



EFFECT OF DEMING’S SEVEN QUALITY DISEASES: A CASE OF ENTREPRENEURIAL ACTIVITIES IN WHEATFIELD SCHOOL IN ELDORET, KENYA

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ABSTRACT

The aim of this study has been to establish the influence of quality initiatives on the operations of a Private school run as an enterprise in Eldoret, Kenya. The rationale for this study was based on the information that a number of privately owned schools rarely survive beyond their 3rd birthday. The success of an enterprise depends on a number of factors. These include the type of management or leadership style, the environment surrounding the enterprise, the contribution of the employees and the demographic factors of the customers. The entrepreneur should have such personality variables including; one’s ability to take risks, creativity, innovativeness, high need for achievement, need for autonomy and control of one’s destiny just to mention some factors. The environmental factors that play an important role in determining entrepreneurial success include economic, education, political, socio-cultural, legal, technological and religious variables. Quality is the totality of features and characteristics of a product or service that bear on its ability to satisfy stated or implied needs. The data was collected through interview schedule and the operations “know-how” observed in the school were subjected to scrutiny to enhance relevance in the field of study. As the area of study was small and the target population of people was small, it became appropriate to do a census study. A total of 4 key people were interviewed. The study found that wheatfield School suffered from at least six of the seven Deming’s quality disease. The remedy for the diseases included entrepreneurially factored characteristics.

Key words: Deming’s quality disease, Entrepreneurship, Wheatfield School, Management

INTRODUCTION

Dr. W. Edwards Deming taught that by adopting appropriate principles of management, organizations can increase quality and simultaneously reduce costs. Deming’s Seven Deadly Diseases (taken from Walton, 1990), include the following; Lack of constancy of purpose; Emphasis on short-term profits; Evaluation by performance, merit rating, or annual review of performance; Mobility of management; Running a company on visible figures alone; Excessive medical costs; Excessive costs of warranty, fueled by lawyers who work for contingency fees.

Wheatfield School was started in the year 2008 as a high school targeting athletes. The purpose was to combine education with athletics, eventually producing students who would then be trained to run in different world events. The athletes would then bring some agreed percentage of their pay to the institution that nurtured them. It was some kind of “nurture talents for financial gain”. The manager saw the opportunity as a good entrepreneurial venture and therefore took a financial risk in the form of a loan from a bank. This was after the program had been approved by the District Education Board (DEB).

Unfortunately, the plan did not bear fruit as expected and the loan taken did not complete the work of construction and so the school manager was faced with financial constraints.

Friends and family came to his support in the year 2009 and in the following year 2010, the school was registered both as a pre-primary and a primary school. It got a sponsor in the form of a sporting organization, the Kenya Community Sporting Foundation (KESOFO). After this, the school got another lease of life when another neighboring school called the Grace of God School brought into their school 14 students. The school was therefore able to start with a total of 40 children in the primary section and 14 children in the pre-school section. The school fee was Ksh. 28,500 per year for the boarding students. In the same year 2010, The Grace of God School withdrew their 14 children claiming that the fee was too high for them to afford. By January of the following year 2011, most of the other parents of the school also complained of the 'High School Fees' and therefore withdrew their children. As at the time of research in August 2011, there were only 12 children who were learning in the pre-school. The intended high school had now evolved into a pre-school. Initially, there were 7 teachers but as at the time of research there were only 2 teachers in the institution, working together with the director/manager and his wife. This means that there were only 4 members of staff in the school.

Problem Statement

The study stems from observation that even though a number of Pre-Schools and Kindergartens have been opened up in Eldoret town and its environs, only a few have survived to be termed successful. A survey within the town indicated that a number of pre-schools did not survive past 3 years from the time of their start-ups. One therefore wonders why there has been such a high failure of running pre-school enterprises in Eldoret. This research therefore went out to find the cause of pre-mature closure of the school enterprises in terms of Deming's quality diseases.

Objectives

The main objective of this study was to determine the performance of Wheatfield private school enterprise in relation to Deming's seven deadly quality diseases. The specific objectives were;

1. To determine which of Deming's deadly diseases were affecting the pre-school enterprise performance
2. To determine the nature of the effects of the Deming's quality disease to the business
3. To determine the magnitude of the effects of Deming's disease on the business
4. To give recommendations on how the business would go about treating the Deming's quality disease
5. To determine the likely benefits of treating the Deming's quality diseases.

