

DEVELOPING A QM FRAMEWORK FOR PROMOTING VALUE-ORIENTED PRACTICES AT THE UWI, ST AUGUSTINE MAIN LIBRARY

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Abstract: *The purpose of this paper is to investigate the current challenges facing the St Augustine (STA) Campus Libraries towards developing a Quality Management (QM) approach to meeting changing demands while increasing and improving value within the Main Library. The study reviews both the 2007-2012 Strategic Plan of The University of the West Indies (UWI) and the Operational Plan of the STA Campus Libraries, for the same period, and identifies quality as an area of value for the Campus Libraries. It also incorporates the findings of the literature review and the analysis of data collected from three user satisfaction surveys conducted at the UWI. The study emphasizes the need for a structured approach to managing service quality within the Main Library through the adoption of Value Methodology and QM procedures. This paper contributes to the development of the QM Framework that helps foster operational excellence for the Main Library. The experience learnt from implementing the framework could be extended to other Faculty's/Departmental Libraries and the Campus Libraries at the St. Augustine, Mona and Cave Hill as well as the Open Campus.*

Key words: *Value Methodology, Quality Management, Library and Information Services*

1. Introduction

The Main Library at The University of the West Indies, St. Augustine (UWI STA) Campus has developed from one of the oldest special libraries in the West Indies, the Imperial College of Tropical Agriculture (ICTA) established in 1922. The Library has become one of the University's most lasting investments serving not only its present members but also future generations. However, the rapid growth of information made accessible via the World Wide Web and as a result of the continued advancements being made in technology have forever changed the way in which traditional libraries must now operate.

This paper attempts establish the reasons for the current challenges facing the STA Main Library by analysing data collected from the UWI website and the Main Library's annual reports. An examination of the UWI 2007/2012 Strategic Plan and the Campus Libraries Operational Plan will be conducted to identify the strategies being proposed to address these crucial issues. To further substantiate the need for the development of these strategies, data and reports collected from three User Satisfaction surveys will be analysed. Besides, a structured framework for the STA Main Library will be developed using the tools and techniques identified in the literature while the structure of the framework will be based on the principles of Value Management.

2. Background

2.1 Challenges to the UWI STA Main Library

In light of the academic libraries changing perceptively, the STA Main Library have been faced with a myriad of challenges. These challenges include: an expanding user populations and limited physical space; budget cuts and shrinking resources due to increased competition for financial resources; and retraining staff and reorganising workflows to keep pace with the changing internal and external environment.

One of the more significant challenges has been the growth in the student population. One reason for this increase may be attributed to Government's policies. The Trinidad and Tobago Government agreed to provide free tertiary education for Undergraduate degrees and a 50% subsidy for Postgraduate degrees. Over the years this has contributed significantly to the increasing student population. In addition to this,

the UWI Administration policy has structured its' academic system in an effort to promote research and publication. This has further increased the throughput of postgraduate and academic and professional staff conducting research. Both of these factors have placed considerable additional demands on these libraries' limited facilities and resources. Table 1 shows the enrolment statistics for the UWI, STA Campus from 2002/2003 to 2009/2010.

Despite this continual growth in the student population every year and the increasing demands for information services, the resources made available to the library remain relatively inadequate to meet the growing demands. The impact of this increased demand for the library's facilities has put considerable strain on both the limitations of the physical facilities and space within the library as well as on the limited professional staff. Currently the library has a seating capacity to accommodate only 693 users and employ only 28 professional staff to facilitate an ever-increasing user demand.

Table 1. Enrolment Statistics for 2002/3 to 2009/10

Year	Undergraduate	Certificate & Dip.	Postgraduates	Total
2002/2003	7,362	743	2,463	10,568
2003/2004	9,085	731	2,762	12,578
2004/2005	9,400	613	2,591	12,604
2005/2006	10,652	898	2,927	14,477
2006/2007	11,821	855	3,042	15,718
2007/2008	11,298	1,056	3,470	15,824
2008/2009	11,621	998	3,475	16,094
2009/2010	11,137	590	3,735	15,462

Source: Statistics taken from the University Website

One reason for the limited physical and human resources is due the library's restricted budget. As the UWI, STA Campus is financed by the Trinidad and Tobago Government it is subject to the changing financial climate being experienced by the country, the Government's changing policies and priorities and the increased competition for Government funding from other tertiary institutions. To address this shortcoming in financing, the UWI has sought to reduce its spending in all areas including the acquisition of staff and the provision of appropriate infrastructural facilities. The STA Main Library has not been exempted and this places additional strain on the library and its ability to function effectively.

