The study sought to investigate and develop an understanding of the competitive advantages at an Open Distance Learning (ODL) institution using the value chain analysis framework. Literature has documented the utility of value chain analysis to help institutions determine the type of competitive advantage to pursue and how to pursue it. Two components of the value system were identified, namely, the industry value chain and the organisation’s internal value chain. The industry value chain comprised the value creating activities within an organization such as course development right through to the delivery of course offerings and related services to the learners. Five competitive forces were identified in every organization, including distance education as determining survival in the market. An analysis of such competitive forces was vital to reveal the organisation’s fundamental attractiveness, expose the underlying drivers of its profitability giving an insight into how profitability would evolve in future given the possible changes in technology, communication channels, emergence of substitutes and competitors. Organisations had cost differentiation, and also focused on competitive advantages to pursue in order to strengthen their position in the education market. It was against this background that a study of the Zimbabwe Open University (ZOU) as an ODL education provider was undertaken to identify its competitive advantage(s) in the market place as an education provider. The study revealed that ZOU enjoyed the advantage of being the only institution located in an education hungry country with state support that offered education through distance learning. However, competition from conventional colleges also offering parallel ODL programmes were threatening ZOU’s supremacy in the area hence the need to remain competitive. The study recommended that constant monitoring of the operations of the entire institution’s units, acting pro-actively to enable the institution to remain competitive by reducing operational costs, remain efficient and provide quality education to its customers. Further recommendations were made on what the institution could do to enhance its competitive advantage in ODL. The study concluded that value chain analysis framework could be used to understand the operations of an ODL organisation better when used as a monitoring instrument. Results from the study would inform strategic planners on the way forward to consolidate the university’s position as an ODL education provider and to look out for new opportunities in the market.

Keywords: competitive advantage, value chain, organization, ODL, improvement, education, quality, monitoring.
INTRODUCTION AND BACKGROUND

Value chain analysis

In strategy analysis and strategic development the value chain model is one way of thinking. The value chain concept was originally used in accounting analysis. Professor Michael Porter (1985) the founder of the value chain suggested that the concept could be used for strategy analysis too. The value chain identifies where the value is added in an organization and links the process with the main functional parts of the organization. Here value is defined by the customer of the organisation’s services such as education. Porter identified two sets of activities: the primary, which are directly involved in logistic product flow, and support activities, which though indirect, play a very useful role in the success or effectiveness of primary activities. Its main concern is focusing on value added by each activity, and contribution to the organisation’s competitive advantage. However, value chain is difficult to apply to organisations that deliver different kinds of services.

The study sought to investigate developments at an ODL institution in order to enhance understanding of competitive advantage using the value chain analysis conceptual framework. Documents and interviews were used as the main sources of data. Literature has documented the utility of value chain analysis to help institutions determine the type of competitive advantage to pursue and how to pursue it. Two components of the value system have been identified, namely, the industry value chain and the organisation's internal value chain. (Elloumi, 2004). The industry value chain has been described as comprising the value creating activities within an organization such as course development right through to the delivery of course offerings and related services to the learners. Every organisation has competitive forces which determine its survival in the market place. Five competitive forces were identified in every organization. An analysis of such competitive forces was vital in revealing the organisation’s fundamental attractiveness, exposing the underlying drivers of its profitability giving an insight into how profitability will evolve in future given the possible changes in technology, communication channels, emergence of substitutes and competitors. It is further argued that the attractiveness of distance education is further determined by the same five underlying forces. (Powell, 1998). It was against this background that a study of the Zimbabwe Open University (ZOU) as an ODL institution was embarked upon to identify its competitive advantage in the market place as an education provider. It was hoped that the study would reveal the strengths of the institution and possible threats as an ODL education provider. Recommendations would be made on what the institution should do to enhance its competitive advantage in ODL, what activities should be regarded as core and which are supportive. It is hoped that the results would inform strategic planners on the way forward to consolidate its position and look out for new opportunities in the market.

