

Open and Distance Learning: An Unavoidable Pillar in the Building of a Knowledge Society

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Abstract

Knowledge societies can only be built when the education pillar is strong enough to support them. Open and distance learning (ODL) is revolutionising the ways learning takes place and emancipating educational practice from the confined walls of traditional classrooms to make learning accessible to anyone, anywhere and at any time. The pervasiveness of technology and the much acclaimed pedagogical worth it carries will undoubtedly shape the ODL learning paradigm in unprecedented ways. This research paper has looked into some key aspects of ODL in Mauritius and assessed its role as a vital pillar in the creation of a knowledge society. Using future thinking tools, a Futures Wheel was developed to portray the different trends and signals that will define the future of ODL in Mauritius. The findings of this paper show that Mauritius can offer high quality courses at affordable costs by maximising the tenets of technology.

Keywords: Futures Wheel; knowledge society; open and distance learning (ODL); Open University of Mauritius

Introduction

The sharing of knowledge and information, particularly through information and communication technologies (ICT), has the power to transform economies and societies and significantly impact people's lives as all members of a community get involved in knowledge creation and utilisation (UNESCO 2014a). Mauritius aims to develop the knowledge sector as a new pillar of the economy and thus increase its current contribution of 2.7 per cent to the GDP to about 10 per cent by 2025 (Ministry of Tertiary Education, Science, Research and Technology 2013). It has embraced a new wave of economic and social transformation that will continuously usher the island towards a knowledge society.



The building of knowledge societies rests on the provision of quality education for all, and open and distance learning is being viewed as the most pertinent alternative for educational systems that are geared towards reducing tuition fees and increasing educational access. According to Calvert (2006), ODL is considered nowadays as the most viable means for broadening educational access while improving the quality of education, advocating peer-to-peer collaboration and giving learners a greater sense of autonomy and responsibility for learning. There is no doubt that ICT is a serious enabler of the paradigm shift taking place in open and distance learning. There are many more factors affecting the future of ODL and it is therefore imperative to analyse them in the context of forthcoming developments in this sector. The Mauritian government's policy of "one graduate per family" is intended to increase the skills and competence of our young people, promote social mobility and improve quality of life (Ministry of Tertiary Education, Science, Research and Technology 2013). In line with this policy, reputable tertiary education institutions are being encouraged to operate in Mauritius and the setting up of the Open University of Mauritius (OU) has widened access to higher education, not only in the country but in the region as well. What is the future of ODL in Mauritius? How is the future of ODL likely to contribute to the development of the knowledge society? Is the country technologically well poised to meet such objectives? These are some of the questions that this paper will address.

Literature Review

Today knowledge has become a global religion, providing solutions to individual and collective social and economic problems (ICDE 2009). The term "knowledge society" was first coined by Peter Drucker in 1969. The roots of the idea of a knowledge society emerged in 1858 in the writings of Karl Marx, who was the first to write that "knowledge has become a direct force of production" (Philips, Hameed, and Akhdary 2017). The English Oxford Dictionary defines a knowledge society as "a society based on the acquisition, dissemination, and use of information, especially by exploiting technological advances; a society with a knowledge economy" (OED 2018). According to Dahlman (2011), a knowledge society can be defined as a society that values the creation, dissemination and effective use of knowledge, and has the institutions, infrastructure, norms, social interactions, and culture that support this. The definition of a knowledge society still varies in different contexts, but the concept of knowledge societies encompasses much broader social, ethical and political dimensions and involves all members of a community in knowledge creation and utilisation (UN 2005).

Many organisations have endeavoured to promote their approaches to build such societies and emphasise their importance in today's world. One such initiative, UNESCO's Building Knowledge Societies, outlines the fundamental role of education in the process of building knowledge societies while taking into consideration the human dimension of the digital divide and breaking barriers for everyone to benefit from learning opportunities across the globe, since information to all is impossible without education (UNESCO 2005). UNESCO (2014b) draws attention to the quality aspect of education for all as one of the vital pillars

of building knowledge societies. No doubt education is at the forefront of all economic development, providing insurance against poverty and representing opportunities for the empowerment of people for their personal growth, critical and exploratory thinking and encouragement to innovate and to adapt to changes in an increasingly globalised environment (MOEHR 2014). Mauritius allocates around 12.5 per cent of its total expenditures to the educational sector, showing the country's commitment towards educating its citizens (Statistics Mauritius 2016).