The need to compete for funding and the demands by the UWI stakeholders for accountability has also spawned the need for transparency as the University's now needs to strive for continuous improvement through assuring quality within the UWI. In support of this, all areas within the University, including the Main Library, must now strive for continuous improvement through accreditation, an essential component of performance assessment and quality assurance.

Another major challenge facing the Main Library is its ability to manage these changes. Changes such as the increased competition, the products and services being provided by libraries which consists of a mix of traditional materials (printed books, journals, audio-visual) and emerging formats (e-books, e-journals, e-newspapers, e-theses, Internet resources, digital objects, multimedia), the impact of technology and new methods for information provision have placed additional demands on the library's limited resources. The library has had to respond by ensuring that its limited staff are kept abreast of changes and receive proper training and in some cases retraining. Workflows have also had to be reorganised in an attempt to compensate for these changing perspectives.

2.2 UWI 2007/2012 Strategic Plan and STA Campus Libraries Operational Plan

In an attempt at addressing some of these changes and challenges, the UWI and the Main Library have proposed the adoption of a number of strategies. By reviewing both the UWI 2007/2012 Strategic Plan and the Campus Libraries (which the Main Library manages) Operational Plan for the same period, a more concise and realistic view of the priorities and operational focus for the Main Library towards addressing these concerns can be ascertained.

The strategies adopted in the Campus Libraries Operational Plan are in keeping with the University's goals outlined in the 2007-2012 Strategic Plan. Some of the major operational strategies include: the adopting of a quality assurance system based on internationally accepted standards and benchmarks for best practice; defining and prioritising target audiences and conducting user surveys to determine the perception of the clientele in relation to the Libraries' responsiveness to teaching, research and learning needs and to use the feedback generated to initiate continuous quality improvements; improving

continuously the Libraries' web presence in relation to changing user needs and environment for optimum effectiveness and usability; continuing to upgrade and enhance the current infrastructure for ICT within the Campus Libraries with particular emphasis on the provision of access to information resources and research; and transforming the Campus Libraries through enhancement of performance standards driven by best practice.

In light of these proposed strategies, a quality management (QM) system, in accordance with international standards and benchmarks, needs to be developed for the Main Library in an effort to enhance the UWI standing as an internationally recognised centre of excellence for Caribbean Studies and to institute a quality assurance mechanism to set people-centred standards for the functioning of the university and the service output.

2.3 User Satisfaction Surveys

To determine if QM is indeed an area of concern for the Main Library, data was collected from the Library User Satisfaction Survey and useful information from the reports of two other surveys: the First year student experience survey and the Survey of final year students' experience and analysed. These surveys were administered to users across three of UWI Campuses but for the purposes of this study, the data for the STA Main Library was extracted and the findings more extensively analysed.

The purpose of the Library User Satisfaction Survey was to determine their level of satisfaction with the existing product, services and facilities offered as well as to ascertain their current needs and demands. The questionnaire developed was distributed to the library users population or target group which included the students – undergraduate, postgraduate, part-time, full-time, evening, diploma and certificate and staff – Academic staff (e.g., lecturers and researchers), Professional staff (e.g., Senior Management) and Administrative, Technical and Support of the University. The survey was conducted to determine: a demographic profile of the library users; accessibility of library resources and services; factors currently limiting the use of the libraries; and the perception of services provided by the library. The questionnaire was divided into the following areas: Library Resources/Services/Facilities; Library Training/Workshop Opportunities; Factors limiting the use of the Library; Security; and Perception of overall Library Service.

