

Value Chain Analysis and Modelling to Assess and Create Modern and Innovative Methods of Quality Culture at Institutions of Higher Learning.

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Abstract

Recent trends in higher education in Sub Saharan Africa and world requires that activities of higher education institutions (HEIs) be separated into discrete components to enable value chain analysis. A value chain map will help in identifying and separating core activities in order to create targeted quality upgrading or improvements. The discrete components are can best be divided into broader categories of pre-education, education and post education. Modern and innovative methods for assuring quality should be developed for each stage and activity of the value chain. Complex college and University business activities and processes, from recruitment of students and staff, teaching, training, education, research and development need to be continuously improved. The challenge is findings strategies or methods on how to prioritize tackling them and transform the processes, strategies and methods into a quality culture aligned to HEIs' strategic goals. The purpose of this paper is to show how to apply value chain analysis approach to develop innovative methods of creating and maintaining a quality culture at institutions of higher learning (HEIs) in Namibia and the sub region. Modification, adaptation and extension of Porter's value chain model was used in the creation of service value chain models in higher education.

Key words: Higher Education Institutions (HEIs), Value Chain, Value Chain Analysis, Quality Assurance, Quality Culture.

1.0 Introduction

There are very high expectations from students, community and the country for Higher Education Institutions (HEIs) to create value for money. This can only be achieved if modern and innovative methods of developing and maintaining quality culture at both institutional and national level are constantly re-engineered. Quality culture is one of the main concerns of HEIs. It emphasis on the fact that internal quality assurance should not be reduced to formalised processes but should be likened more to a set of institutional and individual attitudes, a “quality culture”, aiming at “continuous enhancement of quality. The study method was the utilised documentary evidence of a public institution University of Namibia and a Private Institution of Higher Learning –Monitronic Success College Namibia to develop the value chains and methods of developing quality culture. A total of 12 quality assurance documents were reviewed which included quality assurance manuals, minutes of meetings, annual reports and institutional student and teaching staff induction materials.

1.2 Objectives

The objectives of the paper was to develop a generic service value chain model of HEIs in Namibia and Sub-Saharan Africa which can be used as a value chain analysis management tool in creating a quality culture. And in the process map HEI value chain in Namibia and in Sub-Saharan Africa. The second objective was review and propose methods of developing quality culture that transforms higher education system into effective and efficient set of HEI distinct value chain business processes and activities. Lastly, the objective was to demonstrate how to develop modern and innovative methods of quality culture at HEIs using value chain methodological approach,

2.0 Literature Review

2.1 The Value Chain Conceptual Model

The concept of the value chain, was created by Porter (1980), and is based on the process view of industrial entities. The value chain concept is also applicable to education, because it defines the roles, responsibilities and knowledge management of stakeholders. Kaplinsky (2000) defined the value chain as “the full range of activities which are required to bring a product or service from conception, through the intermediary phases of production, delivery to final consumers, and final disposal after use.” Also other scholars Stonehouse and Snowden (2007) defined value chain as “Porter's technique for understanding an organization's ability to add value through its activities, and their internal and external linkages, and allows managers to identify where value is currently added in the system and where there is potential to create further value in the future by reconfiguration and improved coordination of activities”. It is the way, business activities are organized within the value chain that represent a source of competitive advantage. A Porter's generic value chain consists of Inbound Logistics, Operations, Outbound Logistics, Marketing & Sales and After-sales Services. Business activities are divided into primary activities and support activities as shown Figure 1. The value chain model describes a series of value-adding activities connecting a business inbound logistics and operations with its outbound logistics, marketing and sales, services. Through value chain analysis that is analysing each and every stage of a value chain, organizations or institutions can redesign their processes to upgrade the value chain or simply improve their competitiveness that is their efficiency and effectiveness.

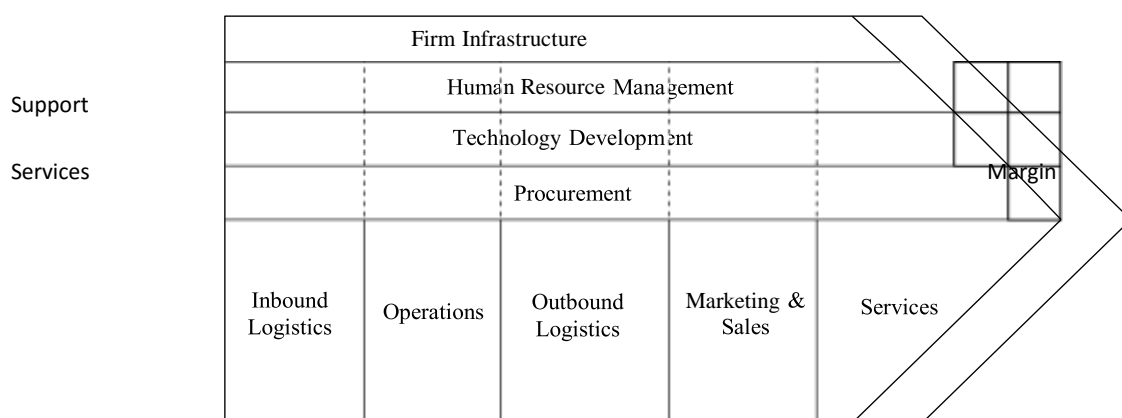


Figure 1: Generic value chain, according to (Porter, 1985)

In addition to a business's core activities, Porter added support activities that includes Firm Infrastructure, Human Resource Management, Technology Development and Procurement. The procurement support services were defined as the sourcing of inputs, or resources, for the business or organisational entity. The human resource management support services are all activities consisting of recruiting, selection, hiring, training, developing, and remuneration and retiring, dismissing or laying off personnel. Compliance with certain regulations like social security act, employment equity act and the labour act. The technological development refers to the acquisition of appropriate latest equipment, hardware, software, procedures and technical knowledge brought to bear in the organisation's upgrading of inputs into outputs. Infrastructure are functions of departments or different actors put together to meet the organisation or firm's needs. These include activities such as accounting, legal, finance, planning, public affairs, government relations, quality assurance and general management.

2.2 Application of Value Chain Concept to Higher Education

Deriving from Porter's value chain model, a value chain in a HEI can be defined as; 'A value chain is a full range of processes, activities, actors and locations that are required to bring a prospective student from recruitment to a job ready graduate'. Sison and Pablo (2000) discussed the value chain of a research university as a range of activities which are classified in three major categories – pre-education, education and post- education. The various service value chain models available in higher education includes , Sison and Pablo (2000), Van der Merwe and Cronje (2004), Pathak and Pathak (2010), and Khaled Abed Hutaibat's model (2011). All the models are the modifications and extensions of the Porter's value chain model.