Since every society has its own knowledge assets, especially those that are strongly influenced by scientific progress and technology (Karpov 2018), building such societies that connect together to impart knowledge is imperative as the current spread of new technologies and the emergence of the Internet as a public network seem to be carving out fresh opportunities to widen this public knowledge forum.

Gesci, which favoured the project “Knowledge Society for All” in 2009, argued that education is an asset that needs to be shared among everybody, since the reason countries remain underdeveloped and in poverty is due to the presence of knowledge gaps (Gesci 2009). The argument extends to the fact that ICT plays a key role in the education process by providing a global and up-to-date infrastructure for learning and innovation and education cannot be relevant for development without the use of computers today. In a knowledge society, “new media” and open and distance learning provide new possibilities for accessing and sharing knowledge (Cornu 2007). Cornu further purports that a knowledge society needs competences linked to distance education, such as being able to learn at a distance, to learn through distant resources, to learn through digitised systems, and to learn through collaborative distance tools such as e-learning environments and learning platforms.

Education including open and distance learning (ODL) is witnessing a transformational period directed by technological functionalities. The need for greater flexibility, lifelong learning and ongoing professional development coupled with trends in globalisation and the global economy are creating demands for new ways to gain knowledge and training in order to be competitive in the workforce. ODL is increasingly expanding opportunities to meet this growing demand (Hanover Research 2011). According to Pitsoe and Maila (2014), ODL has widened access to higher education in the developed and developing countries through technology use and quality assurance. A colossal number of learners choose ODL for various reasons, some because they are working full time and wish to study further for professional development, while others find it a flexible way to study, especially mothers who have to babysit and want to study while doing so.

One of the attributes of distance learning is mediated learning whereby technology is used to bridge the gap between instructors and learners (Visser et al. 2012). This feature of ODL has made distance learning a policy option for most African states that are exploring the educational possibilities it offers (Oladejo and Gesinde 2014). Moreover, the trend in

African states is to intensify globalisation through IT infrastructures such as the Internet, as it has significant economic and pedagogical implications. Hanover Research (2011) reports that Africa and India are two of the growing markets for distance learning globally, as these represent nations with a high demand for higher education but insufficient existing infrastructure. By the end of 2016, 25 per cent of the population in Africa were using the Internet (ITU 2016), a figure that keeps increasing and is promising for providers of ODL.

The concept of the knowledge society therefore rests on three vital components, namely education, ODL and technology. These components in addition to development and innovation have been visually captured in Butcher’s (2011) theoretical framework (Figure 1).

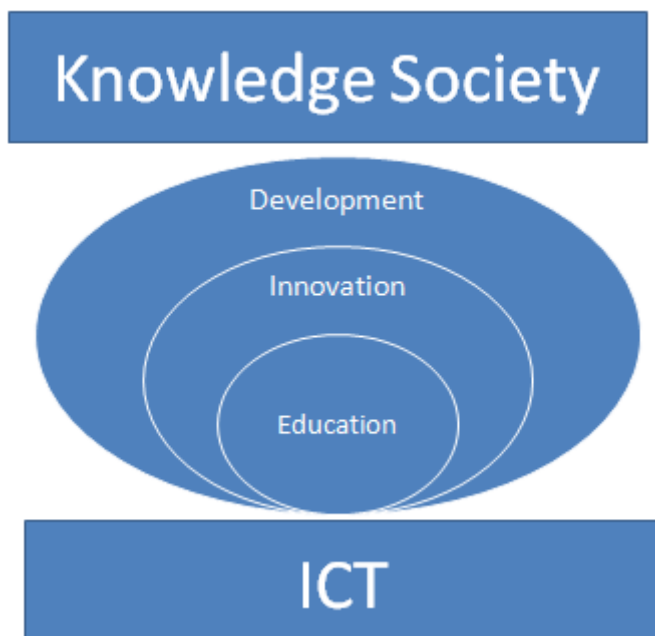


Figure 1: Framework for reflecting on ICT, education, innovation and development support of a knowledge society. Source: Gesci (2017)

Mauritius is working towards building a knowledge society by expanding access to quality higher education and strengthening research, development and innovation (Ministry of Tertiary Education, Science, Research and Technology 2013). More and more facilities are offering tertiary education, especially for adult continuing professional development. In this context, the Open University of Mauritius was set up in 2012 and in five years the number of learners has more than trebled (OU 2015), showing the demand for the ODL mode of learning. This is certainly contributing to the establishment of a knowledge society.

ODL is probably at a budding stage, but its role will be of paramount importance in shaping the new learning paradigm and this will contribute to the development of the knowledge society. This research paper seeks to highlight the trends and events that are signaling future ODL orientation, with a special focus on the contribution of technology.

