

The Relevance and Utility of World Class Operations to the University of Guyana

Jacqueline Murray

Department of Business and Management Studies, University of Guyana, Berbice Campus
Tain, Corentyne, Guyana

Tel: 592-337-2309; 592-333-6637 E-mail: jackiemurray_16@yahoo.com

Abstract

This paper explores the relevance and utility of World Class Operations to the University of Guyana in an era where time and distance no longer pose barriers to competition locally and internationally. It outlines the options available under a World Class Operations framework which can enable the university to progress beyond its present quality assurance initiative. The utilisation and implementation of world class operations strategies can allow the institution to not only achieve its present goal of producing programmes/graduate students fit for purpose intended but also to gain a competitive edge over competitors and thus ensure the university's continued survival.

Keywords: Quality, Quality assurance, World Class Operations, Benchmarking, Customers

1. Introduction

Globalisation and advances in technology has transformed the environment of organisations of developing and industrialised countries into one of hyper competition and uncertainty (Lahiri, Perez-Nordtvedt, & Renn, 2008). Information technology has broken down the barriers of time and location, and as a result small agile firms can now effectively compete against industry giants (Sahay, Saxena, & Kumar, 2001). This new competitive arena has led to the decline in market share and erosion of profit margins of organisations that were once thought of as market leaders in their particular industry and has seen the increase in market share and profit margins of smaller firms.

Today, business organisations have found that in order to sustain competitive advantage they need to learn from the best (Whiteley, 1991) and understand customers who now demand high quality innovative goods and or services (Eugenio, 2010; Treacy & Wiersema, 1995) at a low cost (Treacy & Wiersema, 1995). Porter (1980) proposes a trade off strategy for businesses to compete on while Hamel and Prahalad (2005) oppose the trade off view. They believe that organisations should excel on all competitive dimensions. Hogetts, Luthans, and Lee (1994) believe that in this new environment that business organisations have to make paradigm shifts from total quality to learning to stay ahead of change, to world class continuous improvement and innovation.

Clearly, in this information age, the University of Guyana has to find other ways of competing other than cost – quality since it cannot hope to remain unscathed by this ever changing competitive environment. The adoption of world class practices has been held to stimulate solutions to quality problems (Schonberger, 1986 as cited in Flynn, Schroeder, & Flynn, 1999) and can enable the university not only to achieve its present quality assurance initiative aimed at improving the quality of its product (programmes/graduate students fit for intended use) but to move beyond this to that of a World Class Operations.

1.2 Purpose

This paper intends to explore the relevance and utility of a World Class Operations to the University of Guyana as it seeks to secure the accreditation of its programmes through improving the quality of its product – programmes/graduate students fit the purpose intended. It is not proposed to be prescriptive in any way.

1.3 Outline

The paper is structured as follows: The subsequent section will outline the concept of World Class Operations. Section 3 explores how an organisation/institution can become world class. Section 4 concludes with a discussion of options available to the University of Guyana if the institution is to survive in an era where time and distance no longer pose barriers to competition.

2. World Class Operations

2.1 Introduction

Globalisation and advances in information technology have broken down the barriers of distance and time and hence have opened the University of Guyana to competition locally and internationally. The University of Guyana has in the past enjoyed monopoly advantage since it is the only university of its kind in Guyana. Additionally, the costs of its programmes, which are heavily subsidised by the Government of Guyana, have been deemed to cost much less than they would regionally and internationally. In fact a student pursuing a Bachelor degree programme, with the exception of the medical programme, currently pays G\$127,000 annually which is approximately US\$635 per annum which gave the university a cost advantage as well. However, the university's monopoly advantage is slowly being eroded by local and international institutions which now offer on-line/distance learning degrees programmes and its cost advantage can no longer be relied upon since customers have become very knowledgeable as regards quality and now demand that products measure up to their expectations.

The identification by the University of Guyana of the establishment and mobilisation of a more consistent quality assurance system as one of the key strategies integral to bringing the institution into basic comparability with institutions of higher education functioning in comparable countries and to permit it to seize its potential and develop in a manner commensurate with the needs of Guyana (Strategic Plan 2009-2012, p. 11) undoubtedly seeks to address the quality of its programmes. However, pursuing a World Class Operations Status has the capacity not only to enable the University of Guyana to compete effectively in this environment that is relentlessly changing but also facilitates the implementation of the university's present quality assurance initiative owing to its focus on quality which is deemed fundamental to business success (Adam et al., 1997). The following sections will detail the concepts relating to that of World Class Operations.