Value chain conceptual framework

Value chain analysis can help institutions such as ZOU determine which type of competitive advantage to pursue, and how to pursue it. The industry value chain comprises the value creating activities within the industry, in this case, Open and Distance Learning (ODL). The primary activities for ZOU include course development, teaching or delivery of courses, research, assessment and accreditation, module writing and reviews. All these activities are directly relevant to the student. The quality of such services determines the quality of education students should receive to meet their value chain system or aspirations. These are what Porter (1985) described as competitive forces that interact with a given industry (institution) such as ZOU. The intensity of rivalry among existing competitors (conventional higher education (HE) institutions parallel block release programmes and other distance learning institutions who can provide the same service of higher quality at a lower cost), barriers to entry of new competitors, the threat of substitute products and services, the bargaining power of suppliers (Institutions of higher learning) and power of buyers (students in this case). An analysis of these forces would reveal the industry’s (ZOU) fundamental attractiveness, expose underlying drivers and provide insight into how the institution can become profitable in future given the changes in customer needs, competitors, technological advancement and channels of communication. The structural attractiveness of distance education is also determined by the same five underlying forces. Porter (2001) argued that while internet helped distance education, it had also changed the front end of the industry process. Consequently the attractiveness of any offerings can be analysed using Porter’s framework. Overall deployment of the internet and other information and communication technology (ICT) has expanded the size of the market by both allowing access to a greater market and by bringing more institutions into the market and competition. Such developments can put the institution at an advantage while cost structure can pressurize managers to engage in a destructive price competition. Pressure on administrators to come up with a cost saving structure brought by internet and ICT's produce increased competition. Fixed costs increase harm to the company because they cannot be altered
once incurred. Generally the internet has intensified the competition and rivalry among post secondary institutions, in distance education where pressure to enhance efficiency and effectiveness is intense. The feel and look of learning experience, conventional factors, such as scale, skills of personnel, internal processes and physical environment remain permanent sources of competitive advantage.

In distance learning organizations many actors are involved in the educational process. These are faculty, course coordinators, editors, instructional designers, technology specialists, academic experts, examination developers and invigilators, technical and other administrative personnel. Though these work in distinct administrative units, inter- and intra- departmental linkages are vital for the efficient and effective operation. (Woudstra and Powell, 1989). Consequently the value chain of ODL affects and is affected by others in the value delivery system. These include publishers, providers of authoring and development tools, enterprise systems, portal integrators, distributors and delivery partners, government, other educational institutions and learners as buyers of educational services.

Thus, the value chain framework highlights how ODL’s offerings fit into the learner’s value chain. An ODL’s professional effectiveness component fits into the buyers’ specific programme and organizational needs. Value chain analysis explicitly recognizes the fact that the various activities within ODL institution were not independent but interdependent. Recognition of interdependencies by value chain analysis is an acknowledgement of the possible increase in costs in one unit can bring down total costs. For example, the extra cost incurred creating or buying high quality self-contained course materials might reduce total cost of student support and overall cost as well.

Stabell and Fjeldstad (1998) identified three primary activities with specific reference to educational service or competence development as continuous circular processes. These are: The value chain responsible for transformation of inputs into products, value shop which resolves or solves customer problems and value network which links customers. They agree that when you recognise the need for competence development such as question paper development you need to:

- plan
- choose the way to get the knowledge
- learn by attending
- test and practice new knowledge and competencies
- recognise the need for new knowledge, process and start all over again.

Stabell and Fjeldstad’s value chain model comprised three parts. However, they felt that the value shop was the one more appropriate for consultancy and education services. They indicated that the value shop model had the potential to become inspirational when working with strategy development for example improving quality of assessment tools within education and universities. They also saw the educational service or competence development as a continuous or circular process (ongoing). The four primary activities were:

1. Problem finding
2. Problem solving
3. Choice
4. Execution of chosen plan
5. Control/Evaluation

For example: (1)Poor quality assessment instruments--
----------------------- (2)Set draft questions----------(3)Train examiners------- (4)Attend training------------ (5)Set draft questions using newly acquired knowledge and skills------ ---- (6)Administer test---------- (7)-Identify further errors---
------------- (8)Train to minimize errors-------- (9)Start all over again.