Pathak and Pathak (2010), reconfiguration of generic Porter's value chain for it to apply to Higher Education Institutions (HEIs) value chain. The specific value adding nodes are determined by independent actors and their activities. In figure 2 below the support services are divided into primary and secondary support services. Primary support services includes technology, research and development, teaching and training, academic administration and procurement. Secondary support services include human resources and the firm's infrastructure. In Pathak and Pathak (2010) model, inbound logistics to include students, teachers and funds operations includes students learning, development of teaching and research skills, outbound logistics includes skilled students, skilled teachers and research skills, marketing sales includes brand and market development and services includes client, managing alumni and recruiter relations,

Pathak and Pathak (2010) described this value chain as a reconfigured value chain in higher education in view of making a discrete distinction between various actors and activities in the value chain. The model includes tangible aspects of value chain that could be analysed for innovation or upgrading which create visible or quantifiable value in higher education paradigm shifts.

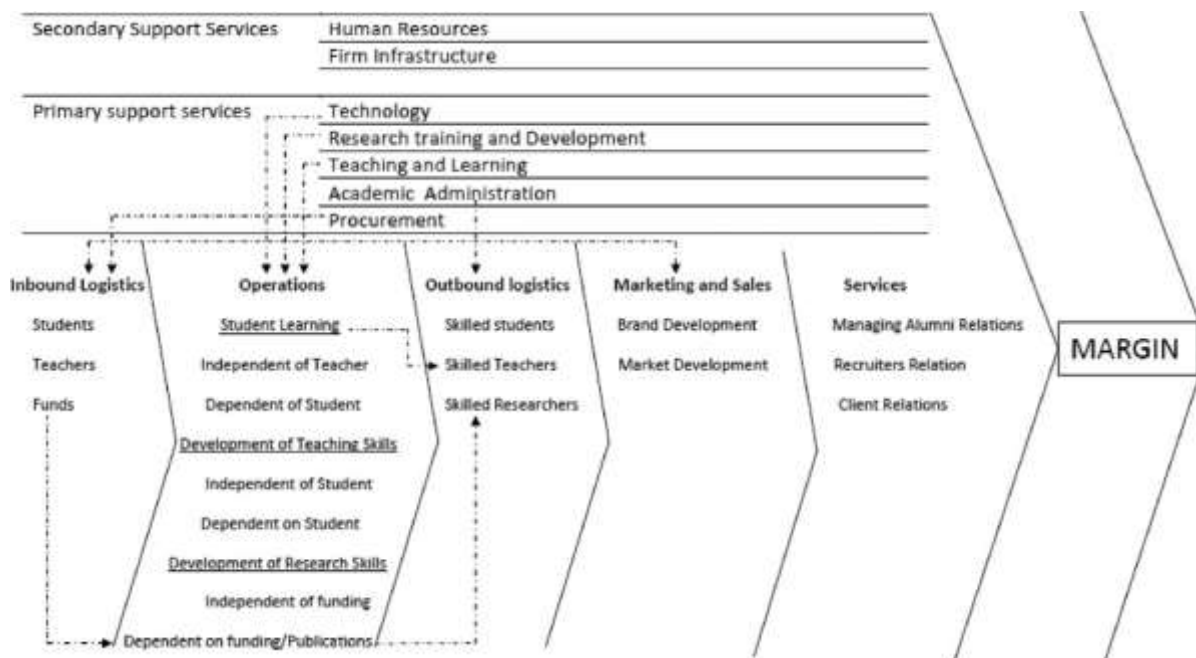


Figure 2: Higher Education Value Chain (Pathak and Pathak, 2010)

2.3 Education Value Chain Framework Sison and Pablo (2000).

A research Higher Education Institution (HEI) value chain is different from a non-research HEI because of the research activity embedded in the service value chain. Sison and Pablo (2000) described a research university service value chain in three categories of pre-education, education and post-education activities. Figure 2 below shows Sison and Pablo (2000) model. Unlike, Pathak and Pathak (2010), this model is much different from Porter (1985) generic service model.

The Sison and Pablo (2000) model showed that all the infinite number of business activities in an HEI or University can be analysed using value chain approach. The value chain map of a HEI includes most importantly teaching and training, research and development, community service, student learning, technology that target knowledge and skills, and formation of target attitudes and values. These value chain activities are in three major groups, namely, pre-education which involves student recruitment, education with many activities includes lectures, examinations, tutorials, co-curricular activities, personal and spiritual development and assessment. Educational value chain activities also includes community service, educational design and research and development. Post-education value chain activity includes graduate placement and alumni support services.