Aims and Objectives

The starting premise of this study rests upon the extensive evolution of the educational sector at all levels, from early childhood to adult continuing education, that is foreseen to contribute to the creation of a knowledge society which holds the promise of bringing development, solidarity, democracy and peace (Cornu 2007). As learning patterns evolve and adult training takes on a new dimension, greater attention will be paid to the potential of ODL to meet educational needs. In line with these changes, this paper will address the following two research questions:

1. What is the contribution of the ODL sector to the development of a knowledge society?
2. Which prevailing signals and trends are likely to impact the future development of ODL in Mauritius?

Both primary and secondary data will be collected, compiled and analysed towards meeting these objectives.

Methodology

The methodological approach for this research study is both qualitative and quantitative. Primary qualitative data were collected from key players in the different sections of the Open University of Mauritius using the future thinking tool, which led to the construction of the Futures Wheel regarding ODL development in Mauritius. This tool, invented by Jerome C. Glenn, is a future-oriented technique which provides a structured way of brainstorming to help participants analyse and explore the effects or consequences of trends and signals (Bengston 2016).

Furthermore, secondary data concerning the ageing population, government expenditure on health and education, and computer use in Mauritius have been compiled from various sources including Statistics Mauritius and the world statistics websites.

The Futures Wheel was drawn based on the focus group discussion to analyse trends and signals that will impact the future development of ODL in Mauritius. A brainstorming session was conducted with the heads of the finance, academic, administrative and IT sections of the university. A number of key questions were used to prompt, fuel and expand the debate. Opinions were spelt out and in some cases counter arguments offered. Profound insights emanated from the discussion which pointed at an informed practice regarding the

development of the ODL sector in Mauritius. Data captured was then analysed and summarised using the Futures Wheel technique.

Data Analysis

The futures thinking tool helped to collect data representing trends and signals that are scanning the horizon for a possible accelerated development of ODL in Mauritius. The Futures Wheel (Figure 2) thus depicts useful information organised within the PEST analysis framework. A PEST analysis (Law 2009) is often conducted using brainstorming techniques and analyses the four external factors, namely, political, economic, social, and technological, that may impact the performance and evolution of an organisation or sector.

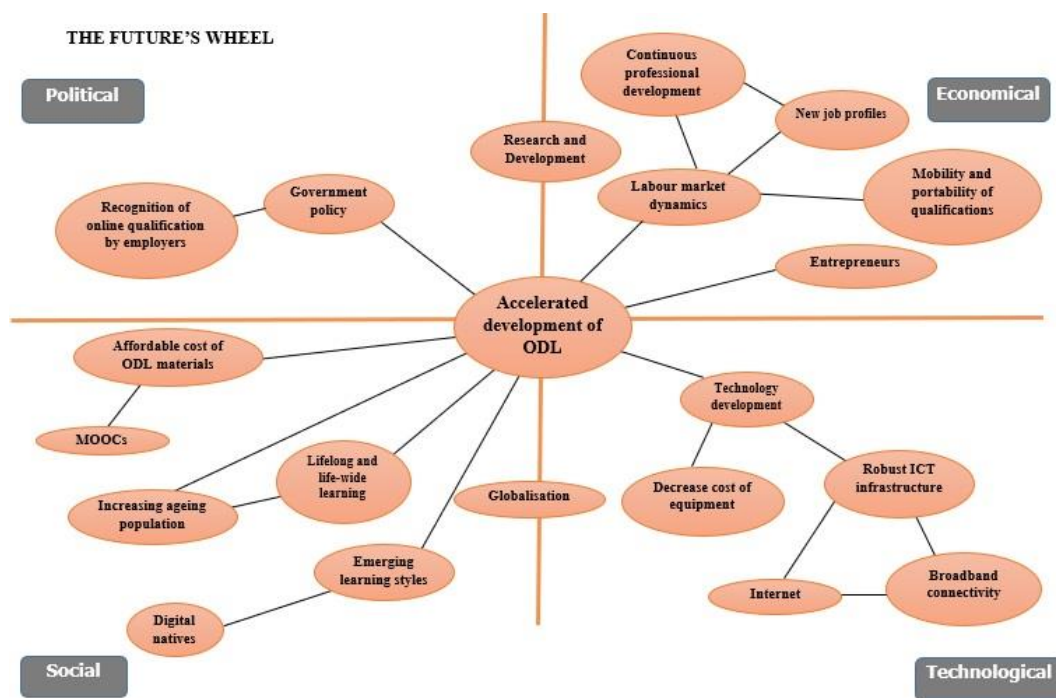


Figure 2: Futures Wheel for ODL development at the Open University of Mauritius

Social Perspectives

It has been found that learning brings social and health benefits to the ageing population, helping them to resist chronic pain and diseases better (THE 1999). From Figure 3 we can see that the trend for the ageing population (above 60 years old) in Mauritius will continue to rise to reach an estimated 23 per cent of the population by 2032. The building of a knowledge society entails providing second chance education to these persons so that they

