previously relied upon anecdotal evidence. Staff involvement in measuring and analysing results provided the foundations for a change management program which aimed to redress unfavourable client and stakeholder perceptions and to build on perceived strengths. This process was fundamental to the success of UOW Library's 'Quality Journey'.*

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## Commencing the quality journey

> The decision to embark on a quality program through adoption of the Australian Business Excellence Framework has been validated over time. It is over a decade since the commencement of the journey. The principles and philosophy of the Framework have been integrated into the work of all teams; 'quality' has become part of the way of 'doing things'. (McGregor, 2004)

The value delivered by libraries is often considered to be of a social, educational or cultural value; values which are difficult to measure (McGregor, 2004). An element influencing difficulty in measurement is that the value is not always immediately apparent to the client (Drake, 1997) as it takes time to synthesise and apply newly acquired information and knowledge. The value exchange, between the library and the client is, however, underpinned by numerous processes which in most cases can be measured and evaluated for effectiveness and efficiency.

A Quality and Service Excellence program (QSE), conceived in 1994, provided the catalyst to critically review and evaluate the University of Wollongong's Library's (UWL) capacity to deliver services of value to its clients and stakeholders. The QSE encapsulated the improvement goals of the Library; an emerging commitment to total quality management and a recognised need for an overall planning and management framework to replace the well-intentioned, but somewhat fragmented improvement efforts of the past.

The development of QSE was influenced and informed by the Australian Quality Council's Quality Framework. Now known as the Australian Business Excellence Framework (ABEF), this provided a structured and integrated management system in which the Library could build on its earlier successes as well as identifying areas that had been addressed less rigorously, notably data and information collection and analysis and the communication of business results. The Framework provides descriptions of the essential features, characteristics and approaches of organisational systems that promote sustainable and excellent performance (SAI, 2004). In describing the ABEF, SAI-Global states:

> 'Business Excellence provides organisations with a systematic and structured approach to assess and improve the performance of its leadership and management systems in the key areas of organisational capability, namely: Leadership; Strategy and Planning; Data, Information and Knowledge; People; Customer and Market Focus; Innovation, Quality and Improvement; Success and Sustainability'.

The key areas, known as categories in the ABEF provide the basis for both internal and external review and assessment as well as benchmarking of processes and outcomes.[1] Results from such evaluations have proved to be a powerful catalyst for a change agenda, as the assessment process provides evidence of what needs to be improved at all levels of the organisation. Addressing the opportunities for improvement can introduce new vitality and innovation in the development, management and delivery of quality services and resources to clients.

## Learning what to measure

Essential to the acceptance and acceleration of QSE was the overcoming of myths such as "you can't measure service". Despite the lip-service paid to the service ethic in libraries generally, avenues for measuring client satisfaction and gathering client feedback were, by and large, limited in the profession.

Prior to UWL's development of an in-house suite of performance indicators and measures, data collection was limited to statistics mandated by government agencies or professional library associations. The emphasis was mostly on outputs often used in informal rankings of libraries, traditionally in terms of collection size and other wealth-related indicators. Certainly, there were no measures relating to the human dimension (knowledge, skills, attitudes), integral to quality service outcomes (Hernon and Altman, 1996). At that time, and even today, there is a deficit in nationally agreed measures within this sector that assist in the evaluation of quality and effectiveness, not just the efficiency of libraries. In short, it was challenging to find established indicators and measures aligned with the principles of *Quality and Service Excellence*. These

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[1] See *Benchmarking with the Best*, McGregor, 2003, for a more detailed description of the ABEF.

findings were not atypical. Research across academic libraries revealed similar outcomes. Hiller (2000) described the obstacles standing in the way of developing a culture of assessment, as opposed to measurement, as: organisation structure and inadequate leadership, librarian unease with quantitative analysis, lack of good data analysis and presentation skills.

Inherent to the success of QSE, therefore, was the selection of performance indicators and measures of interest and relevance to key library stakeholders, designed to facilitate demonstration and communication of value and performance outcomes against chosen change strategies.

To ensure that stakeholders' needs and expectations were taken into account, a range of consultation strategies were deployed. In 1994 and 1995 surveys and focus groups commenced with various client groups with the aim of understanding their expectations of excellence in libraries. Results from these reviews revealed not insignificant gaps in terms of clients' expectations of UWL against perceptions of performance. Notably, 74% of clients were satisfied with the Library (26% were less than satisfied) and only 46% of clients were satisfied with the availability of information resources. Qualitative feedback expanded on the primary sources of dissatisfaction, such as barriers to accessing information resources and computers, service speed and accuracy and responsiveness of staff.

