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**DISTANCE EDUCATION FOR NATIONAL DEVELOPMENT:
THE CASE OF THE UNIVERSITY OF MAURITIUS**

THÈSE
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de la Maîtrise en Formation à Distance

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PREFACE

During the course of the dissertation, a lot of self-reflection occurred. There has been the realisation that though we can have the best resources, the best intention, the best climate, leadership acts as a catalyst for the change to occur. Leaders are the ones who press the “GO” button once all the resources have been mobilised. I also realised that working on such a dissertation, issues like politics, the race for power, recognition, personality clashes, and hidden agendas are intertwined.

The environment in which I was working sometimes made my work seem so pertinent and “at the right time and at the right moment” and at other times, just a waste of time or another piece of fancy work.

Being so ‘entrenched’ in the field, I was moving with the wave and could not remain insensitive to all that was happening around me. It was difficult to remain detached, when fuzzy issues - such as hidden agendas, influence of politics, issues that cannot be measured or demonstrated but still part and parcel of the reality we are discussing- were coming to the surface. Moreover, a lot of what I know remains undocumented, unofficial, as I am normally on the front seat when Distance Education (DE) is being discussed at the University of Mauritius, considering my position in the organisation.

However, at the end of the day, this dissertation further convinced me of how DE can a lever for national development, and how it can be the answer to many of the current woes the University of Mauritius and the country in general are facing.

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“The university has derived its legitimacy from a project built around knowledge, around knowing the world... . But the modern world is unknowable... we need, therefore, nothing short of jettisoning the whole way we have construed higher education ...and work out a new conception of education which starts from the understanding that the world is unknowable. We have to develop a form of higher education which allows for the continuing examination and construction of self, society and culture, including our ways of knowing and of understanding the world about us and of acting in it... [this] requires a revolution in the practices we term higher education”.

(Barnett in Coffield & Williamson, 1997:43)

EXECUTIVE SUMMARY

Knowledge has become an increasingly important determinant of the wealth of nations and access to knowledge, coupled with the ability to disseminate it, have become a major source of competitive advantage:

“Higher education can help developing countries use the economic transformation being brought by globalization to leapfrog stages of development.”

(Bloom, 2002: 2)

According to Porter (1990), for nations to be competitive, it is important to have a highly performing higher education. Education is a great catalyst for national development, especially when competing in a globalised world where others have reached higher stages of development, as having a richer heritage of higher education, research and development. “Catching up” or rather ‘coping’ with such giants is impossible if we keep thinking in a linear and traditional way. It calls for an overhauling of old paradigms so as to cope with the new issues, through innovative solutions. In the context of higher education, we need to move beyond the traditional audience (eg, schools leavers) and address emerging niches: those who used to be rejected because they did not meet the minimum entry requirements but who still need to be trained to meet the challenges of the global economy, those who require retraining to recycle themselves, and those who need further specialisation, amongst others.

However, these cannot be tackled simply by increasing enrolment, as the resources of tertiary institutions are already strained and overstretched. There are also budget cuts looming all the time above local private Tertiary Education Institutions (TEIs).

A 1986 World Bank report did argue that

“[...] social rates of return for higher education in developing countries were on average 13 per cent lower than the returns from basic education [...] a more recent review of 98 countries from 1960-1997 found that the typical estimate of the rate of return from primary schooling was 18.9 per cent while for tertiary education, the return was just 10.8 per cent.”

(Kapur & Crowley, 2008:11)

However, there is growing realisation that the

“[...] conventional estimates of the returns to education do not accurately reflect the social value added to tertiary education, including job creation, good economic and political governance, increased entrepreneurship and increased intergenerational mobility.”

(Bloom, Canning & Chan 2006 in Kapur & Crowley, 2008:12)

Higher education is also linked with democracy, egalitarianism, self-reliance, social and cultural change (Kapur & Crowley, 2008: 12; 15). With the growth of tertiary education comes pressure from the demand side.

According to Sir John Daniel,

“[...] in order to sustain even the current level of participation in higher education globally, an average of one new major institution would need to be created somewhere in the world each week for the next thirty years.”

(Hanna, 2003:26)

This scenario is of course far-fetched.

What has been the situation at the University of Mauritius (UoM)? We see that government's recurrent grant per student has in fact been going down over the years; however, UoM's student population has been increasing steadily. This implies though there is pressure to increase access, the UoM is not being given the means to

accommodate more students. In a nutshell, it is being asked to do more with less, while promoting/maintaining quality.

Can Distance Education (DE)¹ be part of the solution to the above dilemma? In fact, as far as 1991, Sir John Daniel had recommended the introduction of DE, through a system of consortium of the Tertiary Education Institutions (Daniel, 1989). Moreover, the internal constraints, external pressures, the threats and weaknesses, as we discuss in Chapters 3 and 4, are all present to make the environment conducive for the introduction of distance education on a larger scale.

We identify in particular the following areas where DE can be the answer to the current problems of access, cost and quality:

1. It makes the Iron Triangle² flexible (reduce cost, increase access without compromising quality)
2. It helps respond to the new breed of lifelong learners, the autonomous learners, who through IT/E-learning, become part and parcel of the Knowledge Society.
3. It provides flexibility to the organisation and breeds an entrepreneurial culture on the peripheral activities, making DE more acceptable.
4. Since it targets working /part-time students, it contributes to the creation of knowledge workers, helps in generating funds, hence reducing dependence on government funding.
5. It hence contributes to national development, whilst contributing to the organisational development and personal and professional growth of learners.

In this dissertation, we look in depth at the pressures, internal and external, that the UoM faces and how DE can help the UoM meet its mission towards contributing to national development. DE, in many ways, involves more than just a new way of teaching and learning; it implies a paradigm shift that implies a change in mind-set, an entrepreneurial

¹ The terms DE, DEOL, elearning are being used interchangeably in this dissertation; furthermore distance education is being used in a generic way to include e-learning.

² Sir Jonh Daniel's Iron Triangle at <http://www.col.org/resources/speeches/2009presentation/Pages/2009-MarAprEdition.aspx>

mind, and an innovative approach. However, the UoM is a traditional university with one Centre³ (Centre for Innovative and Lifelong Learning) involved in distance/online learning, hence making it a bi-modal university. We argue that the “innovation” and paradigm shift comes through this Centre, so that changes to the periphery create limited disturbance to make the change more acceptable.

DE, an innovative way of disseminating knowledge, when resources are scarce, demand is high, can be a winning formula for both the institution and the country.

³ Prior to 2014, there were two centres involved in DE and online learning: The Centre for Professional Development and Lifelong Learning (CPDL) and the Virtual Centre for Innovative Learning Technologies (VCILT). In 2014, the centres were merged into Centre for Innovative and Lifelong Learning

CHAPTER 1: THE EDUCATION SECTOR IN MAURITIUS: AN OVERVIEW

“Education is the livelihood of any community and as such is critical to social, economic, cultural, technological and individual development.”

(ADEA, 2002:37)

“The survival of a healthy and democratic society depends on whether the education system can respond to this pressure [increase access to education] quickly and adequately.”

(ADEA, 2002: 39)

1.1 INTRODUCTION

Since this dissertation is about Mauritius, it was deemed necessary to provide a chapter to the readers, on the country, its population and the educational system.

Mauritius is an island found in the Indian Ocean. It consists of Mauritius, Rodrigues and several other small islands like Agalega. Discovered by the Arabs and then the Portuguese in the early 16th Century, Mauritius was colonised by the Dutch⁴ and French successively in the 18th century and then British in the 19th Century, after the Napoleonic Wars of 1810. It gained its Independence in 1968 and then acceded to the status of Republic within the Commonwealth in 1992⁵. The country has a Westminster type of Parliamentary government and elections are held every 5 years.

The official language is English, but French is widely spoken. This is a direct legacy of the past colonial powers, mainly French and British. As such, most Mauritians are bilingual and those of Asian Origin (China, and India) also speak or at least understand a third language (Hindi, Urdu, Tamil, Telegu, Mandarin, etc.). Creole (French-based) is the mother tongue of most Mauritians.

The population, in 2014, was estimated at 1.26 million, and comprises of Indo-Mauritians, and General Population, i.e., people of mixed European and African origin, and Sino-Mauritians. There are subdivisions within each group: religious (Indo-Mauritians are either Hindus, Muslims, and belong further to other subgroups, based on their castes). Mauritius is thus often referred as a multi-pot, where the major religions of the World coexist. There is relative harmony amongst the groups though the country has known two riots in 1968 and 1999 that revealed the fragile social fabric and how there was more tolerance than acceptance of differences.

There is relatively good political and economic stability; Mauritius has moved from a mono-crop country, highly dependent on the sugar industry, to one that has diversified its economy,

⁴ Dutch colonised the island twice: 1598-1637 and 1638-1710

⁵ For a résumé of Mauritian History, there is a very succinct page on Wikipedia at http://en.wikipedia.org/wiki/History_of_Mauritius

by having other economic pillars: services sector (including Information and Communication Technologies, tourist industry, manufacturing industry^{6,7}). Having no natural resources, Mauritius places the human capital and education at the very centre of its development and survival in the global economy⁸.

The White Paper: Pre-primary, Primary and Secondary, published in 1997, by the Ministry of Education and Human Resource Development, (MEHRD) of Mauritius stressed that the country's economic prosperity and future depends on the knowledge, skills, versatility and educability of the people, with all successive governments putting education as one of their top priorities.

This is well summarised in the words of the then Minister of Education and Human Resource in 2011,

“Quality education is a fundamental right for all children irrespective of their socio-economic status. Consequently, the present Government of Mauritius has decided to take up, with relentless determination and renewed energy, the mission of providing quality education tall, especially in a situation where the competitiveness of our economy is being increasingly challenged by the erosion of trade preferences. In fact today, there is a national consensus for fundamental reforms in our education sector, with an overall emphasis on quality education for all”

(Bah-Lalya (2006:3)

With such a social priority, the educational scene is characterised by acute competition. The situation in the Mauritian education sector is even more complex because of the multicultural audience it has to cater for. Since he/she who has education, has power to access higher social and economic levels, different ethnic groups will compete for education as a means to

⁶ http://www.gesci.org/assets/files/ALICT_Mauritius_Sit.pdf

⁷ http://www.mikif.com/Presentation/Presentation_Minister.pdf

⁸ Education & Human Resources Strategy Plan 2008-2020 (2009), Ministry of Education, Culture and Human Resources. <http://www.gov.mu/portal/goc/educationsite/file/EHRSP%202008-2020.pdf>

climb the social ladder and Governments have to create educational opportunities for all, as otherwise, conflicts may arise (MEHRD, 1997).

Therefore, Education is very high on the agenda of all governments and is a highly sensitive issue among the population. Table 1.1 gives a snapshot of Mauritius in 2004 and 2014.

Table 1.1: A Snapshot on Mauritius in 2004 and 2014

	2004	2014
Population	1,233,400	1,259,838
Population Density (per km ²)	607	618
Age Composition (%):		
• Under 15 years	24.8	20.7
• 15-64 years	68.7	70.8
• 65 years and above	6.5	8.5
Crude birth rate	15.6	10.9
Gross National Income per capita at market prices in Rupees (Rs)	141, 500	301,521
Unemployment rate (%)	8.5	7.8
Inflation (%)	4.7	3.2
<u>Education (nb)</u>		
• Preprimary	37,483	31,419
• Primary	126,226	108,853
• Secondary – Academic	105,988	113,872
• Secondary- Prevocational	8,488	10,437
• Vocational and Technical Training	7,061	10,351
• Post-Secondary (UoM, UTM, MGI, MIE, Institute of Health)	17,856	27,650
Public Expenditure on Education as % of Total Public Expenditure	15.7	13.0

(Source: Central Statistics Office Website⁹)

⁹ <http://statsmauritius.gov.mu/>
<http://statsmauritius.govmu.org>

[Accessed on 25 March 2014

Address as from 2015:

1.2 ORGANISATION OF THE MAURITIAN EDUCATION SECTOR (PRE-TERTIARY)

Pre-primary Sector: 3-5 years

At the pre-primary level, Gross Enrolment Ratio (pre-primary enrolment as a percentage of population aged 4-5) was 98% in 2013. This implies that almost all those in the age group 3-5 years old are schooled.

Primary Sector: 5-10 years

Primary schools are either state-run or private: Primary Schools are mostly run by the Government, and around a quarter is run by the Roman Catholic Education Authority, the Hindu Education Authority and private non-aided schools. Gross. After the 6-year primary schooling, students sit for the Certificate of Primary Education (CPE) which is a highly competitive examination to get the best secondary schools. The CPE is often referred to as the “*rat-race*” competition (Bah Lalya, 2006: 23). Those who pass the CPE exams join a secondary school and those who fail, join Prevocational Education. The Gross Enrolment Ratio (primary enrolment as a percentage of the population aged 6 to 11 years) is 98% in 2013. There are also unfortunately many dropouts after the CPE level. Indeed, Bah Lalya (2006) whilst discussing the scores at the Certificate in Primary Education draws attention to the “*U-shaped*” instead of the expected normal bell-shaped distribution associated with the distribution of intelligence in the population.” The system’s U-shaped “*characterises an important inequity in learning pupil achievement....are biased towards a highly academic approach that does not recognize the barriers to learning faced by the majority of pupils*” (ME&HR, 2012, p:28).