LITERATURE REVIEW

Within the economic constraints of the domination of large corporations, until a decade ago, there has been little demand for the creation of entrepreneurs (Gibb, 1993). Commentators (e.g. Drucker, 1994; Coulson-Thomas, 1999; Keogh, 2002) have noted however, that throughout the modern economies, the traditional corporate culture is no longer best placed to achieve sustainability and growth. Instead, in the face of an increasingly competitive business climate brought about globally by evolving social conditions and technological development, the modern mature economy will become increasingly dependent on enterprise and entrepreneurship and the dynamic economy it creates (Davies, 2002; Klapper, 2004). This is acknowledged by different governments of the world. For example, the UK government has embraced the concept of an enterprise economy, recognizing that 'entrepreneurial skills and motivation are central to the dynamism of a commercial society' (Gavron *et al.*, 1998). The reality for this for young people is that it is now less likely that careers will comprise 'white collar jobs', but instead will be based on portfolio employment (Dearing Report, 1997; Davies, 2002; Collins *et al.*, 2004). It would be of interest to determine if entrepreneurship skills would be a preventive measure or cure for some of the Deming's Quality diseases.

Quality of a Product or Service

“The quality of a product or service is its ability to satisfy the needs and expectations of the customers” (Bergman and Klefsjo, 1994). According to ISO 8402/ISO 9000, “Quality is the totality of features and characteristics of a product or service that bear on its ability to satisfy stated or implied needs.” In the traditional view, Quality is inspected into the product; Defects are an expected part of producing a product. Employees are blamed for quality and supplier relationships are short term and cost driven. In Total Quality view, Quality is determined by product design and achieved by effective control techniques. Satisfying customer needs and exceeding customer expectations, establishing high-performance bench marks for customer satisfaction and the continually improving performance. The quality of the Wheatfield School therefore would be its ability to satisfy the needs and expectations of the students, parents, teachers and the surrounding community.

The Total Quality Approach (TQA)

This is an approach to doing business that attempts to maximize the competitiveness of an organization through the continual improvement of the quality of its products, services, people, processes and the environment. Quality is expected and employees are empowered to produce quality. In the case of Wheatfield School, TQA would maximize the competitiveness of the school through continual improvement of its student’s performance, infrastructure, teacher performance and management input.

Pre-Schools in Kenya

These are also referred to as Kindergartens, Childcare or Nursery schools in Kenya. Normally the schools focus on early childhood education and aims at improving the child’s emotional, physical, cognitive and social skills. They normally admit children between the ages of 2 and 7. According to Said (1977), the existing system of providing for early childhood education is community based, in the sense that it is managed and run by communities through committees. Said found that 75% of the preschools in Kenya are community owned and that since Kenyan communities are diversified, so are the pre-schools.

METHODOLOGY

The research used the purposive sampling method which is a non-probability sampling method. The Wheatfield School was deliberately selected for research. Wheatfield pre-school is located 10 Km East of Eldoret town, 3Km off Iten road towards Illula at Marura in Kenya. This was a smaller unit of the larger Wheatfield School that comprised of the Pre-school and the Primary school. To get data about the school and the Deming’s (1986) seven disease of quality affecting it, the following were the components of the sample; the manager, the head teacher, the chair person of the advisory board, one teacher and one parent. Data was collected through personal interview where the researcher sought to get answers through pre-conceived questions. Data was also collected by observation.

RESULTS AND DISCUSSIONS

The following were Deming’s (1986) quality diseases found to be affecting the school. Deming’s first deadly disease was lack of constancy of purpose to plan product and service that will have a market and keep the school in business as well as providing jobs. It was observed that the school lacked adequate good planning. The manager had a good vision statement for the school but plunged into business without well-thought out plan. It was noted that the school was situated in the interior part of the country away from settlement schemes. The manager used a portion of his large farm to start the school and according to him; access to the school is difficult because there was a large barrier in the form of Chepkoilel River. Secondly, the purpose for which the school was set up (a high school for athletes) was left along the way as financial constraints set in. The management therefore ended up with what they did not intend to have in the first place. It should be noted that as long as the focus is on short-term thinking, management will fail to plan adequately. Without good long term planning, workers’ efforts will be irrelevant.