Kolb (1) came up with the learning cycle with three primary activities and the same number of support activities as Porter, Stabell and Fjeldstad (1998). The three primary activities value chain competence development continuous cycle include: (a) identification of competence needs-------- (b) learning competence development (study and learning at university) ------------ (c)use of competence performance. Kolb further elaborated that the model could apply at different levels or scales namely, individual, group and organizational. Value chain analysis is therefore:

- A tool for analysis to identify where value is added in an organization.(value as defined by the students)
- A conceptual framework for understanding organizations by helping us to link inputs, processes and outputs with functional parts of an organization (Process Model).
- A way of thinking about an organisation for example, what value does each activity add to overall competitive advantage or performance of the organization? (Porter, 1985)

**Purpose of the study/problem statement**

Faced by stiff completion in the education market it was vital that the ZOU continued to monitor its competitive advantage in order to survive. In view of the above the study sought to assess the university’s competitive advantage and apply the value chain analysis framework to enhance understanding of opportunities and limitations at the Zimbabwe Open University.
**OBJECTIVES**

In order to understand the research problem more the study focused on the following specific objectives.

1. To discover the ZOU competitive advantage in the education marketplace using the value chain analysis framework.
2. To enhance our understanding of operations of ZOU as an Open Distance Learning (ODL) education provider.
3. To identify ZOU’s strengths and weaknesses as an ODL education provider.
4. To explore possible models for ZOU to pursue to maintain competitive advantage.

**Rationale and significance of the study**

There is an increasing number of institutions of higher learning emerging in Zimbabwe, the region and the world. Conventional higher education institutions are offering parallel ODL programmes in direct competition with ZOU the only, ODL institution in the country. More ODL institutions are emerging in the Southern African Development Community (SADC) Region. Online higher education offerings are proliferating. Liberalisation of trade has virtually collapsed borders making it possible for nationals to access education in other countries. The United States dollar currency currently being used by Zimbabwe further encourages access to education offered by other countries. All these developments pose a serious threat to the survival of ZOU as an ODL provider. It was therefore important that a study be carried out to create an awareness of the opportunities, challenges and limitations ZOU was facing. It is hoped that information from the study would enable the authorities to monitor and take appropriate steps to remain afloat. Analysing competitive forces of an organisation such as the ZOU:

- Helps to reveal an organisation’s attractiveness (strengths) and threats (weaknesses).
- Exposes the organizations current and future drivers for profit and sustainable development.
- Helps the organization to respond to technological changes more easily and proactively.
- Helps open communication channels.
- Reveals emergence of substitutes and competitors more easily.
- Reveals core activities which help core activities which add value.
- Reveals support activities which help core activities to sustain value.
--Informs strategic planners on the way forward to consolidate the organisation’s position and to look for new opportunities in the market.

- Provides support for recommendations to enhance competitive advantage.

**Rationale for using value Chain Analysis**

- Research has documented the utility of value chain analysis to help institutions determine their competitive advantage and how to pursue it. ((Elloumi, 2004).
  - Value chain analysis helps institutions to analyse the intensity of rivalry among competitors.
  - Value chain analysis helps institutions to identify and analyse the power of suppliers (institutions) of ODL and buyers (students).
  - Value chain analysis helps institutions determine the relevance of institutional value system in relation to that of students.

**Value chain analysis methodology**

The internal value chain of ODL consisted of all physically and technologically distinct activities within ZOU that added value to the learners’ experience. Key to analysing and understanding value chain understood the activities within the institution that created a competitive advantage, and then managing those activities better than other institutions in the industry in this case, higher education. Porter suggested two groups of activities: primary activities directly involved in creating and delivery of the product or service, and support activities which feed into the primary activities and into each other. Support activities included, human resources management, technology development not directly involved in production but have the potential to increase effectiveness and efficiency. Thus, value chain analysis was a means for examining internal processes and identifying which activities were best provided by others.

**Research design**

This was a qualitative study using document analysis and literature search as main sources of data. Key activities by different sections and units of ZOU were identified using the university’s strategic plan document. Functions of each were identified for their value adding activities to the entire institution. The university’s strategic plan was used to identify the vision, mission of the institution, its strengths and weaknesses and how it sought to overcome threats from competitors. These were evaluated using the value chain analysis to find out the university’s competitive advantage and how it could consolidate these.
RESULTS AND DISCUSSION

An analysis of documents revealed that ZOU had a framework consisting of industry or value creating components and activities. Each one of the activities added value or had the potential to add value to the institution. These were:

- Needs analysis carried out to customise programmes and courses to enhance relevance the country’s socio-economic needs. This was carried out by every faculty.
- Regulations and course development by every faculty.
- Module development by faculties, Materials Development Unit (MDU).
- Course delivery through faculty tutorials.
- Assessment by faculties and academic registry providing administrative support.
- Accreditation and certification by ZIMCHE and Academic Registry.
- Quality Assurance and Quality Control by the Quality Assurance Unit
- Research and Development for student surveys and data supply.
- Marketing, communication and public relations for image building and promotion of the institution and its activities.