Secondary and Pre-vocational Education: 11-17+ years

School is compulsory up to 16 years. At secondary level, students sit for the Cambridge School Certificate (SC, Ordinary level exams) after 5 years and then the Cambridge Higher School Certificate (HSC, Advanced level exams) after 2 years. The Gross Enrolment Ratio for people aged 12-19 was 71% in 2013.

1.3 ORGANISATION OF THE MAURITIAN EDUCATION SECTOR (TERTIARY AND POST SECONDARY LEVELS)

Tertiary/Post-secondary

Students who complete the full secondary schooling, that is, up to Higher School Certificate/Advanced level exams, may decide to go for tertiary education abroad or in local institutions or follow courses by distance education mode (either directly with overseas institutions or through the local agents). Some also start work. Some students resume their higher studies after some years of work experience. Gross tertiary enrolment rate in 2012 was 46.6 % ¹⁰.

Local institutions involved in the tertiary level are:

- The University of Mauritius¹¹, (UoM) created in 1968, is involved in teaching and learning and has six faculties, and two centres (2014). The two biggest Faculties are the Faculties of Engineering and Law & Management. The UoM is the major supplier of tertiary education locally. Being a degree- awarding body, the UoM also has affiliated institutions (such as the Mauritius Institute of Education (MIE); Mahatma Gandhi Institute (MGI); Sir S Ramgoolam Medical College (SSR MC). Programmes offered include postgraduate (Masters, PhDs), Degrees, Diplomas and Certificates. Until 2001, the UoM was the only public university of Mauritius.
- The University of Technology of Mauritius¹² (UTM) was set up in 2001. It is the second University and offers Masters and Degrees. It has three schools: School of Innovative Technologies and Engineering, School of Business Management and Finance and School of Sustainable Development and Tourism.
- The Mauritius Institute of Education¹³ (MIE), founded in 1973, is mainly responsible for teacher training (primary and secondary) and research in education. It offers programmes ranging from Masters in Education to Advanced Certificates. Some

¹⁰ <http://statsmauritius.govmu.org/English/Publications/Pages/Education-Statistics-Year-2013.aspx>

¹¹ <http://www.uom.ac.mu/>

¹² <http://www.utm.ac.mu/>

¹³ <http://www.mieonline.org/home/>

programmes are run in collaboration with overseas institutions. MIE is affiliated with the UoM for the award of some of its degree programmes.

- The Mahatma Gandhi Institute¹⁴ (MGI), created in 1970, is a joint venture of the Government of Mauritius and the Government of India to promote “*education and culture in general with emphasis on Indian culture and traditions*” (TEC, 2002a). It offers both formal courses (PhD, Masters, Degrees, Diplomas/ Certificates) as well non-formal courses. Some of the awards (Degrees, etc) are under the purview of the UoM.
- The Mauritius College of the Air¹⁵ (MCA), was set up in 1971, with the objective to “*promote education, arts, science and culture generally through mass media and distance education methods*”¹⁶. MCA runs some programmes in collaboration with overseas institutions such as the Amity University, the University of Madras, and the Indira Gandhi National Open University. Some students also follow non-formal courses. The MCA has a Distance Education Unit. The MCA became the Open University of Mauritius in 2013, and is focussed on distance education programmes, though there were some full time courses with lectures offered for the July 2014 intake.
- The Industrial and Vocational Training Board¹⁷ (IVTB), set up in 1988, promotes vocational education and training with the purpose of supplying a properly trained workforce for the industrial, services and domestic sectors. It runs Higher National Diplomas and National Trade Certification (TEC, 2002, 2002a). The IVTB was reorganised in 2009 and is now known as the Mauritius Institute of Training and Development (MITD).
- The Fashion and Design Institute¹⁸ (FDI), set up in 2008, runs fashion/textile related programmes at tertiary levels.

¹⁴ <http://mgi.intnet.mu/home.html>

¹⁵ <http://www.mca.ac.mu/>

¹⁶ <http://www.mca.ac.mu/mssnstmt.htm>

¹⁷ <http://www.mitd.mu/>

¹⁸ http://statsmauritius.gov.mu/English/Documents/digest/digest_edu2013.pdf

- The Université des Mascareignes¹⁹ (UDM) set up in 2012, (merge of Swami Dayanand Institute of Management and ex Institut Supérieur de Technologie) with the primary objective of providing an education of international standard for students to operate at middle and higher levels in the services and industrial sectors of the Mauritian economy.
- The Mauritius Institute of Health²⁰ (MIH), which started training activities in 1982, offers specialised programmes for medical and paramedical personnel, both at the regional and local levels; some programmes are classified as tertiary level training (TEC, 2002).
- Private Providers/Overseas Distance Education: Increasingly, students are turning to overseas providers of tertiary education such as the University of South Africa (UNISA) and Université de Poitiers. Some programmes are run by distance education, where the local institutions act as study centres (assist with enrolment, provide tutorials, and offer library facilities). Among these local institutions, we have the Charles Telfair Institute²¹, and the Mauritius Chamber of Commerce and Industry²².
- Overseas: In 2012, there were 9,460 ²³students who were studying abroad (representing an almost four-fold increase from 1999, when the figure was 2,424). The most popular countries are Reunion/France, UK and Australia.

Table 1.2 illustrates the evolution of the different sectors of the educational landscape (pre-primary to tertiary) in 2004 and 2013, in terms of population size and Table 1.3 provides an overview of Government Recurrent Expenditure on Education by Sector, in 2001 and 2011.

¹⁹ http://statsmauritius.gov.mu/English/Documents/digest/digest_edu2013.pdf

²⁰ http://statsmauritius.gov.mu/English/Documents/digest/digest_edu2013.pdf

²¹ <http://www.telfair.ac.mu/>

²² <http://www.etudes-superieures.org/cms/>

²³ http://statsmauritius.gov.mu/English/Documents/digest/digest_edu2013.pdf

Table 1.2: Snapshot of Evolution of Education sectors, Sector-wise: 2004 and 2013

	Pre-primary	Primary	Secondary (General and Prevocational)	Main Post Secondary						Distance Education/ Private Providers ²⁴	Mauritians Studying abroad
				UoM	UTM	MIE	MGI	MCA/ OUM	FDI		
2004	37,483	126,226	114, 476	6,394	1,183	2,230	421	157	-	6,846	7,515
2013	31,419	108,853	124,420	11,318	3,727	3,732	566	541	179	18,603	9,460
The total enrolment at tertiary level, both locally and overseas was 49,625 in December 2012.											

(Source: Central Statistics Office Website http://statsmauritius.gov.mu/English/Documents/digest/digest_edu2013.pdf)

²⁴ Private Post Secondary Educational Institutions

Table 1.3: Government Recurrent Expenditure on Education by Sector, 2001 and 2013

Expenditure Rs (mn)	2001 - 2002		2013	
	Rs	%	Rs	%
Ministry of Education & Human Resources	3,948.9	96.0	11,780.2	86.7
• Pre-primary	59.2	1.5	201.2	1.5
• Primary	1,255.8	31.8	3,522.4	25.9
• Secondary	1,575.6	39.9	6,941.8	51.1
• Technical & Vocational	75.0	1.9	395.4	2.9
• Other* + Special Needs	343.6	8.7	719.4	5.3
Rodrigues Island			22.3	1.6
Ministry of Tertiary Education			714.6	5.3
• Post-Secondary	639.7	16.2	714.6	5.3
Other Ministries	164.7	4.0	836.7	6.4
Total	4,113.6	100.0		100.0

*Includes Mauritius Institute of Education (MIE), Conservatoire de Musique Francois Mitterrand, Human Resource Development Council (HRDC), National Productivity and Competitiveness Council (NPCC), Mauritius Qualifications Authority (MQA), Rajiv Gandhi Science Centre & World Hindi Secretariat (<http://statsmauritius.gov.mu/>)

(Source: <http://ncb.intnet.mu/meduhrd.htm>)

It has to be noted that following the General Elections of 2010, a new Ministry was created: the Ministry of Tertiary Education, Science, Research and Technology. It showed the commitment of the Government to give a new thrust to the tertiary education sector, by having a dedicated Ministry. One of the slogans of the Government in place was “One graduate per family”. It has to be noted that following the December 2014

election, there is only one Ministry for the education portfolio: Ministry of Education and Human Resources, Tertiary Education and Scientific Research.

From Table 1.2, the pyramidal, elitist type of education becomes more obvious. Several reports by the Ministry of Education have highlighted the limits of our educational system. For instance, according to the 1997 White Paper, Pre-primary, Primary & Secondary Education, it is argued that the system has not undergone reform to respond to new development paradigms, and, though it has assisted the first phase of industrialisation, it is proving inadequate to address new needs such as increased access to secondary and tertiary levels. This in turn can cause social crisis because it can engender inequalities.

The 2001 Report “Ending the Rat Race in Primary Education and Breaking Admission Bottleneck at Secondary level, the Way Forward” highlighted the acute and unhealthy competition during the final year at Primary level to enter secondary education which was hampering the holistic development of the child.²⁵

The 2003 Report “Quality Education for All” described the school as a place where there is rote learning, with out-dated programmes that are not attuned to local realities, with acute competition to enter secondary level, with no guarantee of one being able to secure a seat after so many years of schooling.

One landmark of the 2001 Reform was the abolition of ranking at the Certificate of Primary Education- CPE. In 2004, the Education Act was also amended to make schooling compulsory up to the age 16²⁶. However, some pessimists also argue that the ranking has been replaced by grading and cut-throat competition has thus not been removed.

These changes have ripple effects on the tertiary education sector, implying more would now exit at secondary level and more would seek access to tertiary education. What we

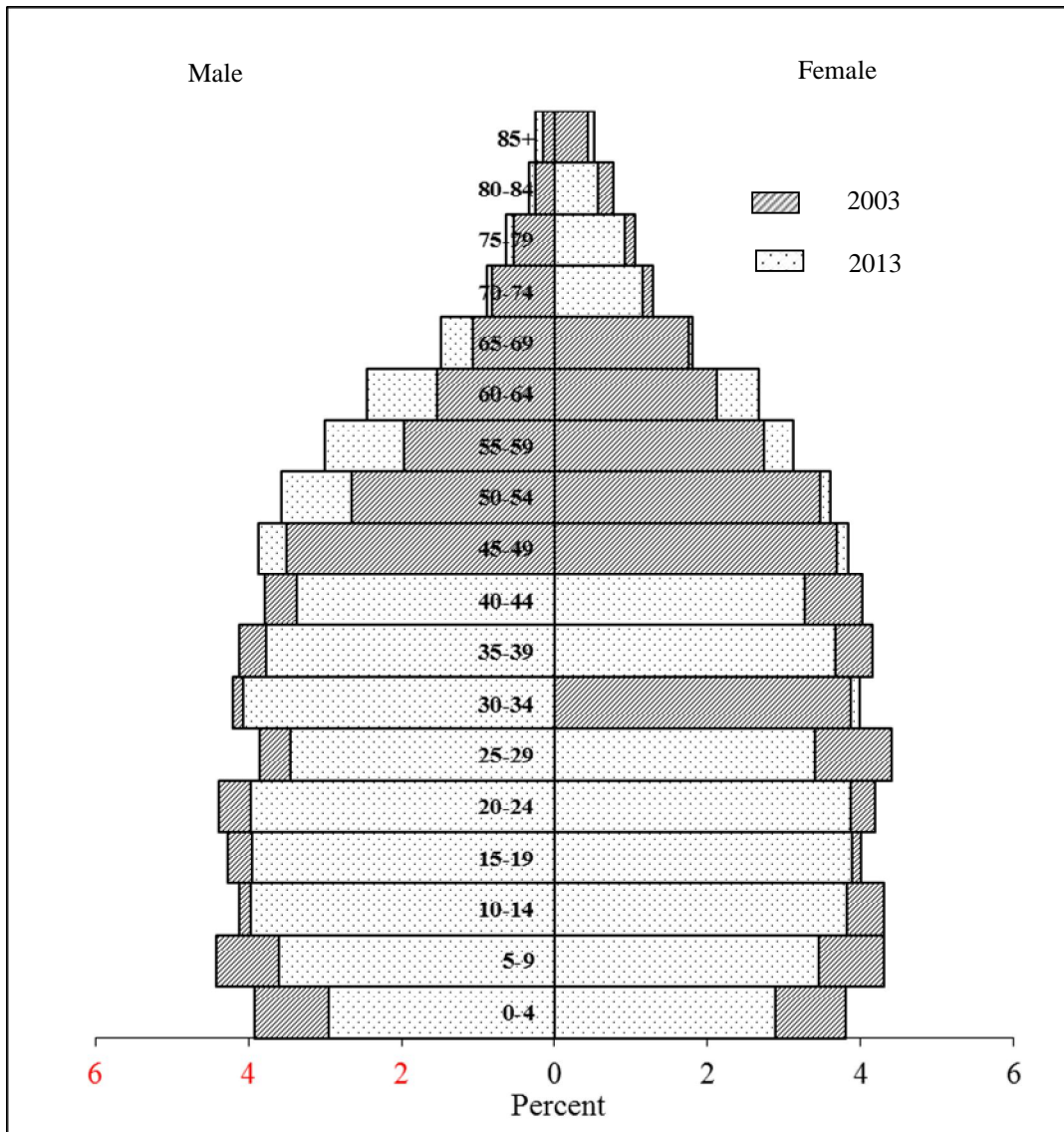
²⁵ <http://www.adeanet.org/adeaPortal/adea/wgesa/Testwgesa/Copy%20of%20PR-Mauritius%20Report-edited-Oct17.pdf>

²⁶ http://www.gov.mu/portal/site/Mainhomepage/menuitem.a42b24128104d9845dabddd154508a0c/?content_id=f13e036cf1f2f010V.gnVCM1000000a04a8c0RCRD

notice from Table 1.2 is that the population attending UoM is as important as those attending overseas universities and following programmes offered locally by overseas DE providers. This can be interpreted as a sign that the needs are not being met by local Tertiary Education Institutions (TEIs), hence the need for students to look for alternative providers.