Most significantly this disease warns that Total Quality Management cannot be a fad. If management changes its philosophy for whatever reason, then there will be no long term forward progress. To treat this disease, the management should go back to its original plan of the school for athletes, change the school location so that it is accessible to customers and prepare the school adequately so that it has the standard

required structures for learning and athletics. The entrepreneurial characteristic that the manager needed to consider was the control of one's destiny.

The second Deming's (1986) deadly quality disease is Emphasis on short-term profits: short-term thinking fed by fear of unfriendly takeover and by push from bankers and owners for dividends. In the case of Wheatfield School, the manager thought of compensating for the insufficient money from the bank, family and friends by changing his original plan of action and instead starting a primary school and a pre-school. Due to this short-term thinking, he came up with almost immediate competition. The manager indicated that immediately he started his institutions of learning, there came up in the neighborhood very simple structures in the name of schools where children were allowed to learn without the necessity of school uniform or shoes. The competition was charging school fees of a mere Ksh. 300 per month compared with his pre-primary fees that was Ksh. 10,000 per year exclusive of uniform. To cure this disease, the manager should put up boarding facilities and get a wider customer base. The entrepreneurial characteristic the manager could put into consideration is innovation and creativity to beat competition.

The third Deming's (1986) deadly quality disease is Personal review systems, or evaluation of performance, merit rating, annual review or annual appraisal for people in management, the effects of which are devastating. On being asked if merit pay was being used, the Wheatfield School manager indicated that it was not being used because of unexpected financial constraints. The annual evaluation was focused on past performance of the students in the Zonal evaluation examinations where the school had maintained the top 3 positions in the classes 1 to 4. For the non-financial merit for example recognition of teachers' performance, this was done just to try to keep the few teachers who were willing to work in that environment. The fear was that other schools would 'poach' his teachers as was done to one staff member who went to bench-mark in one of the public schools. The essential problem with merit system is that they reward results rather than process improvement. Some managers want to reward people who cooperate more or seem to have better attitudes. To cure this disease, the manager of Wheatfield School should focus on merit reward by focusing on the nature of work done by the school members of staff. The entrepreneurial characteristic the manager could put into consideration is risk taking to employ the best teachers possible who would make the school attractive.

The fourth Deming's (1986) deadly quality disease is: Mobility of management; job hopping. When top management changes organizations very often, continuous improvement efforts will be broken and disjointed new leaders will come on board. Changes in leadership also mean changes in management philosophy. This indicates that there cannot be constancy of purpose in such an environment. Even though in the case of Wheatfield School there has not been change of management from the time the school was launched, the manager's commitment has been wanting. According to him, the main purpose of his starting the school as an enterprise was to have a continuous family source of income which was a laying foundation for him to operate it with his children when they grow up. At the time of this research, his eldest child was about 10 years old. To cure this disease, the manager should give his full attention to the enterprise or employ an entrepreneurial manager who can do this on his behalf. The entrepreneurial characteristic the manager could put into consideration is, need for autonomy.

The fifth Deming's (1986) deadly quality disease is; Use of visible figures only for management, with little or no consideration of figures that are unknown or unknowable. Many consultants in the quality field have been quoted to say, "If you can't measure it, you can't manage it." Deming insisted that leaders must make decisions and manage situations. For instance, if a quality effort is truly justified, then it should cause operating costs to decline and overall sales to rise relative to what would have happened otherwise. In the case of Wheatfield School if we go by numbers, then the disease has eaten deep into the enterprise. Considering that in the year 2010, there were 40 students and 7 teachers and that in the year of this research there were only 12 students and 2 teachers, then the numerical measure has declined drastically. If the performance of the enterprise is measured by numbers, then the enterprise, is failing. To cure this quality disease, the management should go back to their initial vision of the school, put up good infrastructure, do some vigorous marketing of their services and the number will definitely go up. However, it is worth mentioning that the performance of an enterprise by numbers only is not a

substantive way of measuring quality. The entrepreneurial characteristic the manager could put into consideration in this case is; high need for achievement.