A total of 784 students responding to the survey and analysis indicated that the primary users of the library are mostly females between the ages of 17-22. The analysis of the questionnaire indicated that in all the areas quality issues rated poorly. Regarding the quality of resources, facilities and equipment, the percentages indicated that quality was an area that needed to be improved while the areas identified as factors limiting use of the library may be due to improper quality management and in the area of overall perception of services, the percentages indicated that there was considerable room for improvements to service quality.

The Survey of First year Student Experience Survey was distributed to first-year students. The objective of this survey included determining library use, library satisfaction and library resource support. The Survey of Final Year Student Experience at the UWI was distributed to final year students. The objectives of this survey included a determination of customer service and the availability of resources. Both these surveys were also conducted through the distribution of questionnaires. Evaluation of the reports from both surveys proved to further support the findings of the Library User Satisfaction survey regarding the need for improvement and management in the area of quality.

3. Literature Review

3.1 Quality Management in Academic Libraries

The implementation of QM by the Main Library will require an understanding of the quality concepts, tools and techniques that are applicable to service-oriented organisations and more specifically the library industry. Current approaches to quality stress that quality is 'conformance to requirements and customer satisfaction' or 'fitness for use' and 'meeting requirements' (Chin et al., 2001). In the context of service, these definitions share a common focus that quality is about putting the right service in the hands of the customer, at the right time and price. Good quality is not only concerned with conformance to specification but also drives towards customer satisfaction. Understanding customer requirements becomes the first priority of designing and managing quality. Recent years have witnessed the increasing acceptance of QM into services-related and non-profit organisations such as education.

A QM system "*is a set of processes and resources that function harmoniously in order to achieve objectives related to satisfying the customer*" (Karapetrovic and Willborn 1998). While a quality assurance system in academia "*is to provide confidence to customers and stakeholders that the requirements for quality education and research are continuously met.*"

Kaur (2006) suggests that QM is driven by two broad ideas; first is customer satisfaction and second is efficiency. If the organisation can figure out what the customer wants and need, it can then deliver it in the same way each time there is a demand (i.e. fitness to purpose). The other step would be to figure out the most efficient way to produce a service and reduce time and resource wastage. The QM system is based on continuously improving the process to meeting and exceeding customer requirements on a continuous basis.

The increasing expectations of today's users for better services and products have challenged libraries to improve their quality of services. This has motivated libraries to adopt QM practices in recent years. By embracing the concepts, processes, tools and techniques of QM, libraries can effectively facilitate both quality improvements and continuous improvement into their products and services. By adopting QM, the library's image and service quality can be improved and librarians can increase productivity while focusing on the customers' needs. In developing an appropriate QM system a library can establish policies and achieve its quality objectives.

According to Hsieh et al. (2000), effectively implementing QM in libraries and information services will however require an understanding of the following: the unique characteristics of library operations, the nature of interaction between librarians and customers, and the making of recommendations on the application of appropriate QM concepts and techniques. The tool, techniques and procedures for managing quality in the library and information services industry can include those used in the profit-oriented industries such as TQM, Standards and Benchmarks. They can also include those tools that have been refined to address the particular needs of the library.

3.2 *Benchmarking of Library Services*

According to Mclean et al. (2008), the efforts of the library geared at achieving quality services have not been confined to mere adherence to standards and guidelines of organisations and professional associations, libraries have a tradition of sharing information about inputs, outputs, processes, practices and policies and that cooperation rather than competition has been a strong ethos. Information on best practices has been achieved formally through workshops and conferences and informally through visits to other institutions, study tours and talks with colleagues.

Benchmarking is an approach to ensuring improvements in quality. It offers a way of identifying better and smarter ways of doing things and understanding why they are better and smarter (Mclean et al, 2008). It is concerned with developing systematic and structured approaches to finding and implementing best practice (Brophy, 2004). It may be a continuous process in which the organisation continually seeks to challenge its practices as the purpose of the benchmarking process is not just to understand the processes carried out by other organisations but to enable a considered self-assessment to be made of an organisation (Hofman and Worsfold 1996).

According to Brophy (2004) however, while benchmarking may be more or less formal, it is often associated with iterative processes that draw in a range of both quantitative and qualitative methodologies. Rather than focusing on a particular technique or on the whole organisation it seeks to use appropriate methodologies to explore particular issues in depth before moving on to the next issue. Library managers must therefore choose from a range of available techniques to select those which best suit a particular purpose to undertake that analysis, determine and implement action, review, etc. before moving on. This may prove to be tedious and may require an appropriate level of knowledge and expertise.