Moreover as per the population pyramid, 2003 and 2013 (Figure 1.1), there is an increasingly ageing population, compounding the problem on the demand side, for higher education even further. There are more secondary children who are looking for opportunities for higher education; with an ageing population, there is a new category of learners asking for opportunities for retraining, second chance, and who will demand a whole new set of pedagogical models given their professional and family constraints.

Figure 1.1 - Population pyramid – Republic of Mauritius, 2003 & 2013



Source: Central Statistics Office:
<http://statsmauritius.gov.mu/English/StatsbySubj/Pages/populationyr13.aspx> [Accessed on 25 March 2014]

The population pyramid has been interpreted as follows:

- the shrinking of the base of the pyramid due to falling fertility;
- the thickening of the upper body of the pyramid indicating an increase in expectation of life;
- the relatively longer bars on the female side of the pyramid around its apex indicating the predominance of females among the elderly.

CHAPTER 2: THE CHANGING AND CHALLENGING HIGHER EDUCATIONAL SCENE

“There is nothing permanent except change”.

(Heraclitus, 540-475BC).

“A. Toffler has suggested that for significant change to occur in developed organizations, three conditions must be present: “First, there must be enormous external pressures. Second, there must be people inside who are strongly dissatisfied with the existing order. And third, there must be a coherent alternative embodied in a plan, a model or a vision.”

(Hanna, 2003:33)

“In today’s uncertain global economy, the continuing acknowledgement that education is critical to long-term economic prosperity seems to be the one constant.”

(Deloitte, 2011:2)

“Higher education faces problems throughout the world; Universities are underfunded, raising worries about quality; student support is inadequate; the proportion of students from disadvantaged backgrounds is lamentably small and the financing of universities in many countries is regressive since the money comes from general taxation but the major beneficiaries are from better –off backgrounds.”

(Professor Nicolas Barr, LSE, 2005)

2.0 THE CONTEXT

In this chapter, we analyse the term “change” as a concept and the external and international factors that prompt change. These factors will then be transposed to the Higher Educational context: the changing context it operates in and the challenges it faces, forcing it to find innovative solutions. In the chapters that follow, we will then try to see how far the concepts apply to the Mauritian Higher Educational scene, more specifically to the University of Mauritius (UoM).

2.1 CHANGE, THE NEW CONSTANT

Today, more than ever, the axiom, “adapt or perish” is pertinent. With globalisation, competition from all sides, with the advent of newer, better and cheaper products, we are called upon to do more with less and do it better and fast. Competition is so fierce that those who cannot keep pace are soon out of the ‘market place’. Moreover, firms soon notice that they have to cope with an unknown and changeable “future”. In fact, with “change” now the new “constant factor”, organisations in such a setting have to be proactive and on the avant-garde so as to ensure that they are properly equipped to face the unpredictable future. Good planning decisions are no longer about predicting the future: ‘good decisions’ imply making sure one can adapt to any or all circumstances, that one is flexible enough to use threats and challenges constructively to become stronger and continuously innovate, to adapt and to manage multiple future scenarios (Paton and McCalman, 2000:7, in Boolaky & Gungaphul, 2005).

2.2 FACTORS THAT PROMPT CHANGE

There are internal and external factors that prompt organisations to change and reorganise itself. Before, making the link with higher education, we shall describe briefly these factors, as per table below:

Table 2.1: External and Internal Factors that Prompt Change

External factors	Internal Factors
1. Costumers	1. Need to improve technology
2. Competitors	2. Need to enhance efficiency
3. Concept of “change”	3. Need to decrease cost
4. Changing industry or market conditions	4. Need to define or redefine strategic focus
5. Governmental regulations/political pressures	
6. Social and Economic factors/pressure groups	

(Source: Boolaky & Gungaphul, Unit 2, 2005: 14, 18)

External Factors

1. Customers: The customer is seen as sovereign and organisations try their best to meet their needs and demands. Customers now have better access to information, and can now have the power to dictate the rules. (Hammer & Champy, 1993:20). The organisation has the obligation to meet those demands or else they lose their customers.
2. Competitors: Competition can act as a catalyst for organisations to reengineer.
3. Change: Hammer & Champy (1993:23) consider that the very concept of change has changed now, becoming a new constant and it calls for companies to look in many directions at once.
4. Changing industry or market conditions: Changes in the market or the industry imply that organisations must keep pace to survive.
5. Governmental regulations/political pressures: Changes in government regulations or political pressures might compel organisations to respond. Such responses may be minor adjustments or could entail a revamping of an entire business process.
6. Other external factors include social and economic pressures and pressure groups.

The implications of the above points can be summarised as follows:

- Changes of the variables on the market have to be taken on board to be able to survive and thrive. With new, dynamic and innovative players on the market, the rules of the game change and organisations have to be ready to adapt.
- Pressures from government can be real catalyst of change; pressure from below also prompts change.
- What is thus needed is a highly flexible and responsive organisation.
- Someone has to be centrally responsible for the change to occur and “change” cannot just be left to anybody in the organisation (Hammer & Champy, 1993:28).
- The organisation has to be result-oriented.

Internal Factors

1. Need to improve technology: To compete effectively on the market, organisations have to be “technology-enabled” in order to survive, grow and prosper.
6. Need to enhance efficiency: With enhanced competition and economic slowdown, organisations are forced to find ways and means to become more efficient and productive.
7. Need to decrease cost: To survive, organisations have to look for ways to bring down their costs in order to continue to operate.
8. Need to define or redefine strategic focus: Organisations have to be clear where they want to go with the changes.

2.3 CHANGE AND THE HIGHER EDUCATION CONTEXT

We now translate the above external and internal factors that prompt change to the higher education landscape. Universities too are facing many upheavals, internal and external, that call for change. Normally, when we talk about need to change, we tend to think of a more business-type context. Public organisations are normally considered to operate in a relatively stable environment, and hence cannot, and also are not willing to change the status quo. Most Universities, being mostly public-funded and having their own individualistic culture, are seen as very resistant to change.

Louise Upton (Deloitte, 2011:1) argues that

“Higher education institutions are in the midst of a perfect storm. Government funding is declining, market conditions have reduced the value of endowments, private backing is on the wane and costs are going up. Yet, these combined challenges create a unique opportunity for transformation. Education institutions willing to think laterally can position themselves to outperform into the future.”

According to Coffield & Williamson, 1997, “universities have not responded and are not responding, with sufficient speed or at an appropriate level, to the technological, economic, social and demographic changes [...] that to help people learn to cope with change, the universities themselves have to change” (1997: 2, 4-5). Thus, even if there is resistance to change, there is an imperative to change.

2.3.1. External Forces

As discussed previously, there are external “winds of change” that are forcing organisations to change. We apply these ‘forces’ to the Higher Educational scene.

2.3.1.1 Customers and Changing Industry or Market Conditions

Berquist (1992) in Latchem & Hanna, (2001) argues that the following cultures are present in universities and colleges in varying mix and degree: Managerial culture, Development culture, Negotiating culture, Collegial culture; but maybe what is also needed is the Entrepreneurial culture:

“[...] a culture which values proactivity and capacity to change and to change quickly, to be opportunistic and responsive to market forces, to connect with and generate support from external constituencies, and to introduce new ideas, programmes, delivery mechanisms, goals and purposes. Such a culture takes as given the necessity of change and greater self-sufficiency and sets out to seize the opportunities that come from building linkages across institutional boundaries, disciplines, constituencies and regions.”

(Latchem & Hanna, 2001:33)

To Latchem & Hanna, unless organisations see they are operating in an entrepreneurial culture, they will see their customers go elsewhere and “*organizations that continually neglect to respond to environmental imperatives are candidates for extinction*” (Latchem & Hanna, 2001:36).

Therefore, an entrepreneurial culture assumes a responsiveness to the environment that includes the consumers/clients and in the case of the University, students/learners. Universities are increasingly being asked to be accountable and to adopt the “business model with students more demanding who seek quality, no more in terms of ‘*size of libraries, staff to student ratios [...] but in terms of customer satisfaction*” (Kovel –Jarboe, 2000)²⁷.

According to Porter²⁸, the more demanding the customers, the greater the pressure facing firms to improve through innovative ways. What if the organisation is resistant to change? Higher education institutions enjoy a feeling of satisfaction as echoed in the following quote:

“Until recently, the need for customer focus was not obvious to many of our institutions. Their culture of complacency is now being seriously challenged by governments, employers and the wider community”

(Latchem & Hanna, 2001:16).

Globalisation, it is argued, can mean either more new students or, the other side of the coin, loss of international and local students; therefore, globalisation is both a threat or/and an opportunity (Kovel-Jarboe, 2000). She also argues that those who are able to capitalise on demographic changes will be able to find new markets for their programmes. One such new markets /niches is working students, more so since lifelong learning is now a must to remain employable and also with ageing population, there is a greying of the student population.

It is indeed argued that universities must help people and organisations in modern societies to learn their way out’ of the problems they face. They must position themselves to do so and be engaged directly and creatively with the problems of the society which sustains them

²⁷ <http://horizon.unc.edu/projects/issues/papers/kovel.asp>.

²⁸ Porter (2014a) http://www.valuebasedmanagement.net/methods_porter_diamond_model.html

whereby lifelong learning is seen as ‘*the master concept of educational policies*’ in the years to come (Coffield & Williamson, 1997).

The concept of lifelong learning is also associated with employability: lifelong learning which is made possible through technology/online learning/corporate learning. It is argued by McIntosh (2005, in Simmons-McDonald H, 2009)²⁹, that “*it is less and less realistic to imagine that one can take a degree as a badge of employability, go into a career and never return to education [...] lifelong learning equips workers to cope with rapidly changing demands and to survive in the labour market*”.

As far responsiveness to consumers is concerned, another aspect is customer service, which when translated to the educational world means student support. Lee (2010:217) argues that higher education has to be considered as a trade in service where it is subject to the same pressures in the market place, as any trade and where “*customer satisfaction is increasingly being considered as a prime determinant of online learning programs in competitive markets*”. He also argues that “*there exists substantial literature indicating that service quality is a key determinant of customer satisfaction in the educational setting*” (p:278).

2.3.1.2 Competitors

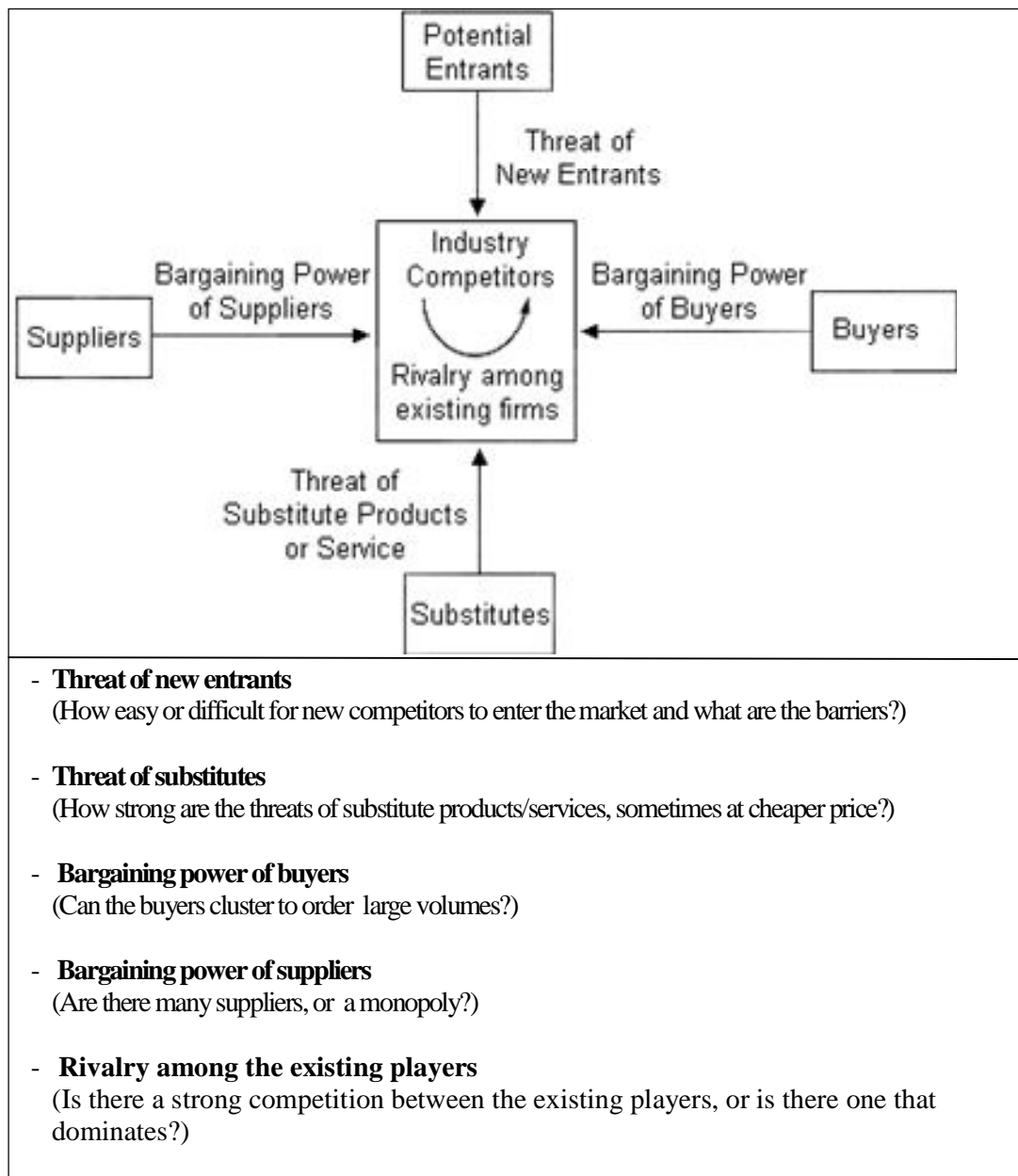
According to Porter³⁰, competitive advantage is about taking offensive or defensive action to create a defensible position in the industry and stresses that to achieve above average performance within the industry, we have to have sustainable competitive advantage, that is, to be continuously on the forefront so as not to lose that advantage.