2.2 World Class Operations

A world class operation is an organisation which has acquired the position of Best of Bests in the world in its given business and continuously strives for beating its own standards so as to retain that position (Khan, 2008). They are the best in the field at each of the competitive priorities - quality, price, delivery speed, delivery reliability, flexibility and innovation (S M Thacker & Associates, 2000). However, because organisations' resources are unlikely to allow improvements in all areas, organisations should concentrate on maintaining performance in 'qualifying' factors and improving 'competitive edge' factors. Indeed, Altbach (2004) and Salmi (2009) draw attention to the fact that even the best universities, for example Harvard, are not the best in everything and Altbach (2004) advocates building world class departments, institutes, or schools instead, especially in areas relevant to national, regional or societal development.

Porter (1980) posits the choice between three generic strategies (cost, differentiation and focus) and Treacy and Wiersema (1995) believe that an organisation can be the best in the market place by excelling on one of the competitive priorities while maintaining threshold standards on the other dimensions. Hamel and Prahalad (1989) however cautions that trimming ambitions to match resources only leads an organisation to pursue sustainable advantages and trap them in a continuous cycle of 'catch up' with competitors. Additionally, the application of concepts such as "strategic fit" (between resources and opportunities), "generic strategies" (low cost versus differentiation versus focus), and the "strategy hierarchy" (goals, strategies and tactics) often aid the process of competitive decline.

Hill's (1998) study (as cited in Flynn et al., 1999, p. 26) also opposed the trade off view by pointing out that firms in mature industries do not usually have a unique low cost position but can use differentiation as a means of achieving a low cost position owing to the effects of economies of scale arising from the increase in demand for a more valuable product. Schonberger's (1986) study also (as cited by Flynn et al., 1999, pp. 27-28) held that the theory of tradeoffs has been outdated by world class manufacturing, in which the adoption of world class practices stimulates solutions to quality problems reflected in a reduction in costs and lead time and the absence of tradeoffs enables the manufacturer not to modify its managerial focus by analysing and choosing, but rather to achieve high level of performance across all value dimensions. Womack et al. (1990) is cited by Flynn et al. (1999) as supporting this approach in 'The Machine That Changed the World' and used the term 'lean producer' to describe an organisation which pursued multiple competitive priorities simultaneously.

2.3 University of Guyana in Context

Clearly, a World Class Operations Strategy provides a variety of options to enable an organisation to become a market leader. The University of Guyana has the option to compete on the basis of quality, price, delivery speed,

delivery reliability, flexibility and innovation or they can compete on one of these dimensions while maintaining threshold standards on the others. Evidently the chosen strategy will depend on the availability of the necessary resources (financial, technical and human, for example) and should consider national, regional and societal needs.

The adoption of world class practices can engender solutions to quality problems and improve the university's 'bottom line' through resultant cost reductions since it can enable the university not only to improve the quality of its product but processes as well. Consequently, the University of Guyana's quality assurance initiative is only a subset of what must be done for the institution to achieve world class leadership. However, care would have to be taken to ensure that this initiative while leading to sustainable advantages does not trap the University in a continuous game of 'catch up' since this is a distinct possibility according to (Hamel & Prahalad, 1989). How then should the University of Guyana become the 'Best of the Best'? The following section will detail what the university can do in order to progress beyond its current quality assurance initiative.

3. Becoming a World Class Operation

3.1 Introduction

If the University of Guyana is to ever achieve world class operations status it has to become customer focussed; benchmark from the best of the best in the field of higher education; employ specific techniques associated with successful implementation of its chosen strategy; involve every employee at the university; and overcome resistance to change.

3.2 Customer Focussed

To become a world class operation business organisations must become customer focussed (Hodgetts et al., 1994; Treacy & Wiersema, 1995; Whiteley, 1991) and be able to produce customised products rapidly to respond to customer needs (Sahay et al., 2001). According to Hodgetts et al. (1994) any organisation can achieve world class status but must be customer focussed which provides the foundation for the organisation's vision, strategy, structure and job design and enables the organisation to meet and surpass customers (internal and external) needs and create new demands for their goods and services. Dudek-Burlikowska (2009) believes that understanding customers' needs aids an institution in delivering the optimum level of quality education to them.