3.3 *Integrating of Value Management with Quality in Libraries*

Considering the fact that libraries are non-profit organisations relying on funding, this combined with the increasing cost to deliver services, libraries cannot afford to have any inefficiency in their functioning. Any weaknesses in staffing, procedures, IT systems and infrastructure can have a significant adverse effect on their ability to provide quality service (Orr 2009). The applications of Value Management practices by the STA Main Library will only seek to improve the overall quality of service as well as the policies, procedures and business practices. The Job Plan is the key to the Value Management (VM) and consists of sequential phases to be followed within a structured process (SAVE International, 2007). The first step in the application of Value Management for libraries is the identification of what represents value for the library.

According to Thakor (2000), every organisation exists to create value, whether it a corporation, university or library and they create value if the products and services that they produce have a greater value to the customers than the organisational costs of producing these products and services. It is therefore beneficial for an organisation to identify what represents value for them if they are to maintain efficiency and remain competitive. For a non-profit oriented organisation such as an educational institution value may be linked to some measure of the quality of students' educational experience.

4. Building the Quality Management Framework

Managing the quality of services and products provided to the customers could improve and/or increase value for the Campus Libraries and for the University. According to Peltier-Davis and Renwick (2007), this could be achieved by minimising the need for new resources through: 1) Achieving productivity enhancement and efficiency gains; 2) Optimisation of the use of existing resources; and 3) The active management of costs. Figure 1 shows the various stages of a proposed Quality Management Framework.

4.1 Stage 1: Pre-Study

In the Pre-study stage, it is crucial to have Senior Management commitment and support for the Value Study. Once this is obtained, a Value Team comprising members who are cross-functional, multi-disciplinary and skilled and/or knowledgeable in quality needs to be established. The first real task for the Team should be to develop the Value Study Plan. This plan should include: the purpose for the Value Study; the scope and objectives for the Value Study; the Value Study schedule; identification of any assumptions or constraints and the proposed requirements for a successful Value Study (such as training, resources, etc.). Once this is completed the Value Team can then give a justification for the Value Study in terms of cost and value.