²⁹ http://www.uoc.edu/symposia/scop2009/pdf/HSimmons_Employability_and_lifelong_learning_2009.pdf

Retrieved 27 November 2014

³⁰ Porter (2014c) http://www.valuebasedmanagement.net/methods_porter_competitive_advantage.html

Figure 2.1: Porter's Five Forces



(Source: Porter (2014b) http://www.valuebasedmanagement.net/methods_porter_five_forces.html,
(Accessed 27 September 2013)

From Figure 2.1, we notice that competition surrounds the organisation (a reality that Universities also face): with new competitors and universities (public, private and foreign) entering the market; existing competitors who can enter, by using innovative technological tools, making education borderless.

Therefore,

“It is predicted that if traditional institutions fail to heed the imperatives for change, they may leave the field open to new ‘borderless’ providers, for... whenever there is rapid change and uncertainty in the external environment and the existing institutions are unprepared or respond quickly and effectively, new organizations will emerge to seize advantage.”

(Latchem & Hanna, 2001:15).

In fact,

“Universities are now only one of the key players in generating new knowledge through research, and they no longer have an exclusive role in the further development of highly qualified professionals”

(Coffield & Williamson, 1997:5).

Customers, students, who have more than ever the need to upgrade their skills and who are now better informed, will go to those universities that better serve/respond to their needs.

To be able to maintain that advantage, it is argued that there are three approaches³¹:

1. **Cost leadership:** to have low costs of production, through economies of scale for instance.
2. **Differentiation:** to become unique, by having some characteristics that customers will value.
3. **Focus:** the firm is the best in a segment in group of segments

To face competition from all sides, Universities will have to stand out from the crowd and also work on their cost effectiveness, though it is also argued that this should not normally be the consideration of a University³².

³¹ http://www.valuebasedmanagement.net/methods_porter_competitive_advantage.html Retrieved 27 November 2014.

³² Discussed in section 2.3.2.3

2.3.1.3 Governmental Regulations/Political Pressures

Universities are increasingly under public scrutiny, for greater accountability because of government funding (for public universities) and also because of fierce competition from local and overseas providers of education.

“There are new demands for accountability and utility, and new measures of performance are increasingly linked to financial reimbursements.... These issues of accountability and trust should be understood in a historical shift in conceptualization of the role of universities and HEIs, as argued in Learning to Compete in European Universities: From Social Institution to Knowledge Business. [...] Previously, universities were highly regarded as societal institutions, providing public goods of research and teaching. More recently, universities are expected to compete for resources, students and also for the international assets”.

(McKelvey, 2013:167)

Universities are known to be very proud about their academic freedom and autonomy. However, Coffield & Williamson argue that maybe what we need is a model, as in the Singaporean Model, “*where the state intervenes to direct, shape and enhance the skill base of the society*” (1997:17).

2.3.1.4 Social and Economic Pressures and Pressure Groups

Hanna (in Kearlsey 2005: 22) argues that “*higher education institutions will need to transform their structures, missions, processes and programs in order to be both more flexible and more responsive to changing societal needs*”.

Moreover,

“The survival of a healthy and democratic society depends on whether the education system can respond to this pressure [increase access to education] quickly and adequately”.

(ADEA, 2002: 39).

Education is often linked to social harmony, more so in a multi-ethnic and multi-religious country. In fact, according to the 1997 White Paper, Pre-primary, Primary & Secondary Education, where there is equality of opportunities, and increasing access to secondary and tertiary levels of education, there is social harmony.

2.3.2 Internal Forces

We now discuss the internal forces, as applied to Universities.

2.3.2.1 The Need to Improve Technology

With the advent of Information and Communication Technologies (ICT), we are talking about a new technology that is fast penetrating all the spheres of our life: professional, educational, social, economic, and political. When we introduce technology in the educational sphere, we are talking about imperatives to change from two levels:

- Pedagogical: Technology calls for a review of pedagogical practices, brings in its trail new ways of constructing knowledge and apprehending the environment, and calls for a change in the roles of educators and learners, and in the educational organisations.
- Economic: Technology brings down a lot of barriers and achieves economies of scale depending on models used (Rumble in Anderson & Zawacki-Richter (2014:202)

We have seen in subsection 2.3.1.2 about the importance of technology, which is a factor we have to reckon with externally, in the sense that it allows a new category of competitors/substitutes to enter the local market and is appealing to new categories of customers. In this section, we focus on the pedagogical implications of new technology and

how within the organisation, it is calling forth for a new way we approach teaching and learning.

There are certain benefits that technology brings in the learning transaction that makes it appealing to the educational world. If the benefits were not important, then we would not have seen the exponential increase in e-learning. In fact, to Chris Lonsdale (September 2000, Times Higher article), technology can be used to create

“[...] truly effective learning environments that enrich the multi-sensory experience of learners...which will accelerate learner’s development along multi-dimensions by generating the potential for new insights“[...].

Moreover,

“[...] social media and distance learning technologies have fundamentally changed the models of instructional delivery available to instructional designers in distributed environments. They have afforded learning that is learner-centred, individualized, and interactive [...]”.

(Campbell & Schwier in Anderson & Zawacki-Richter, 2014:369)

However, we have to be alert to the fact that unequal access to technology can bring additional problems:

In the Information society, new fracture lines of social inequality are built on differential access to the means of communication, learning and knowledge”

(Coffield & Williamson, 1997:8)

Sallis & Jones (2002) talk about technology as a driver and a divider:

“[...] the most widely feared prediction surrounding the digital revolution is that it will splinter society into a race of information have and have-nots, knowers and know-nots, doers and do-nots - a digital divide. This revolution holds the promise of improving the lives of citizens but also the threat of dividing us.”

(Sallis & Jones, 2002:100)

Hence, one of the major challenges of educators is

“[...] the ability to transform this divide into a digital opportunity and to bring about digital exclusiveness and to ensure that all people have the skills for the digital economy”

(Sallis & Jones, 2002:101)

Borderless education which overcomes barriers of time, place, student –type, subject-type, programme-type and organisational type, is also tapping the lifelong learning market, which sees higher education as something to be returned to as a regular source of personal and professional development. The Internet specifically helps these lifelong learners as far as access and flexibility to learning are concerned.

Beyond the “pragmatic” and pecuniary aspect of e-learning and cost implications, distance/e-learning holds a bigger promise: how we process information and what skills are being developed to make us citizens of the twenty-first century: as active agents in the knowledge society.

Ananiadou & Claro (2009:10) argue that *“that ICT applications make up a particularly appropriate environment for higher order abilities such as management, organization, critical analysis, problem resolution and the creation of information”*.

Together with the need for new technology, there is also the quality aspect: for instance, Pond (2002) talks about the old and new paradigm for accreditation and quality assurance and the highlighted part shows how DEOL are compatible with the new paradigms such as : “tailored”, “collaborative”, “flexible”, “distributed”.

Table 2.2: Old versus New Paradigms for Accreditation and Quality Assurance

Old Paradigm	New Paradigm
Teacher/Institution Centered	Learner Centered
Centralized	Local
Hegemonistic	Deferential
One Size Fits All	Tailored
Closed	Open
Us versus Them	Collaborative
Quantitative	Qualitative
Prescriptive	Flexible
Time as Constant/Learning as Variable	Learning as Constant/Time as Variable
Teacher Credentials	Teacher Skills
Consolidated Experience	Aggregated Experience
Regional/National	International/Global
Static	Dynamic
Single Delivery Model	Distributed Delivery Model
Process	Outcomes
Infrastructure	Services

(Source: Pond, (2002).

2.3.2.2 The Need to Enhance Efficiency/The Need to Decrease Cost

The two internal factors have been grouped since both are interrelated.

It has been argued by Massy (2003, in Groccia & Miller 2005:xvii) that *“traditionally the university is about knowledge creation and dissemination, not about providing the highest quality education given the resources available”*. But it is also seen that the profit-oriented universities is gradually forcing traditional universities to change their focus to “cost, flexibility and access to safeguard their “franchise” and to retain their “market share” of

students (Marchese 1998 in Groccia & Miller, 2005: xviii). Universities are being called upon to change: becoming more cost-efficient and efficient and productive

According to Latchem & Hanna (2001:xv):

“Worldwide, educators and trainers are confronted with demands for greater accessibility, flexibility, cost-effectiveness, quality and relevance and lifelong provision. ...Both in developed and developing countries, educators and trainers are expected to achieve more with less as a consequence of budgetary pressures on governments and inter-sectorial competition for funding [...].”

Discussion about cost and efficiency brings in the concept of productivity. What does productivity imply for Higher Education? According to Tierney (1999, in Groccia & Miller, 2005:xix), there are four definitions of productivity:

1. “[...] ratio of outputs to inputs [...]” (Massy & Wilger, 1995);
2. “[...] the way in which a firm transforms inputs and outputs e.g., labour and capital [sic]” (Layzell, 1996);
3. “[...] an increase in educational outcomes (for example, more student served, improved instructional outcomes, a more valued mix of services relative to costs or low costs for a given set of educational outcomes.” (Leven 1991);
4. “[...] the input of faculty and staff [related] not to enrolments or to courses taught or to credit or classroom hours assigned, but to learning i.e., the demonstrated mastery of a defined body of knowledge and skills.” (Johnstone, 1993:41-42).

Applying the above definitions of productivity would surely make any member of academia jump; hence instead of productivity, the term preferred is quality. According to Groccia & Miller (2005:xx), *“the pursuit of quality becomes productive when innovations and changes are implemented that are attainable, lead to real and sustainable quality gains and fall within the appropriate fiscal parameters”*.

Whilst acknowledging the *‘long term reality of restricted resources’*, Guskin & Marcy (in Groccia & Miller (2005:2), also argue *“that the key to success will be placing what we value*

at the forefront- student learning and the quality of faculty work life- and redesigning the institution to support these basic values”. They also call for a change in the way academics teach, students learn and how the university is organised and have proposed three (3) principles and seven transformative actions.

Table 2.3: Creating a Vital Campus in a Climate of Reduced Resources:
 Organising Principles and Transformative Actions

Organising Principle I Create a clear and coherent vision of the future focused on student learning, quality of faculty work life and reduced costs per student	
Organising Principle II Transform the educational delivery system consistent with the vision of the future	Organising Principle III Transform organizational systems consistent with the vision of the future
Actions	Actions
1) Establish and assess institution-wide common student learning outcomes as basis for the undergraduate degree. 2) Restructure the role of faculty to include campus professionals as partners in student learning while integrating technology. 3) Recognize and integrate student learning from all sources. 4) Audit and restructure curricula to focus on essential academic programs and curricular offerings.	5) Utilize zero-based budgeting to audit and redesign the budget allocation process, involving faculty and staff as responsible partners. 6) Audit and restructure administrative and student services systems, using technology and integrated staffing arrangements to reduce costs. 7) Audit and redesign technological and staff infrastructures to support transformational change.

(Source: Groccia and Miller (2005:4))

What concerns us for the purpose of this dissertation is Principle II and Action 6:

- Reduced cost: According to Taylor (2001:3), “*fifth generation distance education has the potential to decrease significantly the costs associated with providing access to institutional processes and online tuition*”.
- Student Learning, Quality of Faculty Work Life: Learning happens through multiple sources, with the teacher being no longer the only and main source of “teaching” and “learning”. Technology provides huge potential and access to a wealth of information.