The contribution each one of the above made to the organization could be identified by using the value chain analysis framework.

The value creating activities also had support activities that were vital for the organisation’s success. ZOU has the following as its support activities as identified by the value chain analysis.

- Human resources (HR) which does staff recruitment, induction, appraisal and training.
- Information and communication technology (ICT) to facilitate student registration, processing and grading of marks, research information to complement library and information services (LIS).
- Academic registry (AR)-a vital academic support service responsible for student registration, examination management processes.
- Security ensuring the safety and security of premises including those housing question papers.
- Finance for managing and allocation of funding for the various university activities both industry and support.

The value added by each could be identified using the value chain analysis. Support activities enhanced the industry activities for quality service to the customer.

Not only did the study identify value creating and supporting activities but key actors as well. The actors in ODL at ZOU included:

- Faculties
- Course Co-ordinators
- Editors
- Instructional designers and developers
- Academic experts
- Exam developers
- Research and development staff
- Librarians
- Administrators
- Students’ services personnel
- Technical and no-technical staff
- Senior management and policy makers
- Students as customers
- Quality Control and Quality assurance staff
- Ministry of Higher Education
- Employers
- Zimbabwe Council for Higher Education staff.

The manner in which each one of the above acted or behaved determined ZOU’s effectiveness and efficiency as an organization and also its competitive advantage in the education market place (Woudstra and Powell, 1989).

Support activities consisted of:
- Organisational infrastructure: concerned with a wide range of support systems and functions: finance, planning, quality assurance and control, general senior management.
- Human resources management: recruiting, developing, motivating and rewarding workforce.
- Technology development: information processing and development and protection of knowledge in the organisation.
- Procurement: resource acquisition for the organisation (sourcing and negotiating with suppliers).

Primary structure comprised five sectors

- Inbound logistics: preparation for course development (curriculum planning, acquiring or preparing for learning specific hardware, learning management, content, hiring authors/writers , ordering reference materials-textbooks, formation of internal course teams.
- Operations: course development process-writing, multimedia creation, editing, formatting, graphic design, printing and Web publishing.
- Outbound logistics: packaging and storage of courses, processing mail and delivery materials to students, access to courses for students,
- Delivery (sales): collaborating and marketing preparation of brochures, advertising materials, university calendar as marketing strategies. Communicate benefits, attributes, culture and competitive
- Service: coaching, mentoring, assessment and
testing, technical and support services, learner self-service, tutor support, academic experts/marketing, counseling, granting awards.

**ZOU’s Focus for Competitive Advantage**

**Quality Assurance:** (See Figure 1)

(i) Quality Assurance Unit (QA) set up as an organization-wide strategy.

(ii) Making QA everyone’s business hence every employee and unit of the university is an active player in establishing and maintaining quality.

(iii) Appointment of QA personnel in every region of the university to monitor and report on quality activities and issues on a regular basis.

(iv) Setting up a QA Committee of the university comprising senior management underlines the seriousness with which QA is regarded by top management.

(v) Regular audits to keep up to date with quality issues throughout the university.

(vi) Training of all the personnel in QA in order to create university-wide awareness of the need for quality and what it means to the organisation.

(vii) Currently the university is working to gain ISO 9001 certification before the end of 2012. This will further enhance the university’s position in the market as an ODL education provider.

(viii) Conducting regular students’ surveys and evaluations of tutorials, tutors and university services for students by the Research and Development Unit (RDU) to keep abreast with students’ views about quality of services they receive from the university. (For example, July 2011, a students’ survey revealed their dissatisfaction with some tutorials, punctuality of tutors, communication with the institution, processing and publication of results, and delivery of modules for various programmes, assessment and marking of assignments.