The baseline data gathered from these initial exercises provided evidence of what needed to be improved from a client's perspective, for example, faster services. Two challenges were posed – finding out how to improve processes and then developing the capability to sustain improvements over time.

A desired outcome of QSE was the devolution of responsibility for conducting, analysing and reporting performance to teams. Instilling a sense of ownership of performance indicators and measures was vital to this process. The University Librarian with members of the newly formed Quality Steering Committee systematically worked with each team to identify key processes and activities; identify performance goals for each process; identify the factors that can/could affect performance; and select performance indicators and measures.

Evaluation of the Library's capability at that time, using tools such as organisational self assessment and staff surveys, revealed data collection to be extensive (in areas that were considered easy to measure) but analysis insufficient to convert data into information. In addition, the skill set least evident amongst staff included the ability to analyse and graphically present data and information and to understand statistical variation (McGregor, 2004). All staff received training in Total Quality Management (TQM) tools and techniques and basic concepts associated with measurement and evaluation. These newly acquired skills were exercised through their application in newly formed Quality Improvement Teams (QITs), developed to address the performance gaps identified by clients through the aforementioned focus groups and surveys.

To encourage diversity of opinion in problem-solving, membership of the QITs was cross-functional in nature. This approach to team design fulfilled several purposes: it encouraged a non-hierarchical approach to the designation of responsibility, enabled staff to learn of tasks and processes outside their natural work teams and provided a non-judgemental forum in which to question existing practices. Most importantly, it offered staff, especially those without formal responsibility for decision-making, the ability to contribute to change for the benefit of the entire organisation. As measurement, evaluation and problem-solving was increasingly integrated in the work teams, change management and improvement initiatives became the responsibility of the teams, not just the Library Executive. The development of an overarching measurement framework to enable alignment of team efforts with the Library's vision, mission and overall goals was a critical milestone in the quality journey. The resulting Performance Indicator Framework (PIF) also provided a foundation for the systematic review of services and processes using measures aligned with stakeholder needs and expectations.

## Performance Indicator Framework

UWL's Vision and Mission are underpinned by Critical Success Factors (CSFs), those conditions that must be in place to achieve long-term goals and strategies, as well as sustaining day-to-day excellence. Current Critical Success Factors are:

- Knowledge and fulfilment of client needs and expectations
- Access to information resources which support research, teaching and learning
- Effective and efficient resource management
- Reliable, accessible information technology infrastructure
- Expertise in innovative exploitation of an information environment in transition
- Skilled and knowledgeable staff who respond creatively to change

A series of Performance Indicators are linked to the CSFs and facilitate evaluation of the organisational Key Performance Indicator (KPI): *Client and Stakeholder Satisfaction*. Teams regularly report results of their measures against the indicators to identify trends and elaborate on variations and corrective actions. The data is used for the ongoing management and improvement of processes and services.

To signal long-term commitment to QSE, the principles of business excellence were progressively embedded in all Library activity. Performance Reports and Annual Reports for example, were structured to reflect this integration, with information organised under Critical Success Factors and Performance Indicators instead of functional areas. Stakeholders (including staff) are thus more readily able to interpret core business and strategic outcomes. This approach has been an important catalyst in promulgating a 'systems view' of the organisation for teams and individuals. It illustrates that no one team owns *client satisfaction* or *efficient resource management*, but all share responsibility to improve outcomes in these critical areas.

## Sustaining improvement

Developing performance indicators, measures and essential staff skills, provided the foundation for improvement. To achieve sustainable business excellence, however, meant describing and developing the enabling behaviours and practices required to achieve the desired 'culture of assessment'. The articulation of shared values and beliefs through a consultative process helped staff to recognise and understand their own, and their peers', overall responsibility for organisational performance. Ultimately, through successive review, the values were linked with the Ideal Culture.[2] The concept of an *Ideal Culture* was premised on a vision of how the Library would look, sound and feel if the Values and their associated behaviours were internalised and practised to their optimal level.