Guskin & Marcy (in Groccia & Miller, 2005) argue that given the long term reality of restricted resources, *“the key to success will be placing what we value at the forefront- student learning and quality o faculty work life- and redesigning the institution to support these basic values”*.

Quality, and hence productivity, is measured through how much learners learn and not how much teachers teach and technology can help improve quality in that perspective.

2.3.2.4 The Need to Define or Redefine Strategic Focus

Like any organisation, Universities need strategic focus and direction in making changes, more so given limited resources when faced with fierce competition.

Kotler & Murphy (1981) argue that *“that for their survival, colleges and universities will need to adopt strategic market planning and set as one of their priorities, consumer orientation”*. “Consumers” can mean two things here: the consumers of the education (that is, students) and those who will be recruiting these students (the industry). Universities will have to be increasingly strategic in the choices they make so that they are aligned to the needs of both customers whilst considering the constraints they are facing.

2.4 Changes for the University of Mauritius to Face the Changing Context

To summarise:

- Change permeates our environment, including the higher educational scene.
- Pressures to change are both external and internal.
- Universities have new customers, new profiles of learners (for example, lifelong learners), new niches but at the same time, there are new “entrants” who are competing for the same market.
- Technology is bringing in its trail a need to change: it brings in new competitors but at the same time, it can enable institutions to explore new markets.

- Technology holds in it the promise of reducing cost of delivery, through economies of scale (hence increasing access) whilst grooming the learners of the twentieth century with new skills in the context of the knowledge society.
- Technology hence holds the potential to make universities more cost effective and improve quality and hence make it more robust to face competitors and at the same time, compete for new markets.
- However, to tap the potential of technology, change will need to be part of the strategy of the University. To treat technology as a part of the peripheral activities does not allow the institution to tap its full potential. A strategic as opposed to an “operational/piecemeal” approach is thus called forth.

In the next chapter, we discuss the methodology used for this dissertation and in Chapter 5, we translate the issues discussed in this Chapter to the University of Mauritius.

CHAPTER 3: METHODOLOGY

Documents are often neglected and taken for granted, estranged and alienated even in their familiarity, propinquity and abundance. Nevertheless, they form a basis for a renewed understanding of our social and historical world. Perhaps, also, documentary studies may encourage mutual understanding and regard across the disciplinary barriers, and a fresh awareness of the research challenges that we have in common. This would indeed be to turn over a new leaf, the oldest documentary method of all. What will we find on the next page?

(McCullough, 2004:112)

3.0 THE PROBLEM

In accordance with the recent history of Distance Education development in Mauritius, this dissertation will explore how the University of Mauritius could contribute to national development through the development of distance education. The research question is: How could distance education, as a change agent, further assist the University of Mauritius in contributing to national development, given the resource constraints it is facing?

3.1 OBJECTIVES

The objectives of this dissertation are:

1. Investigate the concept of “change”, and the factors that prompt change, internal and external.
2. Transpose the factors that prompt change - internal and external - to the higher education context.
3. Use the model identified above to see how these factors are present at the University of Mauritius.
4. Discuss how “distance education” could be viewed as the change agent, as the solution to help address the resource constraints that hamper the development of the University of Mauritius.

3.2 RESEARCH QUESTIONS

The research question is being approached from a pragmatic viewpoint, that is, solve a problem/something that is not functional (pragmatic): How to contribute to national development in a context where “change” is the new constant, when resources are scarce, when there are external and internal pressures to change? But universities are considered as “resistant” to change. If the transition is not made, what will be the scenario? Then could DE be the answer: change to peripheral activities but without changing the core identity of the University?

This dissertation will:

1. Present briefly the educational landscape of Mauritius.
2. Explain the factors that are calling for change on the higher educational scene in general.
3. Identify the external and internal factors present at the University of Mauritius that is calling for change
4. Assess how technology, through distance education/ e-learning could be one of the drivers of change.

Thus the analysis should furnish answers to the following questions:

1. What are challenges facing the tertiary education context and how a paradigm shift is necessary in how it operates?
2. How distance learning/e-learning is part of the paradigm shift?
3. Why has DE not developed in a more strategic way before in Mauritius and more specifically at the UoM? What were the missing elements?
4. Why and how DE could be more feasible at the UOM now?

3.3 TYPE OF RESEARCH

This dissertation shall use documentary research: in fact, it has been argued that documentary research is underutilised by researchers in the field education, history and the social sciences (McCulloch, 2004:8).

3.3.1 Sources of Data

In this dissertation, the purpose is to work through official documents from different sources: the University of Mauritius, the Regulator (Tertiary Education Commission), the Government (budget speeches, new acts passed with regards the creation of new public institutions created, hence signals the Government is sending) and the facts (Reports from the Central Statistics Office).

- Textbooks, articles from journals will be used to gather information on the following:

1. Investigate the theoretical framework for the concept of “Change”.
 2. Analyse the international trend for higher education institutions.
 3. Discuss the importance of DE to developing countries and its contribution to national development.
 4. Explain how a conventional university makes the transition to be an institution that offers both DE and mainstream programmes.
 5. Discuss how the trend is for Universities to shake off the myth of “ivory towers” and how reengineering concepts have their place in a traditional University to ensure its survival in a new global economy.
- Official reports by external and internal organisations will also be scrutinised to see what they were proposing, and why their recommendations were never put into practice.
 - Annual reports, Strategic Plan of the University of Mauritius, the Tertiary Education Commission and other competitors will be analysed to see the “official” story and the trend.

However, it is to be noted that Senate and Council meetings notes, Position Papers etc. have not been used: because these documents are mostly confidential.

CHAPTER 4: UNIVERSITY of MAURITIUS:

INTERNAL AND EXTERNAL FACTORS

The survival of higher education into this next century is not in dispute. What is less clear are the format in which it will survive, and exactly who will be the major players - the winners and losers in the global classroom. Universities will be driven by radical changes in the practice, management and research of higher education in this new century. New ways of teaching and learning must be developed and nurtured to meet the demands of a society that is in a constant state of change and upheaval. Universities will need to diversify, innovate, collaborate and invest in human capital in order to survive. Scenario planning, careful economic management, risk and benefits analysis and quality assurance evaluation will become essential activities. Doing nothing, however, is no longer going to be an option.

(James L Morrison. 2002, September)

4.0 INTRODUCTION

In this chapter, we will deal with the external and internal factors that are affecting UoM, based on issues discussed in Chapter 2.

4.1. EXTERNAL FORCES

As discussed previously, the external “*winds of change*’ that are calling for Universities to review their position are as follows: Customers and Changing Industry or Market Conditions; Competitors; Governmental Regulations/Political Pressures; Social and Economic Pressures and Pressure Groups.

4.1.1 Customers and Changing Industry or Market Conditions

For long, the UoM, as the only public university, has been able to recruit the best students that come after the laureates at secondary level. It was then guaranteed of better output. However, this can create a sense of complacency. Maybe one question that the University will have to ask itself with all honesty is: what are the reasons students want to enrol at the University - is it solely because of its standard or because it is free? When students will have a myriad of institutions that are flexible, customer-oriented and hence more responsive to their needs, then they may think twice before enrolling at the UoM if the other gains overshadow the “no-fee paying” advantage of the UoM.

If we look at the population pyramid in Chapter 1 (Figure 1.1), we see that there are more 18+ in 2014 than in 2003. This implies that there is a pressure on the demand side and also, with an ageing population, we have more mature students who will be coming to the university for lifelong learning opportunities or returning to the university to upgrade skills. By becoming more customer-oriented, the issues to be addressed are access rate and Quality Assurance.

4.1.1.2 Access Rate

The fact that only half of the qualified students have access is no longer a sign of great achievement but can also be read as a sign that the UoM is not being able to respond to demand.

Table 4.1: Access Rate in 2013 at the University of Mauritius

	n	Percentage Candidates/total application	
		selected	registered
Total application	22,501		
Number selected	6,707	29.8 %	
Total registered	3,639		16.1%
		Proposed intake/total application	
Proposed intake	5,481	24.3 %	

(Source: Registration Statistics from Admission and Student Record Office, University of Mauritius. 01 August 2013)

The above table is interesting:

1. The UoM selected only 29.8 % of the total applicants, and finally has been able to register only 16.1 % of total applicants when it had proposed to take 24.3%.
2. *A priori*, it still seems that demand exceeds supply but in reality, it is being able to register only 3,639 out of the proposed intake of 5,481.
3. There are two possible explanations:
 - a. Those who have been selected may not have got their first choice of programmes and hence have preferred to go to another university.
 - b. Due to low response from students, some of the programmes have not been run and hence the candidates have not pursued their studies at the University (eg programmes like Certificate in Poultry Production, MSc Agribusiness).

Coming to point 3 (a) above, in fact, we have a number of bright students with good results who apply for high demand courses but when they cannot secure a seat as there are better candidates and there is a system of quota based on existing resources (size of classroom/labs, number of lecturers) , then they opt to study overseas. In the table below, we have taken as example the high-demand courses, the number of candidates who apply, the intake and the results of the last candidates.

Table 4.2: Intake in High Demand programmes and
 A-Level Results of Last Candidate Admitted on Programme

Programmes titles	Proposed Intake	No applied	Number Selected	Number Registered	Percentage of Registered over Total Application	Last candidate's A- level grades*
BEng (Hons) Civil Engineering	40	272	46	40	14.7	34
BEng (Hons) Electrical & Electronic Engineering	30	244	41	28	11.5	26
BEng (Hons) Electronic & Communication Engineering	30	189	45	29	15.3	28
BEng (Hons) Mechanical Engineering (Minor: Energy Systems)	40	446	61	41	9.2	24
Sc (Hons) Finance (Minor: Law)	60	273	73	59	21.6	30
Bachelor of Laws with Honours - LLB (Hons)	40	323	52	38	11.8	30
BA (Hons) Law and Management	40	378	51	38	10	24
Doctor of Medicine (MD) - (Bachelor of Medicine and Master of Medicine)	25	80	30	25	31.25	30
BSc (Hons) Actuarial Studies	25	173	34	24	13.9	32
* A* = 12 marks; A = 10 marks; B = 8 marks; C = 6 marks; D = 4 marks; E = 2 marks						

(Source: University of Mauritius Website:

http://www.uom.ac.mu/images/Files/Admissions2014/Undergraduate/PROFILE_NOTICE.pdf

[Accessed 31 August 2014])

By continuing to use conventional modes of delivery that are almost wholly lecture-based, there is a limit to the expansion. By failing to admit qualified students in programmes because there are fixed number of seats per programme, these same candidates either go overseas or to the competitors. As mentioned by Dhanarajan (1999), when resources are scarce, we need “a paradigm shift” in the way conventional education providers provide services” (ADEA, 2002:39).

In a conventional university, paradigm shift can mean different things depending on where the focus is: it can be mode of delivery, reviewing its role with regard to research, teaching and/or consultancy, mode of assessment, and so on. As far as mode of delivery is concerned, whereas a traditional university tends to favour face to face, a more innovative approach will be to consider distance education/elearning. Distance education can help increase access and will be a learning mode more appropriate for working students who bring in their experience and will be able to reconcile work and professional obligations. Working students are also that category of students who pay tuition fees.

This paradigm shift also echoes a certain need for student-centredness/sovereignty of students/customers, concepts that are normally taken for granted when ‘we do business as usual’.

Reaching out to off-campus students/working students via distance learning/elearning will bring in its trail new concepts of student support and learning that are in fact quite poor at the University, as echoed by the Second Quality Assurance Audit (pgs: 12, 13 and 45)³³. A change in mindset is required so that academics move from teacher-centredness to student-centredness/customer-centredness where the student/customer is sovereign. A more elaborate structure will have to be put in place so that learners are given support in their self-learning endeavour. Student support is one of the prerequisites for successful implementation of DE in an institution, in this case the UoM.

In fact, “*studies in developed and developing countries alike show that tuition, counselling and performance feedback are major factors in retention and performance*” (Latchem & Hanna, 2001:18). Moreover:

“The development of models of support that are learner-centred, apply technology effectively, and offer benchmarks for evaluation, and the investment in large studies [...] speak to the recognition of the essential role that learner support has in a quality online educational experience.”

(Latchem, 2014:305)

³³ http://tec.intnet.mu/publications_report (Retrieved 20 September 2014)

Therefore, tertiary education at the UoM should not only be the preserve of those bright students who get access but the real test of the UoM will be the support mechanisms that are set in place to ensure that all students equally benefit from the education being provided, especially when we are talking in a context of lifelong learning and short shelf-life of knowledge, hence the need for continuous learning, and working in parallel.

Coupled with that, UoM should consider more seriously the concept of fee-paying, coupled with the idea that a new category of students, within a context of ageing population/greying of the student profile, are soon entering the tertiary education scene. Getting students to follow full time tuition-free programmes through traditional mode, and in parallel, allowing those who do not get straightaway access to follow training through DE mode but on fee-paying basis where they can work and study, can prove to be a winning formulae and become a marketing strategy for the University, ensuring that the UoM keeps the qualified students instead of sending them to the competitors' doorsteps.