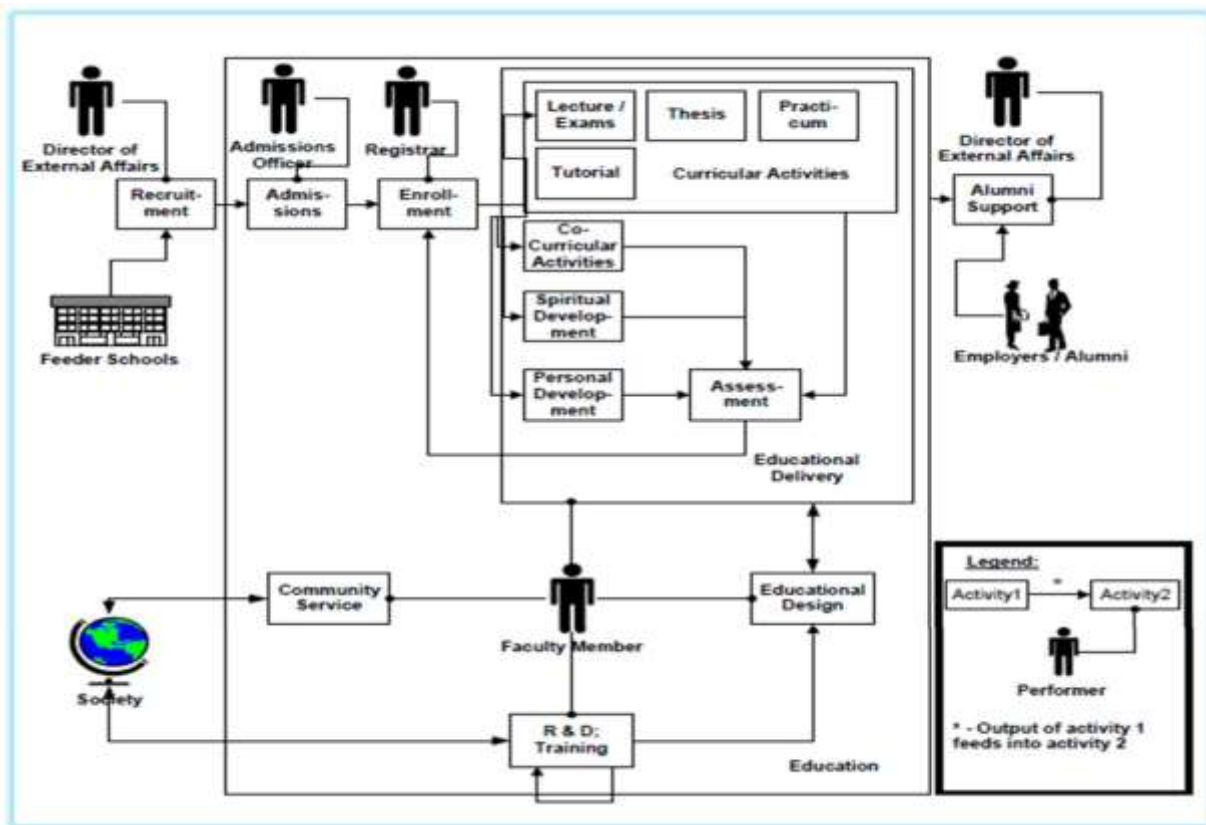


Fig. 3: Education Value Chain Framework Source: Sison and Pablo, (2000, p.2)

2.4 Khaled Abed Hutaibat's Value Chain Model for Higher Education

Khaled Abed Hutaibat's (2011) model unlike Sison and Pablo, (2000) shown in figure 3, is derived and resembles the Porter's (1985) generic value chain. It outlines higher education support and primary value chain activities in detail. The model gives details of the application of value chain approach at HEIs and its universal application to the higher education. As shown in Figure 3, the model consists three different areas. Primary support covers diverse activities including university infrastructure, academic student support services, professional administration services, and academic support staff. On the other hand student and academic recruitment, with that comes with managing teaching both in students and academic staff. The idea of academic actuality involves research and teaching activities. The referred perception of academic actuality is fierceness of the academic view, with issues of stringent scarce financial funds, the continuous between research and teaching, and the difficulties of staff recruitment and retention in subjects where the outside job-market is very competitive. The university activities of research and teaching are the main operational activities included in the strategic planning. Teaching is face to face, that is contact classes, as well as offsite activities. Research funding consists of both internal and external providers. The output reflect what will be the institution, industry, publication media, higher education sector and society at large.

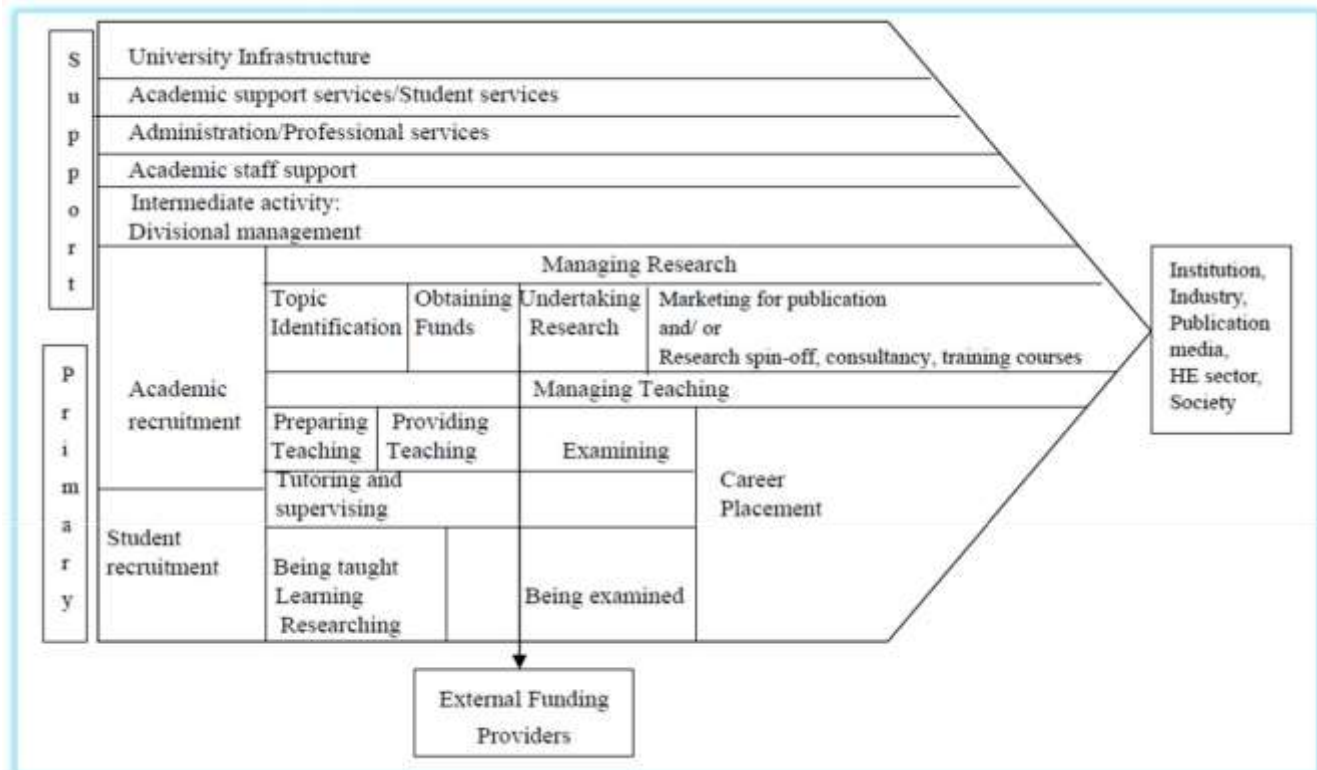


Fig. 4 Value Chain Model for Higher Education Source: Khaled Abed Hutaibat, (2011)

2.5 Van Der Merwe and Cronje Education Value Chain Model for Course Development

Van der Merwe and Cronje Model (2004) developed a model which is graphical tools used to identify bottlenecks in the educational value chain. It differs from Sison and Pablo (2000) and (Pathak and Pathak, 2010) and other models which are modifications and extensions of the Porter's 1985 generic value chain model. The two authors design a model for course presentation and development value chain which could be regarded as only a unit activities of other value chains. This model which explains all the activities of the value chain in a detailed manner. Van der Merwe and Cronje Model (2004) educational value chain is a graphical tool shown in Figure 4, which can be used by developers in re-engineering efforts to identify possible bottlenecks that are likely to occur, as well as providing a route to follow when determining the value added elements by technology. Support services are the same as those identified by Porter with student activities taking centre stage in technological innovations such as learner management systems, e-learning and technology upgrade that upgrades the educational service value chain. The model also enables a mechanism to follow up and determine the technological value added activities.