Extending measurement at the personal level was facilitated by a review of position and person profiles (otherwise known as position descriptions) to incorporate the *Values and Ideal Culture*. Moving beyond the traditional paradigm of simply describing tasks to be performed, the new profiles placed a particular emphasis on behaviours and attributes staff were expected to demonstrate in their day-to-day working relationships. For example:

- Striving to understand our clients' needs through consultation and feedback
- Actively seeking information to improve our processes and services
- Rewarding enterprising and innovative ideas, encouraging staff to respond creatively to challenges
- Taking pride in planning, anticipating change and working towards achieving our goals
- Recognising and rewarding individuals and teams who make exceptional contributions
- Seeking opportunities to continuously learn, developing the skills and knowledge to effectively do our jobs

Attributes such as these formed the basis of individual performance and development review. Responsibilities within Position Descriptions were supplemented with articulated performance outcomes and performance indicators against which individuals were assessed twice yearly.

## Client Service Charter

Much of this discussion has focussed on internal communication and application of assessment practices designed to foster service excellence. It is equally important to communicate this commitment to clients and stakeholders (Jantti, 2005). Published *Service Standards* can provide one vehicle for this purpose. At the UWL,

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[2] See UWL website http://www.library.uow.edu.au/planning/UOW026251.html .

*Service Standards* are communicated through a *Client Service Charter*[3] which outlines services clients can expect from the Library and the measurable standards which will apply.

In the beginning, the identification of measurable, guaranteed standards was approached with caution by most teams. This was partially due to the lack of process data needed to establish more informed standards, as well as concern about occasions when standards might not be met (McGregor, 2004). To overcome these initial concerns, standards were somewhat conservative until substantive datasets could be collected to gain an improved understanding of process capability. They did, however, address issues identified by clients as being important, in particular the timeliness of response and processing times.

In the mean time, teams were encouraged to set stretch targets. These stretch targets although not communicated to clients, provided the necessary impetus to challenge existing process capability and to implement continuous improvement initiatives. Over time, improved understanding of process capability and variation has influenced the standards against which staff strive to achieve. Through analysis and problem-solving, teams have demonstrated their ability to drive continuous improvement and change, as illustrated in the table below, comparing advertised standards from 2002 to those used in 2007.

| 2002 | 2007 |
| --- | --- |
| Make returned items available within 12 hours | Make returned items available within 6 hours |
| Have newly received resources ready for borrowing within 10 working days | Have newly received resources ready for borrowing within 5 working days |
| Fill 90% of document delivery requests within 10 working days | Fill 90% of document delivery requests within 7 working days |
| Respond to suggestions and feedback within 5 working days | Respond to suggestions and feedback within 2 working days |

## Benchmarking

Benchmarking has many definitions and many purposes. It is primarily a tool for measurement, learning and improvement. Benchmarking encourages examination of results and trends generated from processes, against internal reference points, for example, the Service Standards discussed above, as well as more ambitious comparisons by testing achievements, services and performance outcomes against external reference points considered as good or best practice. Essentially, benchmarking is about deciding which areas your organisation must excel in, understanding current practice and outcomes, learning from others and applying what has been learnt in a way that leads to enhanced performance (Evans, 1994).

Benchmarking strategies utilised by UWL include both formal and informal benchmarking. Identification and observation of good practices occurring outside the organisation provided valid and considered reflection of internal practices. Processes benchmarked include traditional library activities such as acquisitions, cataloguing and document delivery.

UWL has used client satisfaction surveys as a key tool to better understand client perceptions of services and resource provision since 1995. In 2002, a client survey negotiated by the Council of Australian University Libraries (CAUL) was adopted to enable benchmarking with Australian and New Zealand university libraries. The major assessment categories are: *communication, service quality, service delivery, facilities and equipment, library staff.* A key aim of the survey is to identify service and resource gaps. Data and information collected from the survey are used to inform planning and improvement initiatives across all levels of the Library.

A significant benefit from adopting this approach to evaluating customer satisfaction is the ability to monitor internal benchmarks of performance as well as to determine how UWL is positioned against its peers. In addition to quantitative analysis of UWL's performance, clients are encouraged to provide qualitative feedback. This feedback is pivotal in contextualising the hard data generated from the survey. Examples of areas for improvement as identified by clients include:

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[3] See UOW Library website www.library.uow.edu.au/about/planning/charter.html.