DE is very appealing to working students, who sometimes have an immediate need for retraining (for a promotion, for upgrading of skills, employers wanting better and more up-to date staff). Moreover, fee-paying can be polemical to students who are not working but more acceptable to working students who are more economically independent. To Latchem & Hanna (2001:xv), there “[...] *is a growing tendency to adopt the principle of ‘the beneficiaries should pay’*” and they also discuss the “*the commercial potential of open and flexible learning*”.

With students being now customers, universities will be forced to adopt a more responsive attitude as the new commercial/entrepreneurial culture calls for universities to be more attentive to customer needs and to work towards customer satisfaction. It is also argued that with income being generated, there will be less dependency on government funding and this will create “*new work and long-term opportunities – in research, education and training – of an income-generating, mutually beneficial kind.*” (Coffield & Williamson, 1997:128). Trying to increase access to University students by doubling intake each year is not a very good strategy in itself as it is opening access to that category of students that do not pay tuition fees and it would mean stretching the already scarce resources.

Lifelong learning should not be viewed as making universities do more with their already overstretched resources: through lifelong learning, they will be promoting democratic values and “*through this, they will contribute to the development of the social, cultural, intellectual and economic life of modern society. With a wider public purpose to what they do, they are more likely to enjoy wider public support.*” (Coffield & Williamson, 1997:120). Lifelong learning through distance education becomes thus a more winning formulae.

We discuss the issue of lifelong learners again in this chapter when we discuss economic and social factors that act as “internal” pressure.

4.1.1.2 Quality Assurance

The UoM is dedicated to quality and standards, seen as crucial to achieve its mission and objectives. Quality Assurance (QA) process is part and parcel of its activities and this concern gathered momentum in 1998, with the official creation of the University Quality Assurance team and the year later, decentralised through Faculty Quality Assurance Teams (FQAT) and centre Quality Assurance Teams (CQAT). Workshops were carried out to sensitive staff on the culture of quality. UoM has already been through two external Quality Assurance Audits in 2005³⁴ and 2012³⁵.

Competition in the Mauritian Tertiary Sector is already rife, and is assuming various forms: established institutions, commercial presence of overseas institutions, on-line delivery, etc; the need for proper benchmarking is more than ever felt. Two of the recommendations of 2012 Quality Assurance Audit³⁶ call for our attention:

Recommendation 3. It is recommended that the University of Mauritius conceptualise its quality management system in such a way that it moves beyond compliance and focuses on provision of good quality teaching and learning, research and community engagement.

³⁴ [http://tec.intnet.mu/pdf_downloads/pubrep/UoM%20Summary%20External%20QA%20Report%20\(May%202005\).pdf](http://tec.intnet.mu/pdf_downloads/pubrep/UoM%20Summary%20External%20QA%20Report%20(May%202005).pdf) (Retrieved 20 September 2014)

³⁵ http://tec.intnet.mu/pdf_downloads/pubrep/UoMAuditReport200213.pdf (Retrieved 20 September 2014)

³⁶ http://www.tec.mu/pdf_downloads/pubrep/UoMAuditReport200213.pdf (Retrieved 20 September 2014)

Recommendation 18. It is recommended that the University of Mauritius develop University-wide strategies for the use of blended and online learning, including the provision of more comprehensive information to prospective and enrolled students.

For a dual mode university like the University of Mauritius, quality assurance mechanisms have to provide generic recommendations as well as those specific to the distance education provisions. Within the distance education programmes on offer, the ‘degree’ of online, face to face and use of technology differ and hence the need to be aware of the differences and provide QA mechanisms accordingly. Moreover it is noteworthy that awards of the UoM do not mention that these degrees have been obtained by DEOL mode.

However, if the University is to strengthen its position in this field, QA will have to be rigorously maintained and as mentioned earlier, have a strong student support, especially since there is a feeling normally that distance education is inferior to mainstream education:

“Such distrust of online learning by academics derives partially from the fact that online distance education is often adopted for reasons of commercial gain or economy or by private for-profit providers, some of whom fall seriously short on quality.”

(Latchem, 2014:312)

4.1.2 Competition

When we look at the educational scene, we cannot ignore the fact that the competitors are present locally and are getting stronger. Bearing in mind that we have a population of 1.2 million, competition in the tertiary education sector in Mauritius is rife, as we have seen in Chapter 1. Not only we face a situation where Mauritian students have a greater choice, but also, many international students will consider UoM as one of the hundreds of institutions they can turn to.

Some of the providers are :

1. University of Mauritius
2. University of Technology of Mauritius
3. The Mauritius Institute of Education (MIE)
4. The Mahatma Gandhi Institute (MGI)
5. Open University of Mauritius
6. The Mauritius Institute of Training and Development (MITD).
7. The Fashion and Design Institute
8. The Université des Mascareignes³⁷
9. Private Providers³⁸ As per the website of the Tertiary Education Commission, there are 55 Private tertiary institutions, with some having awarding powers
10. Those following distance learning programmes
11. Those who go overseas

Table 4.3: Snapshot of Evolution of Tertiary Educator sectors, 2004 and end of 2012

	Main Post Secondary						Distance Education/Private Providers ³⁹	Mauritian Studying abroad
	UoM	UTM	MIE	MGI	MCA/OUM	FDI		
2004	6,394	1,183	2,230	421	157	-	6,846	7,515
2013	11,318	3,727	3,732	566	541	179	18,603	9,460

(Source: Central Statistics Office Website

http://statsmauritius.gov.mu/English/Documents/digest/digest_edu2013.pdf [Retrieved 31 August 2014])

³⁷ http://statsmauritius.gov.mu/English/Documents/digest/digest_edu2013.pdf (Retrieved 20 September 2014)

³⁸ http://tec.intnet.mu/private_institutions (Retrieved 20 September 2014)

³⁹ Private Post Secondary Educational Institutions

What we notice is that the number of students following overseas distance education, either through local agencies or directly with DE overseas providers, exceeds the student enrolment at the UoM. Therefore, it can be argued that the market is open to competitors, whether through the public tertiary education institutions and through overseas providers, through different modes of delivery.

Berge (2005:13) is very optimistic about the potentialities of online learning in these terms:

“a chance to reform what works in schools and organisations, a chance to refocus on what learners do instead of what instructors do and a chance to redefine the roles and responsibilities of instructors, learners and sponsoring organisation”.

Berge (2005:14) further adds, that *“the type of cultural change technology is catalyzing necessitates changes to the roles and functions of students, teachers, the curriculum and the educational institutions themselves”.*

Online learning is a threat if the UoM does not join the bandwagon and is a boon if it seizes the opportunities. In fact, though Mauritius is limited in terms of population size, its ageing population can be an opportunity for lifelong learning through distance learning/ elearning as it allows learners to upgrade while keeping their professional obligations. Moreover the bilingualism can allow UoM to tap the regional markets in both Francophone and Anglophone African countries.

4.1.3 Government Legislation and Prevailing Political Values and Economic Cycles

Universities are known to be very proud and protective about their academic freedom and autonomy. However, Coffield & Williamson (1997: 17) argue that maybe what we need is the Singaporean Model, *“where the state intervenes to direct, shape and enhance the skill base of the society [...]”.*

In Mauritius, the regulator is the Tertiary Education Commission (TEC) and the following extracts provide more information on the institution⁴⁰:

Background

The creation of an independent body to oversee the sector was recommended in the University of Mauritius Visitor's report. The reason thereof was two-fold; firstly because the need to encourage research was felt and secondly it was important to prevent duplication of resources.

Hence the Tertiary Education Commission (TEC) Act was proclaimed on 15 August 1988. The TEC was setup under an Act of Parliament, functioned as a body under the aegis of the Ministry of Education in Dec 1989. In the beginning two Committees saw the day; the Planning Coordinating Committee and the Research Coordinating Committee.

Following major landscape changes in the tertiary education sector, the TEC Act was amended in 2005, bestowing the Commission with additional responsibilities in regard to quality assurance. Since then the Commission endeavours to provide accessible but quality postsecondary education to the future of the Republic of Mauritius.

Our Vision

Make Mauritius the Intelligent Island of the Region in the Global Village

Our Mission

Position Mauritius in the Region as a world-class Knowledge Hub and the Gateway for Post-Secondary Education

Our Goals

1. *Create an enabling environment for Mauritius to emerge as a Regional Knowledge Hub and Centre for a Higher Learning and Excellence*

⁴⁰(Extract from TEC Website) <http://tec.intnet.mu/abouttec> (Retrieved 20 September 2014)

2. *Contribute significantly in the rapid transformation of Mauritius into the rank of developed countries*
3. *Develop Open and Distance Learning (ODL) as an instrument to increase access to post-secondary education and lifelong learning locally and regionally*
4. *Bring post-secondary education provision in line with international standard and quality*
5. *Encourage institutions to mount programmes that are relevant to the needs of learners, the country and the region*
6. *Promote and enhance teacher education and training in order to raise standards of feeder systems to post-secondary education*
7. *Instill the principles of good governance, transparency and accountability in the post-secondary education system*
8. *Ensure optimum use of resources in the TEIs*
9. *Sustain research and consultancy*
10. *Foster regional and international understanding and cooperation through a diversity of studentship and overseas institutions*

What We Do

- *Formulate policies and strategies for promoting and developing quality tertiary education*
- *Promote and assure quality*
- *Register private tertiary educational institutions and universities, and accredit their programmes*
- *Determine equivalence and recognition of post-secondary qualifications/institutions*
- *Maintain a database for recognition and equivalence of all post-secondary qualifications/institutions*
- *Formulate policies for Open and Distance Learning (ODL)*
- *Allocate government funds to the Tertiary Education Institutions (TEIs)*
- *Monitor and evaluate programme-based budgets for TEC and TEIs*
- *Promote research in TEIs*
- *Award MPhil/PhD scholarships and bursaries*