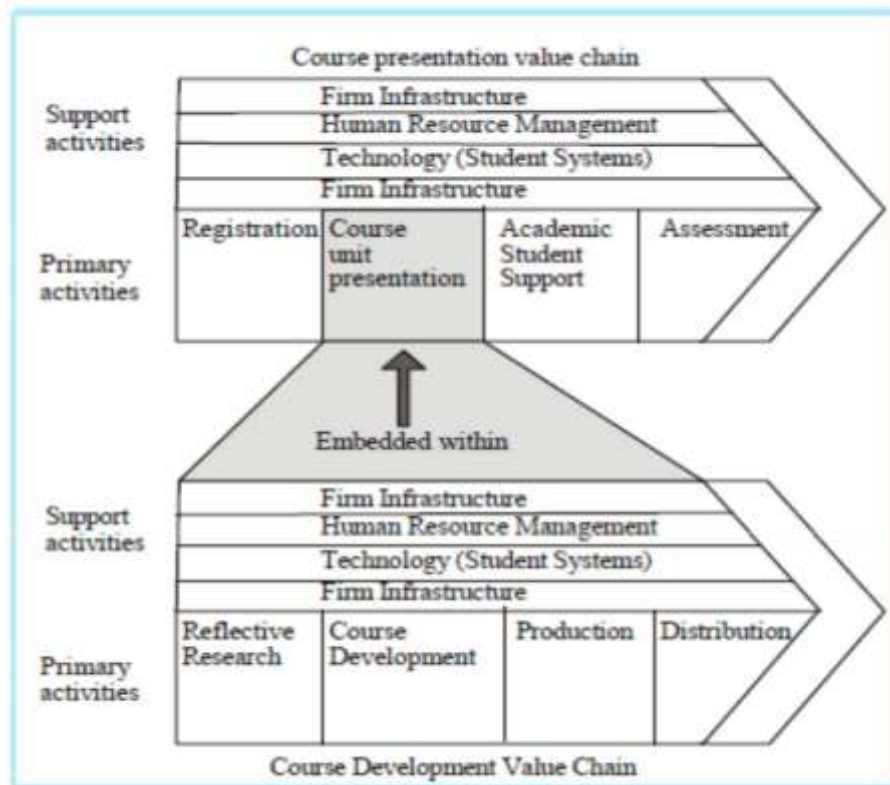


Fig. 5 Education Value Chain Model for Course Development

Source: Van der Merwe, et al., (2004, p. 127)

Support activities in both course presentation and course development includes firm infrastructure, human resources management, and technology with student systems. Primary activities in course presentation includes course registration, course unit presentation, academic student support and assessment. Primary activities in course development includes reflective, course development, production and distribution.

2.6 Gabriel's Value Chain for Higher Education.

Value Chain for Higher Education (Gabriel, 2005) model was developed based on the model developed by Van der Merwe and Cronje (2004) as discussed in the Figure shown 4 above, and other data from literature review, Gabriel (2005), proposed that; If we take the Higher Education as a service, some of the activities of Porter's value chain generic model like inbound and outbound logistics cannot be inclusively applied to the service industry. Figure 5 below shows, the HEI Gabriel, (2005) value chain model. The Gabriel model consist of five primary support activities referred as attributes and four supporting activities or attributes. The support attributes indicated in the Figure 5 are not discrete, as they are not similar to Porter's. Professional recruitment, modern tools and infrastructure, library with relevant books and after sales service are all supporting attributes.

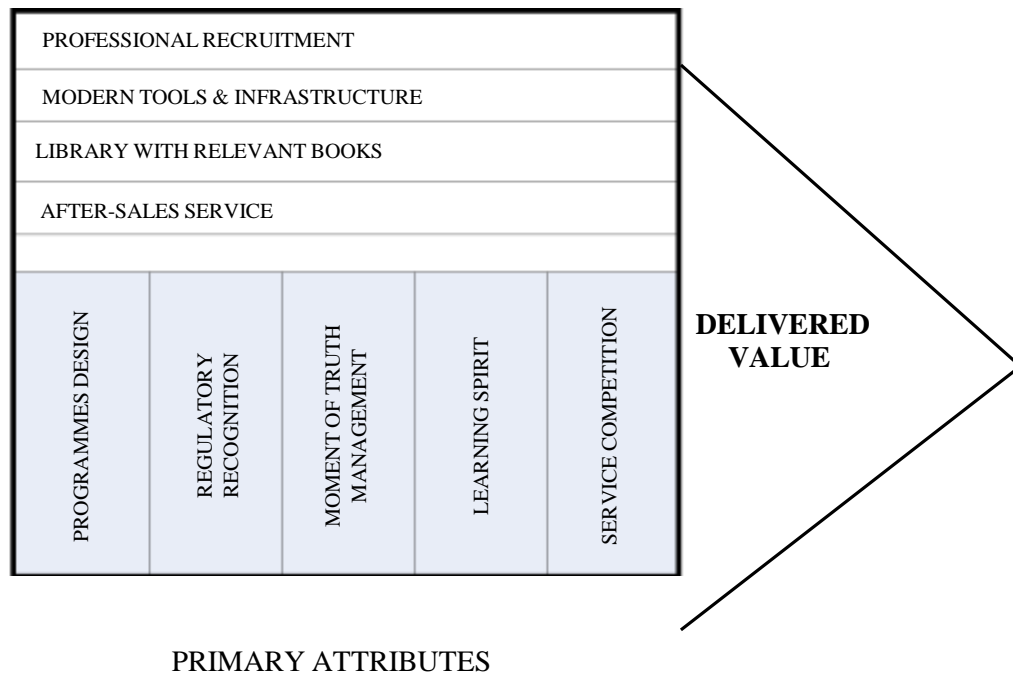


Figure 6: Value chain for higher education (Gabriel, 2005)

Primary attributes includes the programme design, regulatory recognition, moment of truth management, learning spirit and service competition. All the primary and support attributes leads to delivered value.