remain productive and active in the society, and there is no doubt that ODL can offer the appropriate learning platform for this to occur.

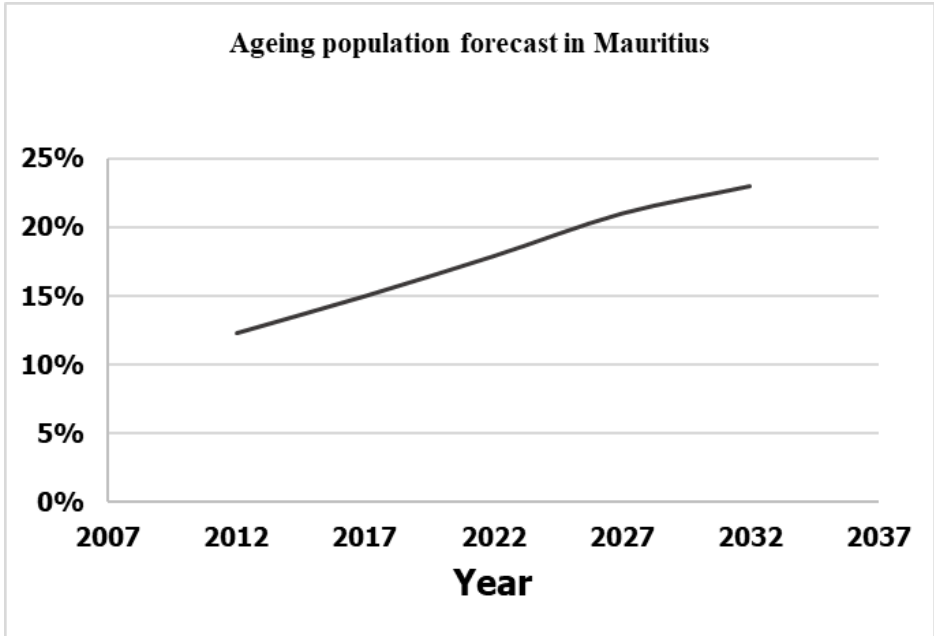


Figure 3: Ageing population forecast in Mauritius

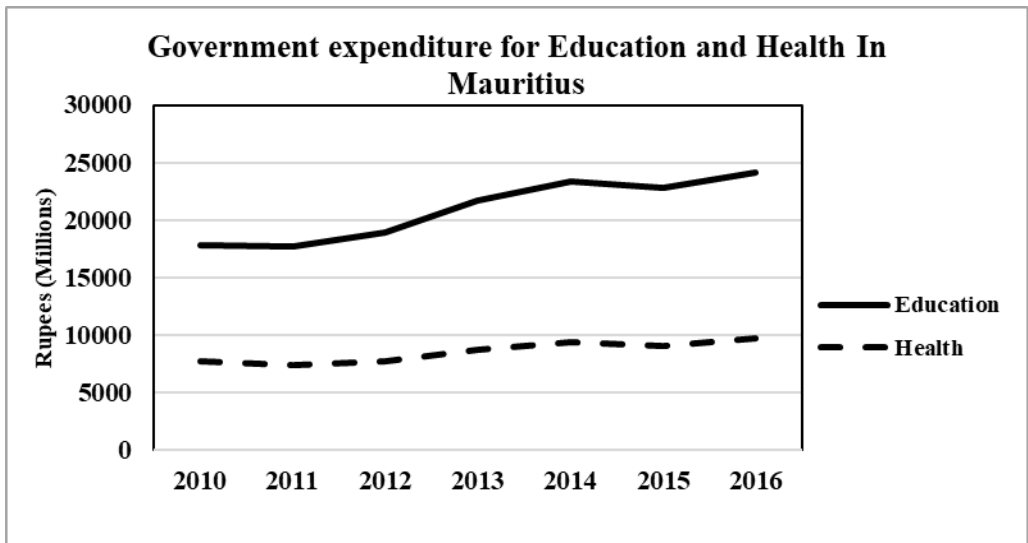


Figure 4: Government expenditure for education and health in Mauritius

Today it is a well-known fact that both education and health expenditures take the lion's share of the national budget. In Figure 4 we observe that education is not just more expensive than health but the trend is such that the cost of providing traditional education is increasing at a faster rate than the cost of providing health services. But Lucas (2014) reported that the cost of tuition fees can be curbed if concepts of ODL like the Massive Open Online Courses (MOOCs) are adopted to conceive, develop and deliver high quality and technologically based learning materials, guaranteeing in the process economies of scale. At the Open University of Mauritius the policy has been to offer high quality courses at very affordable prices to encourage more people from the working force to upgrade their professional qualification, while at the same time permitting a greater number of school leavers access to tertiary education. This analysis concurs with UNESCO's (2002) views that the globalisation of distance learning provides many opportunities for developing countries for the realisation of their system-wide education goals.

The phenomenon of globalisation will necessitate high flexibility for learners to start a course in one place, continue in another one and complete it in yet a different location and once again this can be achieved with the learning platform that ODL offers. ODL is designed to expand educational experiences independent of time, location, and physical barriers. The Open University of Mauritius has opened doors to students of southern Africa by offering a number of scholarships and marketing its courses in that region. The setting up of satellite learning centres in these countries is being envisaged, thus giving the concept of ODL a globalising dimension.

Political Perspective