The questions which arise are: Who are the university's customers? Is it its students who have the desire to pursue particular programmes of studies? Employers who require specialised training for their employees/prospective employees? The government who require graduates trained in skills that will engender national development? Answers to these questions will enable the university to redesign its vision, strategy, structure and job design and hence meet the varied needs of these customers as well as increase the demand for its product offering. This will ultimately lead to improvement in the university's bottom line. However, a customer focus is not the sole criteria for market leadership. If the university is to progress beyond its present status it is going to have to learn from the 'best of the best' in higher education through benchmarking not only institutions of higher education functioning in comparable countries but further afield as well since globalisation and advances in information technology have made possible competition from them.

3.3 Benchmarking

This involves using the standards developed by these institutions and surpassing them (Whiteley, 1991). According to Hamel and Prahalad (2005) catching up should never be the goal of an organisation since successful competitors rarely stand still. They posit the use of 'strategic intent' where companies begin with a goal that exceed their present grasp and resources while rallying the efforts of the organisation to close the gap by setting challenges that focus employees efforts in the near to medium term. Additionally, the resourcefulness rather than the resources of competitors need to be considered when devising strategy if organisations are to more than sustain competitive advantage. However, for 'strategic intent' to be operationalised the core competencies (combination of resources and capabilities) of the organisation need to be taken into consideration. Core competencies are a source of competitive advantage and allow the organisation to stay in business. They are embedded in organisational processes, functions, routine or its people. They are rare, difficult to imitate and substitute (Cardy & Selvarajan, 2006).

Clearly, the University of Guyana's aim should not be to just reach the standards of the institution they are benchmarking but to go beyond this since the university may very well find itself in an endless game of 'catch up' as pointed out by Hamel and Prahalad (2005). Evidently, resource restrictions, national, regional and societal needs will impact the choice of institutions and activities that are benchmarked. Furthermore, the attainment of world class status cannot be achieved by a single person or group of persons. It requires the

combined effort of all stakeholders. Altbach (2004) and Salmi (2009) emphasise the necessity of obtaining the commitment of the government and business community since they can be a source of necessary funding for an organisation transformation efforts while Cardy and Selvarajan (2006) stress the importance of securing the commitment of every employee since these persons may possess the competencies needed to enable the institution to achieve a competitive advantage and stay in business. Additionally, Donoghue and Kennerley of the University of Leeds, as quoted in Salmi (2009) feel that a precondition of staff involvement rests on the establishment of a strategy that is relevant and credible. Ali and Shastri (2010) believe that universities can use leaner budgets and the higher efficiency and productivity associated with certain quality programmes to realize the participation of employees.

The setting of challenges that focus employees effort in the near to medium term is also a necessary ingredient for the achievement of a world class status. Admittedly, the four key strategic tasks (curriculum, governance & administration, finance and plant and equipment) identified in the university's Strategic Plan 2009 to 2012 as necessary elements to bring the university into some basic comparability with other institutions of higher learning in comparable countries, is a necessary step toward market leadership but the university is going to have to go beyond just 'basic' comparability if it is to survive in this present environment where time and distance and cost no longer provide barriers to competition locally and internationally.

3.4 World Class Operations Strategies

Organisations pursuing leadership status focus on value added management (as viewed by the customer (internal and external), concentrates on the systematic elimination of waste in all the processes in the organisation and continuous improvement through the use of a combination of approaches such as lean manufacturing (JIT – Just In Time); total quality management (TQM) and total productive maintenance (TPM) and requires the total participation of everyone in the organisation (Scodanibbio, 2008).

Surely an organisation's ability to utilise all of the strategies outlined above may be curtailed by the availability of the necessary resources. Clearly, as pointed out by Treacy and Wiersema (1995) an institution can concentrate on a particular strategic area and continuously improve it while maintaining threshold standards in the others. Salmi (2009) identifies several institutions, among them the Pontifical Catholic University of Peru (in Lima), that have successfully utilised creative ways to transform their institutions. The Pontifical Catholic University of Peru owing to a drop in student demand (imminent for the University of Guyana owing to globalisation) successfully used continuous monitoring and improvement, coupled with course reform, among other measures, to increase student demand and raise funds. Further, a study by Eugenia (2010) among organisations in Nigeria, found that of the 35 which implemented TQM, 32 (91.4%) of them were able to successfully employ this World Class Operations strategy. This lends credence to the ability of TQM to engender organisation transformation.