In conclusion from Sison *et al.*, (2000), HEIs value chain can be put in three major categories the pre- education which start with student recruitment, education with teaching and evaluation, and post-education which involves graduate placement and alumni support. Two generic value chains in HEIs namely, one centred on education, and the other centred on research. They are HEIs who do not do research, if they are not degree awarding. So these two value chains can be viewed as different in strategy but should always be incorporated and work together in institutions involved in both activities. Porter's value chain should always be used as principle guidelines in creating HEIs value chain as it is difficult to apply some attributes directly. One should start with identifying discrete value chain activities that add value to the end user.

3.0 Results and Discussion

This section presents and discusses modern and innovative methods of developing quality culture at institutions of higher learning value chain. An assessment of Monitronic Success College (MSC), a small private higher education institution accredited by the government accrediting agency of Namibia Qualifications Authority with an enrolment of about 2000 students and relatively large public higher education institution University of Namibia(UNAM) with an enrolment of about 19 000 students value chains were used.

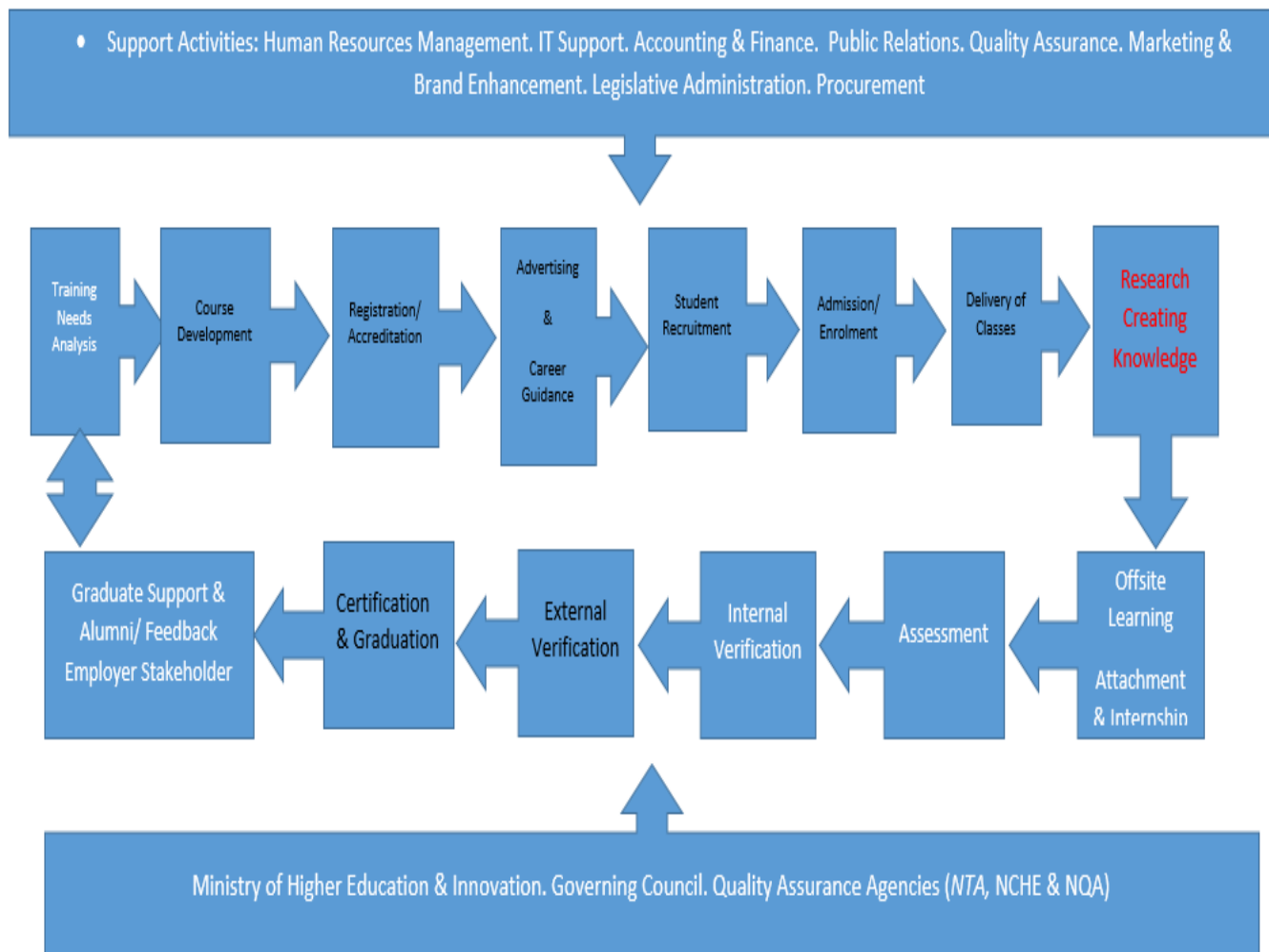
3.1 The DFN- Higher Education Value Chain

The results of reviewing documents at both the University of Namibia and Monitronic Success College, the research came up with the higher educational value Chain shown below in Fig 6.

The value chain consist of primary activities and support services. The support services include human resources management, Information Technology support, accounting and finance, marketing, brand enhancement and promotion, public relations, legislative administration and procurement and logistics management. Human resources management involves recruitment and selection of staff and teaching staff, appraisal and promotion of staff to professors, deans and other positions and most importantly it is involved in staff development. Staff development involves training and retraining staff in areas of facilitation, assessment and verification. Individual staff development supports those who want to progress in studies to obtain higher qualifications like master's degree and doctoral degree. Information technology involves the provision of learner management system, the student portal, accounting systems, lessons applications, and hardware and software maintenance to mention a few.