According to UNESCO (2002), in regions like Central and Eastern Europe and the former USSR the political and economic transformations have had important implications for education, and have already led to fundamental reforms and restructuring of national education systems. Contrarily, in Latin America, where there is precarious political support and chronic ill-funding, distance learning projects continue to suffer. In Mauritius, however, government has been giving clear signals that it wants to make Mauritius an intelligent island, with branding such as "Towards i-Mauritius," by setting up national goals and introducing specific legal frameworks and policy measures. The National Broadband Policy (2012–2020) (Republic of Mauritius 2012) and the National Information and Communication Strategic Plan 2011–2014 (Gillwald and Islam 2011) are examples of initiatives taken to gear the country towards the creation of a knowledge society whereby learning becomes an integral part of living rather than a periodic activity in time. ODL thus poses itself as an indispensable pillar to support this vision of the government.

Government's policy to boost research and development by earmarking Rs100 million (MRC 2014) towards this endeavour further consolidates measures taken towards promoting innovation and creative thinking. New areas of intervention can be identified and ODL becomes a powerful enabler in this process.

The recognition of online qualifications by employers can pose problems and discourage this mode of learning delivery. The creation of the Open University of Mauritius is a guarantee from the government that such fear can be dismissed. Today, after six years of operation, there are 5000 learners who have adopted this mode of learning.

Technological Perspective

Mauritius is presently experiencing an exponential trend in growth in both the use of computers and access to the Internet, as shown in Figure 5, with 54.7 per cent of inhabitants having access to a computer and 63.3 per cent having access to the Internet (Statistics Mauritius 2017). Furthermore, with a robust ICT infrastructure, the country can venture into cross-border learning initiatives, allowing students from different countries to share a common learning experience. Thus the country is well prepared to embark on a technology-driven course, making ODL a foreseeable learning experience, where learning “using” technologies becomes a global phenomenon (Gulati 2008).