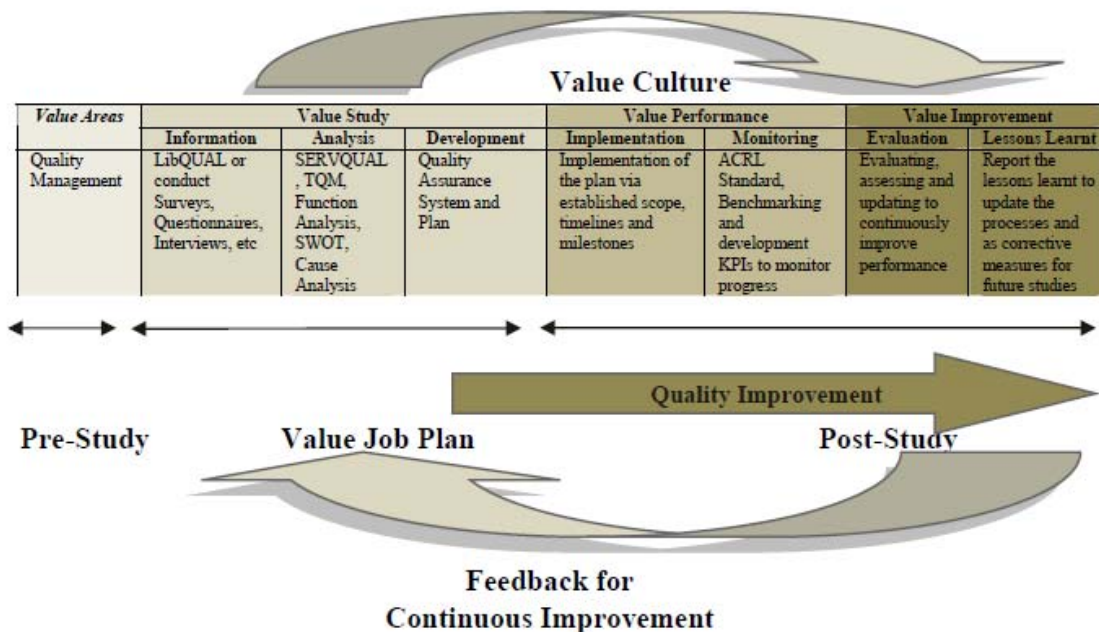


Figure 1. Stages of a Proposed Quality Management Framework

4.2 Stage 2: Development of the Value Job Plan

4.2.1 Information

From the documents reviewed in this study, it was determined that the Main Library currently have no mechanisms in place to provide for the overall management of the quality of the products and services offered. From the literature reviewed it was determined that for a proper evaluation of the service quality to be conducted, the library needs to determine, not only the customer wants and needs but also their level of satisfaction with the quality products, services and facilities already offered. This is necessary so that the appropriate products, services and facilities can be delivered in the same way each time that it is demanded. The Library can achieve this objective by the frequent collection of empirical data using surveys, questionnaires, interviews, etc. The analysis of the survey findings showed that improvements to the quality of many of the services offered needed to be addressed. The level of satisfaction with these quality processes spanned the full range of library functions.

The library documents reviewed and the findings from the surveys conducted, provided further support for the need to improve service quality in the STA Main Library and provided a clear understanding of the current situation, the problem areas that need to be addressed or any opportunities that can be exploited. Based on this information, the Value Team can update and refine the Value Study Plan in the areas of scope, objectives, schedule, requirements and constraints.

4.2.2 Analysis

There are several analytical tools identified for improving/increasing quality for the Main Library. These include: SWOT, Cause Analysis, Function Analysis, Gap Analysis, TQM (for products), Standards (for services) such as ISO 9000 and ACRL and Benchmarking (services and facilities).

4.2.3 Development

Besides, a Value Study Report needs to be developed, addressing: 1) The risks or potential negative factors; 2) Resources requirements; 3) Value to be derived and any other information which may be necessary to convey the intent of the alternative(s); and 4) An action plan for the alternative(s) that include the steps for implementation, schedule and responsibilities. Once the Value Study Report has been prepared it is submitted to Senior Management for approval.

4.3 Stage 3: Post VM Study

4.3.1 Value Performance

It is at this phase that improvements to quality are developed because it is at this phase that policies and procedures are developed for implementing the appropriate quality mechanisms towards improving or increasing quality for the Main Library while performance indicators and targets are established to monitor the successful implementation of the alternative(s).

At this stage, the Value Team should: 1) Establish policies and/or procedures to aid in implementation; 2) Revise and update the action plan(s); 3) Set a timeframe for reviewing and implementation; track quality achievements; 4) Validate the benefits derived from the implemented quality change, and 5) Ensure that the new practice becomes embedded with the implementation plan. The implementation plan should ensure that the necessary resources are available or put in place, and proper training is provided to staff at various levels in the principles of VM and quality. The plan also includes: 1) The roles and responsibilities to staff; 2) The update and revision of policies/procedures/action plans; and 3) The report of lessons learnt for future reference.

Key performance indicator and quantified targets should be set for all the critical issues identified and expressed in parameters which are measurable. The outcomes of each action are measured and compared against the targets. Besides, a procedural manual is developed and a report of the study results is prepared.

4.3.2 Value Improvement

To ensure that the agreed quality alternative(s) are adequately and successfully implemented, the outlined policies and/or procedures and action plans are evaluated and any lessons learnt during implementation are reported for future reference.

The outcomes of each action are measured and compared against the targets as a means of objective evaluation and the development of a procedural manual as a mechanism for feedback of results and continuous improvement. Evaluation of the implemented policies and/or procedures and action plan(s) can also be assessed through feedback from staff and students.

The Value Team at this point: prepares a report of the results of the study, lessons learnt or other items to be recorded and/or tracked through implementation and evaluation; identifying where opportunities were missed; identifying roadblocks to innovation and understanding why they existed; debriefing and recording lessons learnt; integrating the value study results into the libraries' lessons learnt or programme reporting and reflecting on the value study and considering how the experience can be applied to other projects.