Legislative administration is usually dealt with by the institutional governing council which ensures that the legislation is complied with, among the legislation is the The National Council for Higher Education (NCHE) was established by Act of Parliament (Act No. 26 of 2003) to advise the government on issues related to higher education. The NQA Act of 1996, NTA –Vocational Education and Training Act 2008 and for UNAM, The University of Namibia (UNAM) was established by an Act of Parliament on August 31, 1992 as recommended by a Commission on Higher Education. Compliance with these Acts has been a subject of debate as the arguments are compliance with the acts versus the Institutional Autonomy.

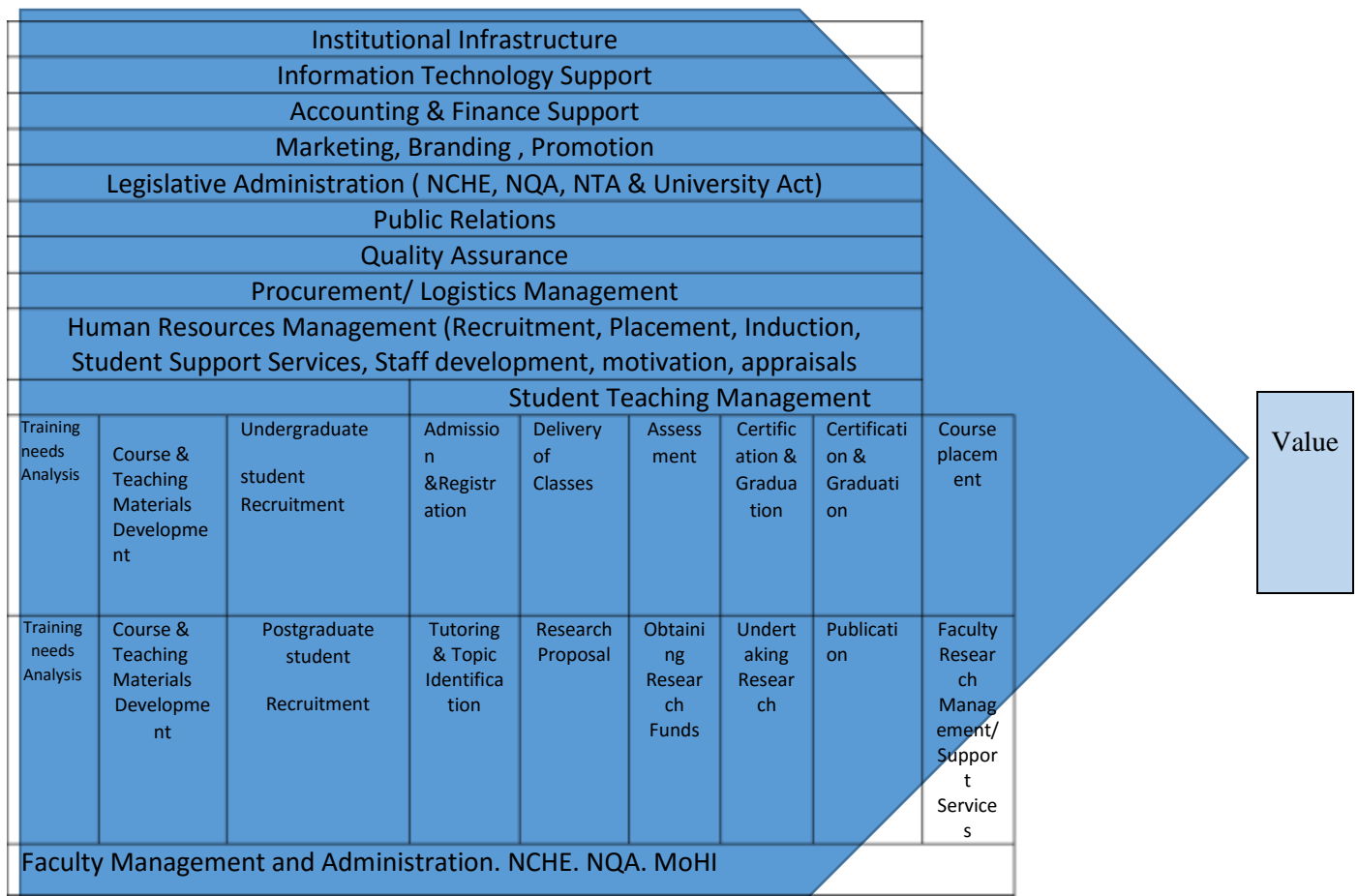
Figure 7 Cyclic Higher Education Institution Value Chain



The primary activities include before any other conduct training needs assessment, then move to course development which involves team work and stakeholder consultation. Stakeholders like alumni, students and employers were consulted in courses development. The employers also provided letters of support in terms of the courses content, structure and scope. Registration of the course on the National Qualification Framework (NQF) follows then accreditation of the programme. The current quality assurance agencies accrediting are Namibia Qualification Authority (NQA) and National Council of Higher Education (NCHE). Student recruitment is another activity which begin by informative advertising, then enlisting, then student selection. In Mature Age entry requirement, the prospective students should pass a selection aptitude test. Admission and registration including student induction. At this stage which other departments gives diagnostic tests in order to find the strengths and weaknesses of students and deal with them. Teaching and training are onsite and offsite. Onsite lecturers and tutors plan, schedule face to face classes. Off-site learning involves workplace visits, attachments and internships. Teaching and assessments are usually followed by internal and external verification.

With every aspect verified certification, graduation and graduate support ends the chain. The research component is embedded after the teaching and training activity but this is only for UNAM a degree awarding institution. Colleges who do not award degrees are not required by Quality assurance agencies to meet research activity requirements. All these activities are governed to a large extent by the Ministry of Higher Education and Innovation which appoints a university governing council. Other quality assurance agencies having a say include National Council of Higher Education (NCHE) and Namibia Qualification Authority (NQA). With a private institution it is an arm's length governance, with registration, accreditation and follow up audits being the main activities. The new trend is that all the institution has a quality assurance department responsible for implementing all the quality assurance policies and procedures. The value chain described above and presented in Fig 7 was developed into a higher education value chain model shown in Fig 8 below.