- *Update and manage the Tertiary Education Management Information System (TEMIS)*
- *Advise the Ministry of Tertiary Education, Science, Research and Technology on:*
 1. *the grant of licences to recruiting agents for overseas education*
 2. *policy issues relating to Tertiary education*
- *Provide support services in respect of IT and laboratory equipment to TEIs; and*
- *Collaborate with other national and international institutions/organizations in matters pertaining to Tertiary Education and Research.*

~~~~~  
What we find is that TEC has a more facilitator's role (except when it comes to allocation of funds) and it cannot impose on a public tertiary education institution. In 2010, following the General Elections, a new Ministry was created and TEC was then under the purview of this new Ministry, the Ministry of Tertiary Education, Science, Research and Technology<sup>41</sup>(MTESRT). Here is an extract from the Ministry of Tertiary Education, Science, Research and Technology Website:

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Our Vision

Transform Mauritius into a Knowledge-based Economy by 2022

Our Mission

Expand the Tertiary Education sector to increase access, further enhance Quality and promote Research, Science and Technology to increase our competitiveness.

Our Goals

- *Extend the 24/7 concept to tertiary education*
- *Attract renowned Tertiary Educational Institutions*
- *Reach an objective of one graduate per family*
- *Set up a one-stop-shop for tertiary education*
- *Review the Tertiary Education Loans Scheme*
- *Review existing legal framework for intellectual property rights*

⁴¹ <http://tertiary.gov.mu/English/AboutUs/Pages/Mission-and-Vision.aspx> (Retrieved 20 September 2014)

- *Prepare an Action Plan on Research and Development*
- *Give a new drive to science popularization and sensitization*
- *Develop programmes in new emerging areas, e.g Nanotechnology, Renewable Energy, Marine and Life Sciences*
- *Promote a new culture of open and distance learning through the setting up of the Open University of Mauritius.*

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From the above visions, missions and goals of both TEC and the Ministry, we see the stress and importance of distance education and in fact, following the creation of the new Ministry, the Open University of Mauritius (following restructuring of the Mauritius College of the Air) was created in 2012, though it had been mentioned in past budgets.

The Vision and mission of the Open University of Mauritius (OUM)<sup>42</sup> is as follows:

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Vision of the Open University

The vision of the Open University of Mauritius is to be among the leading open universities recognized worldwide for providing high-quality education and training.

Mission of the Open University

The mission of the Open University of Mauritius is to provide quality education to people of all backgrounds from Mauritius and around the world with the ultimate aim of developing their intellectual, moral, civic, and creative capacities to the fullest so that they can lead a life full of dignity while contributing meaningfully to the socio-economic development of their nation.

Therefore the Open University of Mauritius endeavours to:

- *expand the scope and scale of quality higher education available to school leavers;*

⁴² (Extract from OUM Website)

http://www.open.ac.mu/index.php?option=com_content&view=article&id=4&Itemid=110 (Retrieved 20 September 2014)

- *provide greater access to continuing professional education, skills development and training;*
- *provide more opportunities for lifelong learning;*
- *play a leading role in research and development and application of learning technologies for education and training;*
- *facilitate national, regional and international partnerships and collaborations for the optimal use of resources for open and distance learning; and*
- *provide quality open and distance learning programmes in Mauritius and the region in a learner-centred environment using state-of-the-art information and communication technologies.*

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Does the creation of the Open University entail that it should be the sole provider of DE? In fact, public institutions like the University of Mauritius is guided by its Acts and Statutes with its Council giving the strategic direction for the University and the Senate being the “*supreme academic authority of the University responsible for promoting the academic work of the University, both in teaching and research. It is the awarding body of the University*”.<sup>43</sup>

How to interpret/read the creation of the Open University of Mauritius, considering that the University of Mauritius already had two centres engaged in elearning? Does this imply a duplication of resources? Sir J Daniel in his 1989 report on the local context, did mention about the lack of collaboration between the tertiary institutions and the situation is still prevalent these days. Moreover, the University of Technology of Mauritius was the second public institution created by an Act of Parliament and its growth has shown that there are niches that it can explore such as sustainable development.

The University of Mauritius has its distance education centre where a more couched term like *Centre for Innovative and Lifelong Learning*<sup>44</sup> has been adopted rather than using “distance education”; the focus is on “innovation” and “lifelong learning” where a continuum in terms of models, modes of delivery, technologies used are promoted. The Final Report and

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<sup>43</sup> <http://www.uom.ac.mu/images/files/otherreports/LAST%20final%20University%20Visitor%27s%20Report.pdf> (Retrieved 20 September 2014)

<sup>44</sup> 562<sup>ND</sup> (Ordinary) Meeting – 23 April 2014, Open Area, Item No. 3B(ii)

Evaluation of the project that funded the creation of the J Baguant Centre for Distance Learning (later renamed Centre for Professional Development and Lifelong Learning) also echoed the problems of inter-institutional collaboration as thus:

*“The UoM was working to involve other tertiary institutions in the country, which institutions were not on the same level of readiness. It became clear that to change the organizational cultures of all the institutions were far too complex and the UoM moved ahead on its own.”*

(Laurentian University, 1999:5)

Thus there is no directive from the Ministry or the Commission that actually debar the University of Mauritius in engaging in DE. In fact, the balance should be found whereby *“central planning must allow for creativity and diversity when determining priorities and finding; and institutional autonomy must respond to national needs and policies while defending internal democracy and disinterested criticism [...]”* (Coffield & Williamson, 1997:17).

The creation of the Open University of Mauritius and the goal of the new Ministry (Promote a new culture of open and distance learning through the setting up of the Open University of Mauritius) can be read as the government clearly pushing in that direction and not restricting it to the monopoly of the Open University. It can be read as *“Development policies must include deeper, structural issues that will transform the system.”* (Latchem & Hanna, 2001:42), instead of piecemeal, institution-based approach that will not bring the overhaul intended.

In fact the Budget Speech of 2014<sup>45</sup> also underlined importance of lifelong/adult learning: *“Our citizens need to have the opportunity to learn and re-learn throughout their lives. Thus adult education will be given greater prominence in our education system”*. Compared to the 2004 Budget Speech, where focus was on constructing secondary schools, the 2014 budget talks about the construction of Universities, the new paradigm (from secondary to lifelong learning).

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<sup>45</sup> <http://mof.gov.mu/English/Documents/Budget2014/BudgetSpeech2014.pdf> (Retrieved 27 September 2014)

What is additionally interesting, though not directly relevant to this dissertation, is that the 2004 budget talked about “One conspicuous weakness in our education system is the shortfall of some 4,000 seats at tertiary level. To address this problem, we need to encourage both domestic and foreign private investment in tertiary education” whilst the 2014 stressed “*And to do so, we need imperatively to maintain a strong oversight on quality*” and “*Government will also deal with the hitches and glitches that have beset the enrolment of foreign students*”.<sup>46</sup> The focus hence shifted from “quantity” to “quality”, so as to compete in the global economy and thereby attract foreign students.

In fact, the invasion from overseas universities has created a lot of turmoil on the local higher education landscape, with the Indian Grants Commission not recognising Indian Universities who operate in Mauritius. Such a situation can affect the positioning of the Mauritius as a knowledge hub, as quoted in the 2002 -2003 Budget Speech. This situation highly echoed in local newspapers, communiqués from TEC<sup>47</sup> and through parliamentary questions can be seen as an opportunity for local universities to increase their market share in the face of dubious providers from overseas, by improving the quality of their provisions.

While the 2004 Budget Speech mentioned foreign providers to increase access, the 2014 mentioned need for safeguards for quality and hence implying that the stress has moved away from access at any costs to quality to ensure UoM can attract foreign students. We can infer that distance education, if quality is strengthened, can be one of the ways to attract foreign students.

#### **4.1.4 Social and Economic Pressures and Pressure Groups**

*“Higher education institutions will need to transform their structures, missions, processes and programs in order to be both more flexible and more responsive to changing societal needs.*

(Hanna, 2003, in Kearlsey, 2005:22).

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<sup>46</sup> <http://mof.gov.mu/English/Documents/> (Retrieved 27 September 2014)

<sup>47</sup> <http://tec.intnet.mu/communiques> (Retrieved 20 September 2014)

The report “Ministry of Education and Human Resources Strategy Paper 2008-2020”, highlights the centrality of education for economic and social progress of Mauritians<sup>48</sup>. One additional peculiarity of this insular, small island, is its multi-ethnicity and multi-culturality, whereby according to the latest Census (2000), Indo-Mauritians comprise 68% of the population, Creoles 27%, Sino-Mauritians 3%, and Franco-Mauritians 2%. Bah-Lalya, (2006) when referring to the case of Mauritius, argues that if one particular ethnic group is represented in a disproportionate manner among the poorest citizens of the island, then there might be a serious issue with the very structure of our education system. Moreover, since Mauritius has only its people as its main resource, it cannot afford to neglect its people if it wants to face global competition.

Hence, education has not only to meet labour and national needs but also ensure that all are moving at the same pace with no discrimination, based on ethnicity, race and culture. All this puts pressure on access; this is where DE can be part of the solution when resources are scarce.

We have also discussed in Chapter 1 the population pyramid where it is demonstrated that though Mauritius is “part of Africa”, it does not share its one important characteristics, namely youth bulge but rather an ageing population. With an ageing population, the retirement age of Mauritians is now 65 and this implies that more and more people will be studying, going back to university to acquire/upgrade/recycle their skills, thus becoming a strong pressure group.

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<sup>48</sup> <http://ministry-education.gov.mu/English/Documents/Publications/EHRSP%202008-2020.pdf> (Retrieved 21 September 2014)



## 4.2 INTERNAL FACTORS

Universities have the reputation to be ‘ivory towers’ immune to change and that they ‘*will not change by themselves, that their own structures of management and leadership have rendered them incapable of radical change in the face of relentless pressure from government.*’ (Coffield & Williamson,1997:131). Does that mean that since they cannot change, there is no imperative to change? We will be looking at the internal factors that prompt organisations to reengineer from the following perspectives: need to improve technology; need to enhance efficiency; need to decrease cost; need to define or redefine strategic focus.

### 4.2.1 The Need for New Technology

In 2001, the Virtual Centre for Innovative Learning Technology was created, despite an existing Centre for Distance Learning (CDL)/CPDL<sup>49</sup>, “*in the pursuit of enhancing the quality of innovative teaching and learning practices and promoting lifelong learning.*”<sup>50</sup>. At the outset, there seemed to have been a misconception about what DE implies: it seemed that at the UoM, DE had started to mean “correspondence’, ‘print-based’ materials.

By creating another centre that was doing DE, but through another medium, a situation of duplication of resources occurred as both centres had their own teams of instructional designers, their own directors and supporting staff. This “misconception” was “reconsidered” in 2014 by the merge of the two centres into Centre for Innovative and Lifelong Learning (CILL). It is envisaged that with this merge, there will be more concerted effort to “address” distance learning and lifelong learning using technology. Since 2001, there was a subtle juxtaposition of VCILT v/s CPDL with CPDL “drifting” more into lifelong learning and VCILT into elearning; this has created unwanted tension which the merge will hopefully address.

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<sup>49</sup> Centre for Distance Learning (CDL) was renamed Centre for Professional Development and Lifelong Learning (CPDL) in 2005.

<sup>50</sup> 2002 Annual Report, UoM: [www.uom.ac.mu/](http://www.uom.ac.mu/) (Retrieved 29 October 2014)

## 4.2.2 The Need To Enhance Efficiency/The Need To Decrease Cost

The two internal factors have been grouped since both are interrelated. Since efficient means “to be productive with minimum waste or effort”<sup>51</sup>, doing more with less and maintaining quality is the very dilemma facing the tertiary education sector and specifically the UoM.

Table 4.4: Student: Academic Staff Ratio and Government Grant per Student, 1998-2013

| Year      | Students | Academic Staff | Ratio Student/Academic Staff | Government Grant Rs (Million) | Ratio Grant/Student in Rs |
|-----------|----------|----------------|------------------------------|-------------------------------|---------------------------|
| 1998/1999 | 3,731    | 201            | 18.5                         | 187                           | 50,120                    |
| 1999/2000 | 4,575    | 196            | 23.3                         | 190.4                         | 41,617                    |
| 2000/2001 | 4,981    | 214            | 23.2                         | 212.6                         | 42,682                    |
| 2001/2002 | 5,076    | 224            | 22.6                         | 210                           | 41,371                    |
| 2002/2003 | 5,163    | 226            | 22.8                         | 230                           | 44,547                    |
| 2003/2004 | 6,045    | 229            | 26.4                         | 249                           | 41,191                    |
| 2004/2005 | 6,519    | 226            | 28.8                         | 249                           | 38,196                    |
| 2005/2006 | 7,070    | 240            | 29.5                         | 255                           | 36,067                    |
| 2006/2007 | 7,531    | 230            | 32.7                         | 264                           | 35,055                    |
| 2007/2008 | 7,833    | 246            | 31.8                         | 278                           | 35,490                    |
| 2008/2009 | 8,521    | 266            | 32.0                         | 394                           | 46,238                    |
| 2009/2010 | 9,959    | 275            | 36.2                         | 351.9 <sup>52</sup>           | 35,334                    |
| 2010/2011 | 10,588   | 288            | 36.8                         | 426.9                         | 40,319                    |
| 2011/2012 | 11,395   | 281            | 40.5                         | 351.9                         | 30,882                    |
| 2012/2013 | 12,254   | 288            | 42.5                         | 451.52                        | 36,846                    |

(Source: Annual Reports, University of Mauritius)

Two main observations emerge from the above Table:

1. What we see is that with enrolment increasing 3-fold, academic staff has only increased by 1.4; this also means a heavier dependence on part time lecturers and also bigger classes, with the implications on delivery, quality and standards.

<sup>51</sup> The Concise Oxford Dictionary, 9<sup>th</sup> Edition

<sup>52</sup> Alignment of Financial Year to Calendar year

2. Government grants per student (actual terms) have fallen since 1998; moreover the per head figure does not take on board inflation and rising costs of living. This has implications on the room for manoeuvre for the University to invest in equipment, and to improve the service to students in terms of infrastructure. What is even more of concern is that the bulk of all income of the University goes to the payment of salaries to staff (see Table 4.5).

Table 4.5: Staff costs as percentage of UoM Total Expenditure

| Budget    | % on Staff costs |
|-----------|------------------|
| 1999/2000 | 74               |
| 2004-2005 | 77               |
| 2005/2006 | 78               |
| 2006/2007 | 82               |