Undoubtedly, the university's present focus on improving the quality of its programme through reforming its curriculum fits into the concept of TQM and hence the lack of the necessary resources to utilise all the strategies of a World Class Operations should not restrain it from aiming for world class status. However securing the commitment of the government and business community is integral to its quality assurance initiative since this will alleviate its financial difficulties. The university will however have to overcome the barriers that will hinder the successful implementation of its chosen strategy.

3.5 Barriers to the Successful Implementation of World Class Operations Strategies`

The successful implementation of any world class operation strategy is usually hindered by barriers. Crawford et al. 1988; Becker 1993; Patterson et al. 1995; Westphal et al 1997 as cited by Salaheldin and Eid (2007) identified these barriers as cultural resistance to change, partial implementation, lack of organisational communication, lack of training and education, lack of well defined routine for attaining the objectives of implementation.

Shrivanci's (2004) study (as cited in Ali & Shastri, 2010, p.14) identifies leadership, customer identification and cultural and organisational transformation as challenges to be overcome in implementing TQM in higher education. He believes that the lack of ultimate authority by chancellors and heads of higher educational institutions regarding hiring and firing personnel and allocating resources usually makes it difficult to deploy values and goals; and deep rooted traditions, a rigid departmental model, interdepartmental competition for resources, lack of market focus and ambiguity in customer identification hinder TQM implementation.

Undoubtedly, the university is going to have to overcome these barriers and leadership will have to employ creative measures, while working within the ambit of their authority, if the university's quality assurance initiative is to progress beyond its present status. The chief barrier which they may have to contend with may be

persons resistance to change, and since the involvement of everyone in the organisation is a vital component to the successful implementation of any change effort, the university's quality assurance initiative may very well not move beyond workshops and seminars if strategies are not developed and deployed to move it beyond dissemination status - the place where everyone knows about its quality assurance plans but are not actively engaged in its execution. Integral to securing the involvement of employees, in an organisation's quality improvement initiatives, is the way in which they are treated (Eugenia, 2010). Nonetheless, Salmi (2009, p.58) warns that "developing a culture of excellence does not happen from one day to the next and that proper sequencing of interventions and careful balance among the various quantitative objectives are required to avoid experiencing the kinds of growing pains that some Chinese universities have encountered".

3.6 University of Guyana in Context

Evidently, achieving world class status is a necessary pre-requisite for the University of Guyana's survival in today's competitive environment. However, for the university to reap the associated benefits (improved bottom line through increased demand for its product offering – programmes/graduate students fit for intended purpose) of a world class operation it is going to have to become stakeholder (internal and external customer) focussed and provide the programmes (products) that customers need. These stakeholders may be students potential or actual, the government, the business community and the employees of the university. The business community may have a need for a specialised product (course and or programme) and the university is going to have to be able to customise it for them. Additionally the university is going to have to stimulate demand for the programmes that it presently offers through various advertising media.

Notwithstanding the above, organisations pursuing market leadership are known to concentrate on value adding management which entails the systematic elimination of waste in all the processes in the organisation and continuous improvement through the use of a combination of approaches such as lean manufacturing (JIT); total quality management and total productive maintenance and requires the total participation of everyone in the organisation (Scodanibbio, 2008). The University of Guyana can employ any, all or a combination of these techniques in pursuit of a world class status taking into consideration national, regional and societal needs in addition to resources constraint. Its present quality assurance initiative is a necessary step in securing market leadership. However, implementing this initiative will require the total involvement of all stakeholders. The government and business community would need to be involved since they represent a much needed source of funding. Everyone at the university will need to be involved (from the ancillary staff right up to top management) since they are all part of the value added process in producing graduate students fit for the purpose for which their services may be secured. Consequently steps would have to be taken to overcome the barriers which prevent the successful implementation of its quality assurance initiative and to enable the institution to progress to that of a market leader in its particular sphere of activity. Becoming a market leader is not outside the reach of the University, for according to Hodgetts et al. (1994) any organisation can achieve world class status.

4. Conclusion

Becoming a world class operation is an absolute necessity if the University of Guyana is to survive in this present age of hyper competition where time and distance no longer pose barrier to competition from other higher institutions of learning locally and internationally. The flexibility of the world class operations strategy will enable the university to choose which competitive dimension it wishes to compete on while striving for continuous improvement in the other dimensions. Given that the university resources are limited this may be the avenue for it to take. In fact, the present quality assurance initiative of the university is a step in the right direction.