4.4 Stage 4: Feedback for Continuous Improvement

The information gathered from the Value Improvement Phase (i.e., Evaluation and Lessons Learnt) and a procedural manual of results is fed back into the value study and pre-study. This information would be used to facilitate continuous improvement in the value areas and on the framework.

4.5 Stage 5: Nurturing Value Culture

Nurturing value culture is developed through the implementation of a QM framework which encompasses

VM principles and practices. The implementation of the framework would require a commitment to the principles of VM from both the Value Team and Senior Management. Besides, the library staff members of various levels should also be involved in the VM process. Individuals would be required to: 1) Accept that there is always scope for improvement in every aspect of the Libraries; 2) Provide active support to the introduction of VM in the Libraries; 3) Accept the constraints due to the approach and apply the VM principles rigorously; and 4) Actively apply the concepts and approach to their specific responsibilities and tasks.

This culture would facilitate a common way of thinking, enable innovative decisions based on value and embrace an awareness of what value represents for the STA Main Library and the UWI.

5. Managerial Views of the Quality Management Framework

In an attempt to evaluate the effectiveness of the QM framework, a questionnaire was developed and administered to the Senior Management Team (comprising six members from the Main Library) of the Main Library. This questionnaire comprised nine questions which can be sub-divided into two parts – the respondents' views on quality at the Library and their views about the QM framework. In the first part, the respondents were asked to: rate the importance of quality to the Library; rate the ability of the Library at identifying quality requirements, the strategies used and the effectiveness of the strategies; indicate any plans to manage quality at the Library and its effectiveness; rating the overall management of quality; and the importance of developing such a plan. In the second part of this section, the respondents were asked to rate the QM framework at identifying quality for the Library, to rate the effectiveness of the analysis at addressing quality for the Library, to rate QM framework and to rate how effectively it could be implemented at the Library.

All the respondents believed quality to be important for the library but indicated that the library failed to identify quality requirements because the library lacks competency in this area as such they fail to adopt appropriate strategies to identify quality requirements. They all agreed that no plan was in place to manage quality and that the library has been generally ineffective at managing quality. They all agreed that the development of a QM plan was important for the Main Library, that the QM framework effectively identified the quality issues of the library and that the analysis in the framework was adequate at addressing the quality requirements of the library. They gave the framework an overall high rating. However, when asked to rate the effective implementation of the framework at the library an average rating was given with reasons being that significant training must first be provided.

Based on the lack of knowledge and competency in QM extensive training should be carried out to build knowledge and skills in this area. This will not only promote both a value culture and a customer-oriented approach but it will assist with the implementation of the framework. It is only when management understands the importance of this value area will they appreciate its worth to the Campus Libraries.

7. Conclusion

Through the review of the literature and finding from the examination and analysis of the collected data, a structured QM framework was developed that supports and enables the consistent improvement of value for the STA Main Library. The evaluation of the QM framework by the SMT, recommended the implementation of the framework for the STA Main Library. The QM framework incorporates VM practices and procedures which provides the guidelines for the implementation of VM tools and techniques. The adoption of the developed QM framework could therefore assist the STA Main Library to achieve the following value performance goals: increasing value by identifying areas for internationally acceptable quality standard; creating value by ascertaining users' wants and needs regarding products and services; and sustaining value by responding to the environmental changes towards value excellence.

Through the adoption the VM methodology which utilises tools such as surveys and questionnaires, a customer-oriented focus can be promoted within the Main Library. The benefits to the Library of such a focus will include an acceptable return on investment (social) to stakeholders and improved competitive position. Other benefits include validation and continued support for funding, providing management with practical guidance in making decisions, creating value for the library, allow the library to adopt value creation as a core management precept and to actively link high-level strategy with day-to-day behaviour at all levels of the business. Once the framework has been implemented, policies and procedures should be developed for further application in the other STA Campus Libraries. The lessons learnt could be used to improve the process for future application and implemented at the other Campus Libraries at Mona, Cave Hill and the Open Campus as well as in national libraries within the region.

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