| 2007/2008 | 80               |
| 2008/2009 | 80               |
| 2009/2010 | 82               |
| 2010/2011 | 76               |
| 2011/2012 | 76               |
| 2012/2013 | 78               |

(Source: Annual Reports, University of Mauritius)

Therefore, from the above table, it seems that there are limits to growth and increase on growth has implications on the service delivered to students. It has also been seen that the bulk of budget income goes to payment of academic teaching staff. As from 2012, the Annual Report has also started to include information about percentage of budget that goes to payment to teaching staff and payment to part time teaching staff. (See extract below from 2012-2013 Annual Report<sup>53</sup>)

<sup>53</sup> <http://www.uom.ac.mu/index.php/about-us/reports.html>

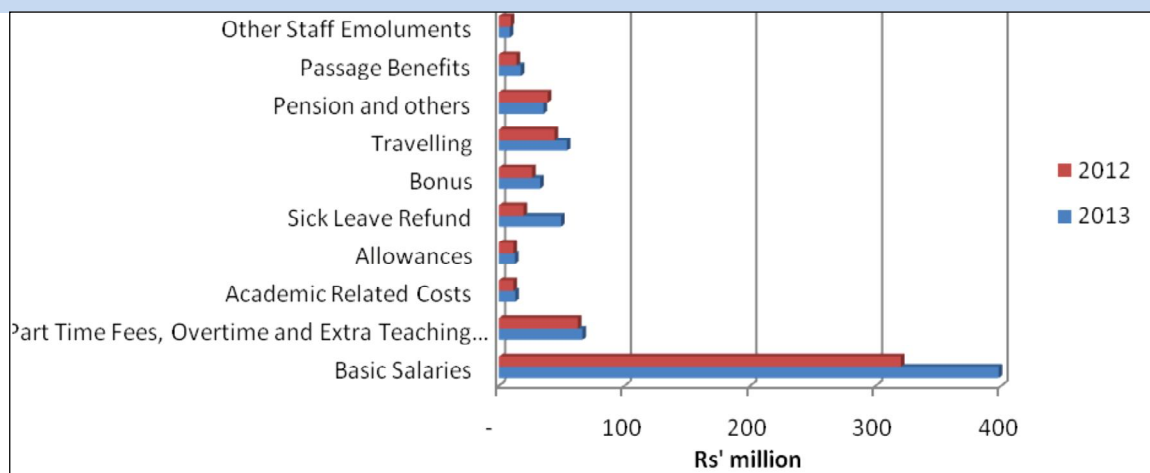
**Overview - Expenditure**

Total expenditure increased by 21% to Rs 873.40m in year 2013 (2012: Rs 722.05m).

**Staff Costs**

The Staff costs increased by 23% to Rs 688.61m (2012: Rs 559.63m) and were equivalent to 78% of total expenditure (2012: 76%). The implementation of The Visitor’s Report on ‘Restructuring of the UoM’ and the PRB & EOAC Report 2013 were the main drivers of the rise in staff costs. As at 31 December 2013, there were 987 staff (2012: 973) being remunerated, consisting of 283 academics (2012: 260) (51% of the total staff costs – year 2013) and 704 non-academics (2012: 713) (49% of total staff costs – year 2013). About 650 part-timers were appointed by UoM to serve modules for which there were no such full-time academics or in cases where UoM academic staff have already reached the maximum allowable teaching load. The diagram below shows the distribution of staff cost for the year 2013 compared to 2012.

Figure 3: Comparison of year 2013 distribution of staff costs with previous year.



(Note: The above table is part of the quote from the Annual Report)

Therefore, an increase in students is leading to increase in payment to academic staff; excluding payment as extra teaching and part time fees. For more efficient use of resources, DE could have been used: where costs of course content development would represent an upfront costs but also an investment where costs are thereafter amortised over several offers..

Making some programmes free and some fee-paying through distance education (for example the postgraduate ones, that also target lifelong and mature learners) could have help ease the stress on the already scarce resource and also help to preserve the political correctness for not introducing fees at tertiary level. Coram & Burnes (2001) explain that changes in public organisations are often dictated by political beliefs instead of economic rationality. However, according to Barr (2005), the communist experience demonstrates that subsidies can easily lead to shortage; thus free education could become the very barrier to the expansion of education. To reconcile political correctness and cost issues and also dwindling government funding while ensuring quality, DE could be introduced to fee-paying programmes that target mature/working students who would welcome a mode of delivery that is responsive to their needs.

Again, the above is echoed in Latchem (2001:19)

*“Worldwide, educators and trainers are confronted with demands for greater accessibility, flexibility, cost-effectiveness, quality and relevance and lifelong provision. ....One response to the imperatives to increase access and equity and achieve economies of scale has been to establish dedicated distance teaching institutions....Another has been for conventional face to face institutions to transform themselves into dual-mode providers...Yet another has been to create corporate and ‘virtual’ institutions, heavily reliant upon online delivery.”*

According to Maher, *et al* in Groccia & Miller (2005), when we compare online education costs, to costs with traditional lecture-based education, we need to distinguish between cost of resources acquired and cost of resources used:

- if we use the concept of costs of resources acquired, then traditional course delivery costs less;
- however if we use the concept of resources used, then online delivery costs less.

Using this second concept, a scenario, comparing costs of running a course face to face and distance education was worked out in Table 4.6 for a postgraduate course of two-year duration. In the table, all the costs items are identical for both modes of delivery, except for:

1. cost of manual development that has been added for DE delivery, that is payment for content developers.
2. servicing (tutoring) that is reduced by half for DE delivery as opposed to face to face mode .
3. space rental is reduced for DE mode as students spend less time in class but nevertheless, some additional hours have been computed for group work that students might wish to have in class.

Table 4.6: Costing of Postgraduate Programmes Conventional versus DE Mode

| Items                                               | Conventional (Rs) | DE (Rs)          |
|-----------------------------------------------------|-------------------|------------------|
| Advertisement of Programmes (newspapers + websites) | 40,000            | 40,000           |
| Processing of applications                          | 44,000            | 44,000           |
| Communications of outcome to students               | 10,000            | 10,000           |
| Registration of students and allocation of ID       | 10,000            | 10,000           |
| Collection of Fees                                  | 6,000             | 6,000            |
| Administrative                                      | 25,000            | 25,000           |
| Programme Coordination                              | 24,000            | 36,000           |
| Servicing of modules (inc lecture fees)             | 648,000           | 324,000          |
| Marking of script                                   | 24,000            | 24,000           |
| External Examiner -Travel+per diem                  | 100,000           | 100,000          |
| Board of Examiners                                  | 40,000            | 40,000           |
| Orientation of students                             | 15,000            | 15,000           |
| Faculty Board                                       | 5,000             | 5,000            |
| Project Supervision (Dissertation)                  | 90,000            | 90,000           |
| Manual development                                  |                   | 360,000          |
| Cost of Materials                                   |                   | 108,000          |
| Library                                             | 266,000           | 266,000          |
| Use of UoM Gymnasium and sport facilities           | 34,000            | 34,000           |
| Use of Computer Lab                                 | 34,000            | 34,000           |
| Use of Cafeteria                                    | 4,000             | 4,000            |
| Administrative expenses - Exam Cost                 | 228,000           | 228,000          |
| Invigilation fees                                   | 7,200             | 7,200            |
| Rental of classrooms, LT, POWA                      | 648,000           | 180,000          |
| Insurance of students                               | 1,000             | 1,000            |
| Clinic charges                                      |                   |                  |
| <b>Total</b>                                        | <b>2,303,200</b>  | <b>1,991,200</b> |
| Contingency - 10%                                   | 230,320           | 199,120          |
| <b>Grand Total</b>                                  | <b>2,533,520</b>  | <b>2,190,320</b> |
| Cost per Student for duration(2yrs)                 | 126,676           | 109,516          |

It is thus obvious, that over the years, for DE mode, less resources are used, though this delivery did require some upfront costs through course material development.

### 4.2.3 The Need To Define Or Redefine Strategic Focus

An analysis of the UoM Strategic Direction 2006-2015 indicates that there is a willingness towards the introduction of innovative approaches (Extract of UoM Strategic Direction (2006-2015<sup>54</sup>):

- Promote and provide innovative and multiple modes of delivery.
- Develop new Programmes of Studies.
- Extend Programmes of Studies beyond normal working hours.
- Provide access to underserved students.
- Develop timely Programmes of Studies which are in consonance with the market demand.
- Design and Offer high quality occupational and professional development programmes.
- Incorporate e-learning technology (web-enhanced, blended learning approaches) in Programmes of Studies to enhance student experience.
- Provide More undergraduate/postgraduate fee-paying programmes of studies.

As mentioned earlier, it is only in 2014, with the merge of CPDL and VCILT into CILL that the University seemed to have realised that lifelong learning and e-learning should in fact go hand in hand. However for real take-off, the University needs to make the leap in distance and online learning; DE/OL has to be made to take a central role and not be considered a peripheral one. But what incentives to provide when the core activities of the university are teaching (conventional mode) and research?

It is often recognised that *“developing and teaching distance education courses takes a considerable investment in time and energy (some say more than conventionally taught courses). Further, activities associated with distance teaching represent an “alternate form of scholarship that is not yet well recognized nor credited”*(Wolcott, 2003:550).

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<sup>54</sup> <http://www.uom.ac.mu/index.php/aboutusstrategic-plan.html>



Moreover, it is also felt that:

*“Even if technology applications are part of an institution’s program, most promotion and tenure systems make no provision for rewarding a professor who experiments with or uses technology to reach students either on or off campus. Faculty members need performance-based merit increases and promotions that include recognition of activities in using technology as well as in publishing.”*

(McNeil, 1990:4–5 in Wolcott (2003:551).

MC Neil (1990) argues that until we recognise these “*alternate methods of delivering instruction*” as “*integral parts of the academic process and faculty are rewarded accordingly, little expansion in the use of technology on campuses will occur*” (Wolcott, 2003:551). Moreover research shows that as opposed to extrinsic<sup>55</sup>, it is the intrinsic values that motivate academics (Wolcott (2003:562).

A study by Dillon & Walsh (1992) concludes that institutions lack commitment to support distance education; intrinsic factors motivate faculty to teach at a distance, but faculty perceive that distance teaching is not rewarded. This is confirmed by Olcott & Wright (1995) who argue that “[*faculty*] *resistance [to participation in distance education] has been due, in large part, to the lack of an institutional support framework to train, compensate, and reward distance teaching faculty commensurate with those in traditional instructional roles*”. (Wolcott, 2003:551-552)

Thus though the University of Mauritius continues to provide financial benefits for the development of ODL programmes, the real recognition of technology will occur when we stop making the very distinction DEOL/Conventional so that there is no dichotomy and hence no discrimination between the two which will be seen as equally viable means to enhance the teaching and learning exercise.

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<sup>55</sup> Intrinsic motivation and extrinsic motivation. The former has an internal origin; an individual derives satisfaction from performing or being associated with a particular activity because it appeals to his or her values or fulfills a personal need or drive (i.e., motive). In other words, engaging in the activity is reward in itself. Extrinsic motives, on the other hand, are associated with benefits received from a source other than the activity. (Wolcott, 2003:555)

## CHAPTER 5: CONCLUSION AND THE WAY FORWARD

*The development of Mauritius could be accelerated by greater use of distance education. This is because national economic and cultural success now depend more on raising the average learning of the whole population than on giving a small elite access to the summits of educational achievement. Distance education offers Mauritius a cost-effective way to enhance the development of its human resources. [...] Those opportunities could be made available to large numbers of people rapidly and flexibly with only modest expansion of the present infrastructure.*

(Daniel, 1989:6)

## 5.1 Discussion

From the two previous chapters, we discussed the threats and challenges, internal and external, that the University is facing.

It has a pressure to increase access; this demand for access is accentuated by the fact that we live in a multicultural country where he/she who has education has power. Moreover, having an ageing population, lifelong learning is taking a new dimension: these learners need a university that is responsive to their needs in terms of flexibility and has an awareness of their professional and personal constraints.

Being no longer the only university on the island, it is witnessing competition from local universities (public and private) and also overseas, with its market share being gnawed by rivals. This loss of market share is understandable as the university cannot meet the demand. It also means that by continuing to address traditional audience through the best qualified secondary school leavers, who do not pay fees for fulltime undergraduate programmes, it is further maimed in its ability to reach to those audience that can help it generate funds (part time courses that are fee paying, postgraduate courses). Fees from such programmes would have allowed the university to cross-subsidise its other activities such as research and improved infrastructure.

The university continues to teach using traditional methods, and teaching mostly traditional learners/school leavers with this creating a burden on its budget in terms of payment to academic staff, thus reducing its rooms for manoeuvre in terms of ability to invest in say, infrastructure.

In this dissertation, we argued that part of the answer to the above threats and challenges, internal and external, could be through distance education. DEOL can help break the Iron Triangle (Cost, Access and Quality) for national development. It helps increase access through economies of scale. The UoM can thus increase its local market share, and even have a regional footprint. DE addresses issues like cost-effectiveness and can be an income-generator, allowing the University to reduce its dependence on government funding.

By addressing issues such as Access and Cost, these DE ventures could also receive the blessings of the Government who is in favour of addressing these concerns. DE can help Mauritius become a knowledge hub and achieve the 2010 Election Slogan “One graduate per family”. It is appealing to working and lifelong learners, an audience who needs flexibility and who can pay fees. By making changes to peripheral activities, DE can be more easily accepted by the academic body.

Above all, DE helps develop the new learners with skills that make them fit for the knowledge society, through the integration of technology, the new “winds of change” in the higher education scene. However, for the change to be successful, the institution’s leaders should make DE an integral part of its strategy and send signals that are coherent to its position on distance education: basically, it should *walk the talk* and not pay lip service to its agenda to promote DE.

## **5.2 Limits**

Using documentary research, it would have been interesting to compare more thoroughly the rhetoric of University leaders through speeches, annual reports, and then do an audit of concrete actions taken to make the rhetoric a reality. Were their actions coherent with their speeches or is there policy coherence? For instance, can examples be identified when they argue that they want to develop distance education but provide very limited incentives to staff involved (promotion, recognition, etc.)? This triangulation of ‘sources’ would allow one to get different perspectives and a truer picture of the official and the real stand point of the stakeholders. Triangulation can be further used by studying documents in the public domain and then the private domains, to see the “genuineness” of the stand of leaders and the main agents.

It would also be very interesting to confront leaders, ex and current, with their official announcement and how what they were undertaking (or not), in terms of policies, was going against their supposed claim to promote DE.

There are limits inherent to the methodology used: McCulloch (2004) talks about the “*differential survival rate of documents*” and argue that there is sometimes, ‘selective

*deposit* and *'selective survival'*. Moreover, it is also argued by this author that documents that do survive are probably strongest in presenting viewpoints and those that have ultimately been successful. Furthermore using documents that have been produced for other purposes and not for the specific aims of the investigation as a source of data (Ahmed, 2010) may be a disturbing factor.

Interview of the main decision makers involved for the period under review would have been interesting. However, since they would then have the advantage of hindsight, they would have maybe wanted to show themselves in the best light and criticise the work of those who were before them or who came after them. In itself, it would have been an interesting research on “official” discourse of the present leaders v/s past leaders.

It would have been also interesting to study the stand of academics and students with regards to DE.

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