The sixth Deming's (1986) deadly quality disease is; Excessive medical costs. Deming indicates that in developed nations like America, health care as a percentage of overall expenditures has steadily risen for decades generally pushing numerous business and government budgets into a state of crisis. Deming would have approved of the political system attempting to reform health care. In the case of Wheatfield School, this quality disease is not so much of an issue. According to the manager, in case of a child falling ill, the school incurred the cost of taking the child to hospital but the parent incurred the medical bill. So in the case of the school, the medical costs compare insignificantly to other fixed costs such as advertising, investment in new capital and interest payment on bank loans.

The seventh Deming's (1986) deadly quality disease is; Excessive costs of liability. Deming blamed America's lawyers in part for the problems of American business. The US had more lawyers per capita than any other country in the world. According to Deming, the lawyers made their living to a considerable extent by finding people to sue. Deming believed that the solution to this quality disease would probably come from the government. In the case of Wheatfield School, the cost of payment to the lawyer was not an issue since they had not established themselves to the extent of needing a school/enterprise lawyer. In the long run, if the business turned around and made significant improvement, the manager suggested they would then consider hiring a lawyer.

RECOMMENDATIONS

The likely benefits of treating Deming's (1986) quality diseases were that the manager's original vision for his enterprise comes to reality. It was recommended that the manager who has a Masters degree in Education planning has the capacity to put into effect mechanisms of treating the quality disease affecting his enterprise. He should change the location of the school to a more visible and accessible area. To get the required finances, he can sell some of the large tract of land where the school is currently situated and use this money to buy other land and put up good infrastructure. With good marketing techniques and putting into effect the Deming's quality points, the enterprise could outshine the competition.

REFERENCES

- Bergman, B. & Klefsjö. B. (1994). *Quality from customer needs to customer satisfaction*. Mc-Graw-Hill. New York, and Studentlitteratur, Lund.
- Collins, L., Hannon, P.D. and Smith, A. (2004). 'Enacting entrepreneurial intent: the gaps between student needs and higher education capability' *Education and Training*, 46, 8/9, pp454-463
- Coulson-Thomas, C. (1999). *Individuals and Enterprise: Creating entrepreneurs for the new millennium through personal transformation*, Blackhall Publishing, Dublin.
- Davies, H. (2002). *A Review of Enterprise and the Economy in Education*, HMSO, London.
- Dearing. (1997). *The Dearing Enquiry into Higher Education*, HMSO, Norwich
- Deming, W.E.(1993). *The New Economics*. Cambridge, MA: MIT Center for Advanced Engineering Study, 1993
- Deming, W. E. (1986). *Out of the Crisis*. Cambridge, MA: MIT, Center for Advanced Engineering Study.
- Drucker, P. (1994). *Innovation and Entrepreneurship*, revision, Butterworth-Heinemann, Oxford
- Gavron, R., Cowling, M., and Westhall, A. (1998). *The Entrepreneurial Society*, Institute for Public Policy Research, London
- Gibb, A.A. (1993). 'The enterprise culture and education: understanding enterprise education and its links with small business, entrepreneurship and wider entrepreneurial goals', *International Small Business Journal*, April-June, 11, 3, pp 11-34
- Keogh, W. (2002). 'Moving Beyond the Idea' in *Creating wealth- Innovation and human capital: The pricewater house Coopers Guide to Business Success*, Spring/Summer.
- Klapper, R. (2004). 'Government goals and entrepreneurship education-an investigation at Grande Ecole in France' *Education and Training*, 46,3 ,pp. 127-137

- Said, S. (1997). A Discussion of the Link Between the Preschool Curriculum and the 8-4-4 Standard One Curriculum in Kenya, Madrasa Resource Centre, Mombasa, Kenya.
- Walton, M. (1986). *The Deming Management Method*. New York: Perigee Books.
- Walton, M. (1990). *Deming Management at Work: Six Successful Companies That Use the Quality Principles of the World-Famous W. Edwards Deming*. New York: Perigee Books.
- Young, J.E. (1997). 'Entrepreneurship education and learning for university students and practicing entrepreneurs' in Sexton, D.L. & Smith, R.W., *Entrepreneurship 2000*, Upstart Publishing, Chicago.