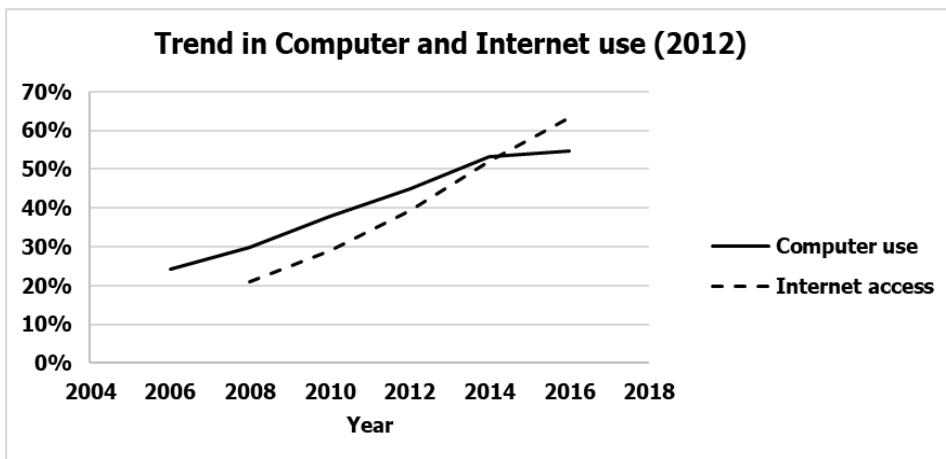


Figure 5: Trend in computer use and Internet access in Mauritius

Economical Perspective

Figure 6 shows the logical path from sustained technology to setting up a knowledge society. The economy of the country is an unavoidable pillar in the building of a knowledge society. Higher education is a major driver of economic competitiveness in an increasingly knowledge-driven global economy (ICDE 2009). So, by boosting higher education through ODL practices, supported by a strong technological infrastructure, we are guaranteeing the rippling effects over the economy.

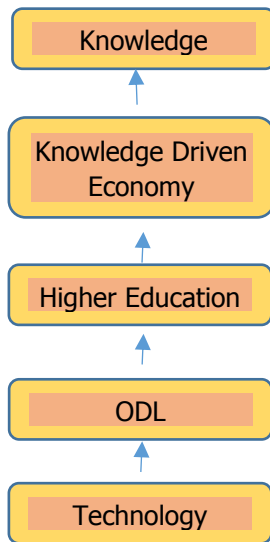


Figure 6: Building a knowledge society through the use of sustained technology

The highly dynamic labour market is constantly creating new jobs, restyling some existing ones, and pushing out others into obsolescence. Moreover, the current situation is calling for greater mobility and portability of qualifications, necessitating in the process continuous professional development, upskilling and reskilling opportunities—a demand that ODL can certainly address. There is also a strong drive towards boosting entrepreneurship in the country as entrepreneurs improve the employment rate. This is certainly calling for greater flexible learning opportunities. The economical quadrant of the Futures Wheel thus depicts the salient prevailing trends and signals which are positioning ODL to play a pivotal role in the setting up of a knowledge society in Mauritius.

The above analysis lists the numerous key factors that point towards the establishment of a strong ODL sector in Mauritius. With the ubiquity of technology, the setting up of a robust ICT infrastructure and the decreasing cost of ICT tools, the channels for fast delivery of ODL materials are guaranteed. New learning styles are emerging, tapping technological affordances for learning achievements, with digital natives taking the lead in this new endeavour. Lifelong and life-wide learning have become buzzwords and will draw heavily on ODL facilities. The need goes beyond the span of time for ongoing learning and embraces a panoply of experiences and skills that cut across sections and organisations. The Futures Wheel thus summarises the key drivers of an accelerated ODL development in Mauritius. These key drivers are forces that orient and position our new learning paradigm to meet the needs of a digital learning society. Even the features of ODL will morph and be revisited to embrace concepts like schools in the cloud, organic learning, and open-schooling for lifelong learning.

Discussion and Conclusion

This research paper sought to situate and evaluate the role of ODL as an unavoidable pillar in the creation of a knowledge society. Using the Futures Wheel tool, it has been argued that there are a number of signals and trends that will shape the future of ODL in Mauritius. In a nutshell, the major conclusions include the following:

1. School education and adult learning are being reshaped to offer greater independence and flexibility to learners—concepts which can be greatly facilitated by ODL affordances.
2. The pervasiveness of technology is a serious enabler of the development of ODL.
3. Government eagerness to develop a knowledge society has been translated by a number of initiatives, including the drafting of legal and policy frameworks (MICT 2013) that will draw on ODL facilities for successful implementation.
4. There are some vital strata of the society, including housewives, the elderly, prisoners and small entrepreneurs that will have growing learning demands to be more productive and active, and once again, ODL holds key tenets for the realisation of such demands.

Mauritius is well poised with a strong ICT infrastructure that can drive ODL to meet the needs of the emerging digital learning society, providing in the same breath greater learning opportunities to the non-traditional student segment of the learner population. Policy makers and stakeholders must take advantage of this great potential to offer to learners learning content of high quality at a relatively low cost.

Today, all trends indicate that in the future people will change professions more often and remain active for longer periods due to demographic changes and higher life expectancies. Government therefore has much to gain by encouraging the population to make learning an integral part of their living and to maximise the benefits of ODL.

Barriers still loom for Mauritius's nascent form of open and distance learning; however, there are promising indications that the future of ODL in Mauritius can be a bright one as necessary measures are taken to overcome all the challenges that may crop up. Great strides are being made to converge towards a knowledge society and this research paper posits that ODL holds some indispensable and interlocking pieces to complete the puzzle.

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