Fig 8 Dfn-Higher Educational Value Chain Model



The Daniel Fungayi Nyaungwa -Higher Educational Value Chain Model above is a modification of the Porter's 1985 Generic Value Chain Model. It consists of higher education secondary support activities involving the institutional infrastructure, information technology support, accounting and finance , legislation administration, public relations, quality assurance, procurement or logistics management and human resources management. The higher education pre-education core activities involves courses development, informative advertising and career guidance of both undergraduate and post graduate programmes. Student recruitment is followed by admission and registration with induction and some diagnostic tests as a tool for selection and teaching approach. Education Activity for undergraduate studies delivery of lessons, assessment, internal and external varication, certification and graduation follows. Post education activity will include graduate learner placement and alumni support. All this is overseen by student teaching administration and management including student support services. For post graduate which is not provided at MSC the value chain begins with advertising, recruitment , then tutoring and research topic identification, to research proposal , obtaining research funds, undertaking the research and publication. Faculty research management oversees student support services and administration.

Inbound logistics: they receive and store inputs. Distribution to production (i.e. goods and services) is according to need (research, investment, teaching, recruitment, admission, registration, research purposes, grants, etc.

In comparison to Porter's 1985 value chain model the DFN Higher Education Value Chain model explains; Operations: they are processes to transform inputs into finished goods and services, that is teaching and training, research, support counselling, tutoring, assessment, moderation, research supervision etc. Outbound logistics: storage and distribution of finished goods and services that is graduation, publications, placement, performance, records management and archiving etc. Marketing and sales: identification of needs of demanders and delivery generation that is advertising, brand enhancement, recruitment, technology and knowledge transfer, and research, development and innovation (RD&I). Service: post-delivery support to users of goods and services as service value that is academic support services, society services, alumni support, RD&I support).

3.2 Higher Education Institution (HEI) Value Chain Analysis Methods Quality Culture

3.2.1 Creating a Business Plan and Training Needs Analysis

Monitronic Success College (MSC) has a business plan which complies with NQA elements of the standard of accreditation. The components of the business plan includes statement of achievable, measurable goals and objectives. The goals and objectives link to national, regional economic, social, cultural and technological needs of populace approved by relevant stakeholders like the industry. The training needs analysis forms part of the business plan. The business plan also clearly list the courses offered in terms of title, duration, level and mode of delivery. The relevance of the courses are supported by a statement of feasibility quantified through recent needs assessments. Appropriate and adequate governance, operational and educational management and quality management structures are in place. Business plan is therefore used as an important tool in this stage for an individual study programme or entire HEI value chain.

3.2.2 The Design, Documentation and Review of Courses

After a needs assessment courses were designed using appropriate standard processes. To ensure quality and compliance the courses were aligned to the National Qualification Framework (NQF) in terms of standards to be achieved. Relevant stakeholders were consulted in designing and their views were incorporated in the design. A profile of learning outcomes were supported by appropriate pedagogical, human, physical and learning resources. The designed courses met national, regional and local economic, social, cultural technological international standards. The programmes description matches the standard of accreditation the courses which are ; the rationale , the outcomes, minimum entry requirements, mode, sequence and weighting of teaching and learning methodologies, resources required, assessment methodologies, learner progression and evaluation methods. Off-site learning and statements of articulation were integrated in the course design.

The review of the programs is carried periodically usually after 3 years. Review of the program is a popular method of maintaining and improving quality. MSC used two methods of collecting review information, firstly, at the end of each course or module students , lecturers and tutors evaluate the curriculum course in terms of its fitness for purpose, its feasibility in term of the course content and organization, student contribution, learning environment and teaching methods, learning, quality of delivery and assessment. The second method used is feedback from employers. The institution specifies steps in the course and materials development process for its departments. MSC and UNAM both adopts a course team approach and a system for quality assurance during the course design and development.

MSC introduced step-by-step course development processes and engages experts and stakeholders nationwide for the design and development of its courses and programmes as well as ensuring the quality of its teaching and learning materials. At MSC, the course development process begins from an idea of programme development followed by a market survey or needs analysis. Then produce a draft document, followed by stakeholder consultations. After the stakeholder consultations, the feedback for stakeholders is incorporated into the draft programme to produce a final document. The HEIs develop their study materials employing a course team approach. Each course team consists of faculty, external content experts, distance education specialists, and textbook designers. There is a continuous gathering of evidence of course effectiveness from students and a developed built-in mechanism of continuous course and study material improvement. The programmes and its course materials are reviewed every three years or as necessary by a review panel.

3.2.3 Registration and Accreditation

To ensure quality of developed programs, the HEIs applied to the NQA for the programs to be registered at the National Qualifications Framework (NQF). The NQA assessed whether the programs meet the national requirements. Application of accreditation of the programs followed with the NQA and NCHE. MSC had to also register with NTA. Registration and Accreditation of the programs ensured quality is part of a quality culture at the two HEIs.

3.2.4 Advertising and Career Guidance

HEIs contact annual career guidance fairs in order to attract best students to choose best careers. Career guidance involves assisting prospective students who are trying to choose a career. The recruitment office at MSC also administer self-assessment instruments or teach prospective students how to use self-administered tools, which assist them to learn about their interests, values, skills and personality type. The tools educate prospective students on how to explore occupations that suits them and make the best choice.

3.2.5 Student Recruitment and Registration

Student enrolment policy document tool with all the requirements and procedures was an important tool for consistence in terms of quality of recruits. The recruits should be at the required level of English proficiency, numeracy and aptitude for them to be able to go through the course. The policies should comply with the program registration document and national stand of accreditation. Aptitude test method is used mostly in selection of best students recruited direct from high school and also mature age entry or recognition of prior learning. Mature age entry students are not required to have passed high school but are supposed to be at least 25 years old and above, a pass in aptitude tests becomes the prerequisite.

3.2.6 Education Activity Teaching and Learning

Delivery of Classes are done in conventional format after student induction. Lecturers and Tutors mark student attendance registers, as well as lesson planning, scheduling and timetabling. Delivery sites are all the ones approved and accredited by quality assurance bodies. Student teacher evaluation is an important tool in ensuring and improving quality of delivery. During and at the end of each semester student teacher evaluations are conducted in order for professors, administrators, lecturers, academic advisors and student peers to assess the quality and progress made. MSC also use teacher student evaluation, as one of the appraisal instrument for the teaching staff. Traditionally, the teacher evaluations are conducted in a questionnaire paper form. The trend is however now moving towards online evaluations. Usually evaluations consist of numeric questions and open-ended questions. Off-site learning is also used as an important modern method of learning. Students are requires to go for an attachment or internship for a period of at least 3 months.

3.2.7 Research- Creating Knowledge

In research on six months or annual basis, the Master, MPhil and PhD students provide feedback on the progress include research publications, scientific equipment, sufficient research materials and whether the student requires subject specialist training. Faculty members also submit their annual survey which seeks to indicate how satisfied are they with a number of issues including their mix of research, teaching and community service, intellectual stimulation at work, type of research they are currently doing and many others.