(ix) Zimbabwe Council for Higher Education (ZIMCHE), have intensified their monitoring and accreditation of degree and diploma programmes to meet minimum standards that have been set in order to ensure that students and the country get the best service. (This is an example of an external organisation with direct influence on what ZOU does and can impact on quality of service delivered to the learners. Compliance with the regulations will go a long way in enhancing the credibility of study programmes being offered by the university as an ODL institution. Furthermore, this will enhance quality of the service students get. Consequently, the country will get high quality manpower from its investment in higher education. Students will get value for their money and enhance employment and promotion prospects in their current employment.

(x) Human resources have embarked on hiring highly qualified academic staff with PhDs to enhance the quality of academic input for the benefit of the students. They are also providing staff development opportunities to others who do not have PhDs. This is a vital support service which value chain analysis can help us understand the role and value of human resources unit to ODL.

(xi) The Module Development Unit (MDU) has been set up to edit, print and distribute modules to all the students. Its efficiency is vital to the success of all students pursuing different programmes and the success of students. Tutorials, assessments are based on these learning resources hence their timely production, their quality in terms of content and presentation are all vital for quality learning and outcomes. The university ensures that appropriately qualified and experienced persons are hired to prepare the curriculum and write the learning materials for the benefit of the students. Human
resources have been scrutinizing the qualifications of everyone recruited to write modules. To complement internal processes, ZIMCHE also scrutinises the modules and certifies them as suitable or otherwise. Such rigour can only help enhance quality.

(xii) Library and information service (LIS) have acquired and continue to acquire books and electronic resources to ensure that students have adequate and appropriate resources for their studies. They hold training sessions to introduce both staff and students to the latest available technology in literature for research purposes. LIS’s work is complemented by that of the information and technology (ICT) to enable students to access more reading and learning material online. It is however, sad that many students are still computer illiterate. Consequently, they cannot take advantage of the advances in electronic literature much as they would like to do so. Some investment in enhancing students IT skills would go a long way in motivating them as well as opening them to a greater variety of learning materials.

Where are the ZOU’s strengths?

- ZOU is the largest and only ODL institution in the country, thus occupies a prime position as an ODL education provider.
- It produces own self-contained instructional learning materials.
- Has a wide geographical coverage that transcends political boundaries.
- It has print modules that can be used in the remotest parts of the country.
- Enjoys the services of highly qualified staff.
- Has experience in ODL.
- Has partnership with more than 52 countries throughout the world.
- Has a Quality Assurance Unit which monitors quality of various services of the university.
- Recognition of the ZOU brand.
- Strong belief in women empowerment.
- Now has own printing press to speed up and lower cost of learning resources and materials production.

There is scope for expanding programmes on offer;
- The institution can run parallel programmes by day or night;
- Scope for international expansion;
- Increasing economic stability;
- Senior management’s commitment to Quality assurance;
- A longer history of ODL in the country with state support;
- Highly qualified personnel (Academic and Non-Academic) though inadequate;
- Now has own printing press which should make module production cheaper, quicker and an additional source of income;
- Has strong faculty of commerce whose business acumen and programmes can be utilized to introduce business ethics in the management of the university for greater efficiency and profitability;
- Hwange Declaration on ODL by SADC (August, 2012) provided an opportunity for ZOU to flourish as an ODL education provider but also opening it to intense competition as more players come into the market. This has made seeking competitive advantage more urgent than before;
- Customised learning resources of high quality;
- Partnership with other institutions provides ZOU opportunities to learn from others; and
- Diverse programmes on offer with more unexploited markets and course offerings.

The positives and opportunities that ZOU enjoys are however, counteracted upon by negatives and threats. Key among the negatives are:
- Technological lag (No Local Area Network (LAN) and wide Area Network (WAN);
- Poor funding base;
- Lack of student financial support by the state;
- Staff turnover;
- Delays in launching new programmes;
- Poor internal communication; and
- Generally weak resource base.