Clearly, the university can no longer rely on its cost advantage alone since customers are now very conscious of quality as the main ingredient of any product. However, there would be need to ensure that the institution is not caught up in an endless game of 'catch up' and that strategies are developed and instituted to secure the continuous involvement of everyone and overcome the barriers that may hinder the successful implementation of its quality assurance initiative. This begs the questions: Can the university sustain such an initiative? Does it possess the collective will to progress beyond its present status to that of a World Class Operations?

References

- Adam, E., Corbett, L., Flores, B., Harrison, N., Lee, T., Boo-Ho, R., Ribera, J., Samson, D., & Westbrook, R. (1997). An international study of quality improvement approach and firm performance [Electronic version]. *International Journal of Operations and Production Management*, 17, (9/10), 842-873.

- Ali, M. & Shastri, R.K. (2010). Implementation of total quality management in higher education [Electronic version]. *Asian Journal of Business Management*, 2(1), 9-16.
- Altbach, P. G. (2004). The cost and benefits of world-class universities [Electronic version]. *Academe*, 90(1), 20-23.
- Cardy, R. L., & Selvarajan, T. T. (2006). Competencies: Alternative frameworks for competitive advantage. *Business Horizons*, 49, 235-245.
- Dudek-Burlikowska, M. (2009). Functioning of the university focussed on the quality and continuous improvement [Electronic version]. *Journal of Achievements in Materials and Manufacturing Engineering*, 37 (2), 767-774.
- Eugenia, N. (2010). Quality improvement in a global competitive marketplace-success story from Nigeria [Electronic version]. *International Journal of Business and Management*, 5(1) 211-218.
- Flynn, B. B., Schroeder, R. G., & Flynn, E. J. (1999). World class manufacturing: an investigation of Hayes and Wheelwright's foundation [Electronic version]. *Journal of Operations Management*, 17 (3), 249-269.
- Hamel, G., & Prahalad, C. (2005). *Strategic Intent*. [Online] Available: <http://hbr.org/2005/07/strategic-intent/ar/1> (September 15, 2008)
- Hogetts, R. M., Luthans, F., & Lee, S. M. (1994). New paradigm organisations: From total quality to learning to world class [Electronic version]. *Journal of Organisational Dynamics*, 22 (3), 4-20.
- Kandampully, J. (2002). Innovation as the core competency of a service organisation: the role of technology, knowledge and the networks [Electronic version]. *European Journal of Innovation Management*, 5 (1), 18-26.
- Khan, A. (2008). *Developing world class organisations*. [Online] Available: <http://www.acusa.net/articles/developingworldclass.doc> (September 29, 2008)
- Lahiri, S., Perez-Nordtvedt, L., & Renn, R. W. (2008). Will the new competitive landscape cause your firm's decline? It depends on your mindset [Electronic version]. *Business Horizon*, 51, 311-320.
- Porter, M. (1980). *Competitive Strategy: Techniques for analysing industries and competitors*. New York: The Free Press.
- S M Thacker & Associates. (2000). *World class manufacturing*. [Online] Available: http://www.smthacker.co.uk/world_class_manufacturing (September 15, 2008)
- Sahay, B. S., Saxena, K. B. C., & Kumar, A. (2001). World class manufacturing and information age competition [Electronic version]. *Journal of Industrial Management*, 43 (3), 23-28.
- Salaheldin, S. I., & Eid, R. (2007). The implementation of world class manufacturing techniques in Egyptian manufacturing firms: An empirical study [Electronic version]. *Journal of Industrial Management and Data Systems*, 107 (4), 551-566.
- Salmi, J. (2009). *The challenge of establishing world class universities*. [Online] Available: <http://siteresources.worldbank.org/EDUCATION/Resources/278200-1099079877269/547664-1099079956815/547670-1237305262556/WCU.pdf> (September 08, 2010-09-08)
- Scodanibbio, C. (2008). *Training programme – world class manufacturing*. [Online] Available: <http://www.scodanibbio.com/site/access/wcm.html> (September 23, 2008)
- Treacy, M., & Wiersema, F. (1995). *The discipline of market leaders*. Massachusetts: Addison-Wesley Publishing Company.
- University of Guyana. (n.d.). University of Guyana: *The strategic plan, September 2009-August 2012*. University of Guyana.
- Whiteley, R. C. (1991). *The customer driven company*. Massachusetts: Addison Wesley Publishing Company Inc.