3.2.8 Assessments

In assessment, quality assurance culture involves the assessment or examinations, internal moderation or verification, external moderation or verification. Assessment policies used include internal assessment, external assessment, and equal opportunity and appeals policies. These policies are evaluated and reviewed after every three years. The internal policy includes the conduct of examination which includes rules and regulations. MSC operates an Examination and Assessment Board for every course. This board is responsible for the production of the examination paper, marking guidelines, the awarding of course results and other related matters. A marking scheme is prepared and made available to all examiners to ensure consistency in marking. The HEIs reviews the process of student assessment and makes suggestions for improvement using external and internal subject matter experts. External examiners or assessors are used at course level, and an external advisor is appointed at award level.

3.2.9 Certification and Graduation

The HEIs hold graduation commencement, convocation and or invocation each year. These ceremonies serve as a celebration of academic achievement which encourages students to be focussed and committed to their studies with the day in mind throughout the study years. The graduation day is when the graduands receive their diploma or academic degree and become graduates.

3.2.3 Alumni and Employer Survey Method

The college and the university do an annual alumni survey as a method of soliciting information on the quality of education the students received and the level of preparation they got during their studies. The survey also assesses the quality of the program in terms of knowledge which covers maths, science, humanities, professional discipline, communication skills which covers oral communication, report writing and presentation skills. Interpersonal skills includes ability to work in teams, leadership skills, independent thinking, motivation, reliability and appreciation of ethical values. Management or leadership skills includes resource and time management skills, judgement and discipline and career opportunities it brings. Employer survey, the purpose of the employer survey is to obtain employer's input on the quality of education the HEI is producing. It also assesses the quality of the academic program also in terms of knowledge, communication skills, interpersonal skills as well as work skills. Work skills will include things like time management skills, judgement and discipline.

4.0 General Support Services Methods

Learner Records Policies: Document Archiving and Learner Records Learner records are kept in safe and confidential places. Electronic storage devices are backed up and kept at different site. The records are kept for more than 25 years without disposing them.

Staff Recruitment and Staff Development Policies: Leadership and staff development training programs is yet another among the methods that institutions of higher learning embrace in an effort to attain quality culture in education. Staff development programs include the developing teaching and assessment skills through accredited facilitation and assessment courses. Research and publishing skills seminars are conducted to enhance faculty research skills. Another modern method as discussed above with a purpose of assessing quality culture in institutions of learning is peer-in-class evaluation. Incorporating peer review into the course helps students in becoming better writers, readers, and collaborators. The use of peer review is therefore an essential tool as it assists in not only improving performance among the students, but also ensuring that the set national standards are met.

The popular methods of quality culture involves providing a wide range of opportunities for staff development training workshops, conducting evaluation research, introducing internal review processes, and inviting external audits and assessments. The most prevalent practice in quality culture has been facilitating training and provide professional development opportunities to faculty and staff, including part-time tutors. Initial induction and training, and continuous staff development opportunities for its salaried staff, academic staff and associate lecturers are provided. The training is in form of formal sessions, workshops, moderated online courses and seminars.

The university provides orientation programmes for course writers, tutors, and counsellors. Similarly, Monitronic Success College organise a series of workshops on course development for teachers. UNAM involves in international training workshops and conferences. Evaluation and monitoring of staff performance is another method to ensure the quality of education.

MSC monitors routine duties of its staff and also prepares a formal annual report that includes evaluation of staff performance by each section head in charge. The administration uses feedback from teachers and students to assess the quality of courses and teaching activities. MSC also evaluates tutor performance based on students' evaluation of their services and tutorials. It also implements a period of probation to all teaching staff joining the college. During the probation period, the head of departments carefully and continually monitor the work of probationers. UNAM evaluation system is rather extensive. It requests each unit to undertake self-assessment and self-monitoring. An institution-wide quality audit team, visits all departments and delivery sites to assess their quality assurance compliance. The top management of the institution is also involved in this evaluation process and examines the quality assurance report and provides feedback and action plans to all departments. The quality culture involves external experts, professors from international universities to review quality of programmes, courses, tutoring, and other services. MSC engages three main external quality assurance inputs namely the external assessor for course in development, administration systems and assessments.

4.1 Marketing, Promotion, Branding Enhancement and Public Relations

Marketing and promotional activities use best materials and advertising media which is used to enhance the brands. The promotional, communication trending media used includes facebook, twitter, linkedin and other social media which the especially the young people are using. In an effort to ensure that institutions of higher learning embrace modern and innovative methods of assessing quality culture in education, it is essential to ensure that among the expected outcomes include networking with different institutions of learning with mutual trust and confidence

4.2 Conclusions

There is a considerable pressure on HEIs for improvement in its performance and quality of graduates. Efforts to establish a quality culture at any HEI is hindered by the lack of an agreed model for quality management. This paper have made an attempt to provide a HEI value chain quality assurance model. If implemented the separation of support services and academic support services must not have a line drawn but shown interact. Through value chain analysis every HEI can develop and appropriate and effective Higher Education service model that addresses the multifarious elements of higher education. The organisational quality culture plays a vital role in the successful implementation of quality assurance strategy. The typical current culture in public higher education like UNAM is bureaucratic in nature, which is more prone to conflict than collaboration. To enhance quality, ideal organisation quality culture is one that embodies the 'learning communities' concept which can serve as the ideal to address the service, education and implementation aspects synergistically. The rise in the need for quality higher education and training needs innovation, in order to create the value for money.

The traditional methods and process includes external and internal review of programmes, policies and procedures. Review is achieved through a continuous programme, policies and procedure student and staff evaluation and appraisals as well as feedback from the industry. The method looks at employers' feedback and perspectives in looking at value added by a graduate employed.

In short these HEIs have established quality culture with detailed criteria especially for quality assurance areas such as programme/ course design and development, learner support, and assessment which are directly related to student learning. A great emphasis is also put on quality assurance in the areas of course/materials development, courses and their effectiveness, delivery of classes, assessment and internal and external verification system, student support services, and other educational services.

Future Research, can include how the quality of support services impact of primary core activities in quality culture. Other topics can include; An Assessment of Higher Education Value Chain Challenges and Constraints and Value Chain Analysis of Private Higher Education in Namibia.

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