- Access to computing facilities
- Access to a variety of study spaces, e.g. individual, group
- Flexible access to information resources regardless of location
- In addition to the process improvements described throughout this paper, UWL responded to the feedback by:
- Developing study areas supporting the use of personal laptops and providing laptops for loan
- Designing a range of study configurations to support individuals and groups
- Implementing an 'electronic-preferred' information acquisition policy (endorsed by the University community)
- Digitisation of high demand information resources, e.g. ereadings, theses

These examples are by no means all encompassing, but do serve to illustrate UWL's commitment to responding to evidence. Results of the survey are an important indicator of the success of QSE and this has been demonstrated through UWL's consistent positioning in the top quartile of performance across each assessment item since 2002 and its position in the top five[4] performing libraries across the major assessment categories (see table below).

| Assessment categories | 2002 | 2006 |
|---|---|---|
| Communication | 6th | 4th |
| Service Quality | 7th | 4th |
| Service Delivery | 9th | 3rd |
| Facilities and Equipment | 7th | 6th |
| Library Staff | 10th | 3rd |

## Milestones

Milestones achieved throughout the Quality Journey have been many and varied. Becoming the first library to win a recognised business excellence award represented major recognition of achievement for the whole organisation. Similarly, recognition against the international *Investors in People* standard was a major achievement. However, there were a number of relatively minor steps leading to these milestones and many of these are listed in the Quality Journey[5] document on our website. Amongst these, reaching consensus on Library values, measurable improvement in staff perceptions of their culture and client feedback attributing excellent service to the quality program, were especially rewarding.

A brief summary of the Australian Business Excellence Awards process follows to demonstrate the rigour of this form of structured assessment. A team of independent evaluators examined a comprehensive, 50 page portfolio of evidence, followed by a one and a half day site visit to evaluate performance against the 7 ABEF categories.

In describing the criteria for recognition, SAI-Global, Business Excellence Australia notes:

- Applicants should have a systematic approach to measuring and improving their performance
- At least three cycles of data showing positive trends is evident
- The organisation is learning and is willing to share its learnings
- A best practice culture will have been in place long enough to sustain continuing improvement and be robust in the face of the major change
- Its activities will be benchmarks for others

After evaluation, feedback reports are presented, identifying strengths and opportunities for improvement. In responding to feedback, improvement initiatives introduced included greater use of stretch targets to challenge process capability, comparisons of practice and results against external reference points, and the capture and analysis of sources of dissatisfaction as opposed to satisfaction. Through this process, the Library was benchmarked and recognised against globally recognised principles of excellence.

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[4] Based on results achieved in 2006.
[5] See Our Quality Journey http://www.library.uow.edu.au/planning/UOW026250.html.

The integration of best practice principles of process management and service delivery into the day-to-day management and long term vision of the Library has resulted in:

- improved clarity of goals and purpose
- active involvement and participation of staff at all levels in achieving the mission of the organisation
- increased client and stakeholder satisfaction with Library services and;
- a collective responsibility and passion for ongoing success.

Other milestones include:

- Since 1994, an 18% increase in overall satisfaction with UWL (satisfaction rating stands at 92% in 2006)
- From 1995, a 35% increase in satisfaction with access to information resources (satisfaction rating stands at 81% in 2006)
- Establishment of new national benchmark results in 2005 for an Employee Opinion Survey administered by Rodski Survey Research
- Investors in People Silver Award in 2003 and Investors in People Gold Award in 2005
- Commendation by AUQA for: *a firmly embedded culture of quality consciousness which leads to strong results for most measurable outcomes*. Subsequently, this commendation was accepted for inclusion in AUQA's Good Practice Database, an online searchable collection of systems and activities relevant to quality assurance in Australian higher education.

## Conclusion

Application of the principles embedded in the Australian Business Excellence Framework (ABEF) enabled changes to be integrated into the 'normal' workflows of the Library. Longevity was envisaged for the ABEF as UWL's management framework and quality assurance was not to be construed as distinct from other processes. In essence, the aim was to drive a cultural change which would achieve a sense of overall responsibility for organisational performance, previously considered to be mainly within the province of the Library Executive. (McGregor, 2004)

Improved performance has translated into greater recognition by the University and integration with its core business. Enhanced Library involvement in establishing and realising the University's teaching, learning and research goals would not have been possible without the efficiency, effectiveness and commitment achieved on the quality journey.

Since the inception of QSE, the approaches implemented by UWL have been recognised by accrediting and evaluation bodies as good, and in some instances, best practice. By striving to understand what the clients and stakeholders of UWL want and expect of excellent library and information services has presented numerous challenges, some of which, especially at the beginning of QSE, appeared insurmountable. The willingness to look to exemplars and best practice, regardless of sector, has enabled an ambitious leadership and change strategy to be realised, offering dramatic and most importantly, sustained service improvements for clients.

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