The weaknesses were further aggravated by threats in the environment which ZOU has to be pro-active about to overcome or work hard to overcome. These included:
- Intense competition from international ODL institutions;
- Market negative publicity;
- Parallel programmes by conventional institutions of higher learning;
- Limited number of highly qualified academic staff such as professors;
- Lack of user access to computer learning facilities.
• Misconceptions about ODL as a provider of quality education.
• Lack of creativity in responding to threats and reduce weaknesses.
• Failure to capitalise on ODL to support convenience (work and family friendly, high quality learning, customization and lower cost.)
• Developments in information and communication technology (ICT) and proliferation of internet and online learning.
• Poor decisions or policies such as tuition fee paying arrangements.
• Absence of/or weak business strategies such as market assessment of consumer demands on a continuous basis.
• Failure to monitor and rationalize staff level in response to changes in student numbers. This in some cases maintaining high staff levels for very small student numbers at high cost and very little contribution to university. Rationalisation of regional structures could go
a long way in cost savings enabling the university to remain competitive using the low cost model. Combining units that perform the same functions could reduce costs by avoiding duplication. The same applies to flattening the staff structure or organogramme to increase efficiency by reducing bureaucracy.

The above were challenges the ZOU had to overcome to remain competitive.

The following strategies or models can be adopted to overcome challenges and remain competitive:

1. Developing a sustainable competitive advantage based on cost or differentiation or both. (Porter, 1980).
2. Low cost/price strategy: Undercut competitors by charging less for the services. Cost becomes the differentiating factor.
   a. Provide a unique position in the education market place by providing what customers value (Lorenzo, 2003).
   b. Provide education that fits the needs of a particular group/market niche (women, young people in isolated areas, prisoners, farmers etc.) (Porter, 1985).

However, in the current economic environment lowering the tuition fees would be unthinkable without donor support or income generating activities.

3. Provide superior education at the same cost as competitors.
   a. Superior education provision would make the institution stand above the rest. Quality of service would be the differentiating factor.
   b. Limiting the number of programmes on offer can reduce the cost and increase efficiency.
   c. Limit course offerings for different programmes.
   d. Simplify course design and production process or learner support.

Thus, by lowering cost and/or raising the quality of education provided the ZOU could enhance its competitive advantage. However, by raising the quality of education the university could also retain a high fee structure and still attract many students.

People may be prepared to pay a higher price as long as the service was of the right quality.

Whatever the institution did, it was important that focus on the students remained sharp because their satisfaction retained them in the institution, and continued to attract more in future. This included decisions and all the academic and non-academic activities. An example was illustrated in figure 4. Student–centered activities would enhance student satisfaction and enhance competitive advantage of the institution and its survival too. Always ask the question: To what extent were decisions, the work planned and implemented benefit the students? Answers to this question would help you see how student focused you were. This could be an effective way of addressing threats to the organisation and any weaknesses that might surface.

Addressing Threats

Faced with a problem an organisation could address it systematically in the following ways:

- Find a process to improve. For example, assessment as the problem (See Figure 2).
- Organise a team to fix the problem.
- Collect information through the research and development unit or each faculty or department can do so. This provides evidence to clarify the nature of the problem and knowledge of the process.
- Identify the sources of process variation which caused the problem by analysing the data collected.
- Select the process/strategy for improvement and clarify the aim and goal of action to be taken.

The following strategies or models could be adopted to overcome challenges and enable the institution to remain competitive.

Once the above process has been completed value chain analysis framework could be used to fix the problem in the following ways (See figure4):

- PLAN: the improvement and data collection.
- DO or CARRY OUT the improvement process and collect data as part of formative assessment.
- CHECK and STUDY the results of the improvement process. What lessons have you learned from the results and actions taken to fix the problem?
- ACT to hold on to the successes and continue improvement or change plans for sustainability.

CONCLUSION

Using value chain analysis as a tool, it was possible to monitor the various functional Units of an organization such as ZOU, their linkages and potential to add value or even threaten potential and opportunities. A consistent approach to its use would enable timely identification of negative forces as well as threats from competitors and the implementation of pro-active action in order to maintain ZOU’s superior position as an ODL institution in the country and the region. This could only happen if everyone in the institution was aware of the complex linkages that constituted ZOU as an organisation, scan the environment, internal and external for opportunities and threats as an ongoing concern. Being re-active could give away its superior position to its competitors. Areas of competitive advantage should be maintained at all costs by means of consistent and persistent focus on the ever-changing customer needs. Delivery of quality of assessment was one area that needed greater attention for credibility of qualifications. The support and activities of the Quality Assurance Unit would prove indispensable and so would top management, and every member of the
institutions for they were all in it together.

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