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Alumni as Lifelong Learners
Towards a Business Model for Lifelong Learning in Higher Education

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Abstract

Lifelong Learning (LLL) involves the formal and informal education and learning of individuals and by extension society in a bid to function efficiently in today's knowledge world. This Learning is not limited by age, race, or other susceptible circumstances; it is instead encouraged and seen in the contexts of adult learning, continuing learning, and work/ professional learning. By de-facto, it is to prepare the aging population, as well as the younger generations for a rapidly changing and increasingly global world in which technology and research rapidly affect knowledge, competency and standards. It is a new adagio to prepare a modern knowledge-based society for the next decades to come. However, in order to fully embrace this model, more modern, open and flexible learning systems need to be put in place. These will enable individual learning pathways for all citizens.

In this thesis, we have focused on the Öresund Universities, which are located in the cross-border region of Sweden and Denmark comprising of Skåne County and Greater Copenhagen, in addition to three rural counties. It employs the 'Triple-Helix' model, which is a focused approach that is used to foster cooperation between the surrounding universities and the broader society. This cooperation includes industries and the local governing authorities. The aim of this study is to address the question of how and what Business Model the University could develop and implement, in regard to the concept of Lifelong Learning and its application to their alumni and the higher educational model, using modern Information, Communication and Technology (ICT). The research method utilized in this project is of Questionnaire Based Surveys.The sample target group used is the Alumni of the Lund University School of Economics and Management (LUSEM).

The centripetal focus and results of this research study have helped to develop a higher education model combining that can be easily adaptable, with some key factors as well as an ideal business model for successful implementation of Lifelong Learning (LLL) in the context of Öresund University.

Keywords: Lifelong Learning, E-Learning, Öresunds Universities, Öresunds Region, Business Model.

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Lund, June 2009

Barrington Clifford
Zahidur Rashid

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List of Abbreviations:

CP	Content Provider
EFL	Executive Foundation Lund
EICM	Education Industry Conceptual Model
EU	European Union
ICT	Information, Communication and Technology
LLL	Lifelong Learning
LMS	Learning Management Systems
LUCE	Lund University Commissioned Education
LUSEM	Lund University School of Economics and Management
ÖSR	Öresund Science Region
ÖU	Öresund University
PPP	People, Place, and Profit

1. Introduction

This is the introductory chapter of our research study. We will first introduce our research topic with an informative background. Then, this is followed by a comprehensive explanation of the phenomenon of Lifelong Learning. We illustrated the problem area, followed by the research question, delimitation and target group. Finally, we concluded the chapter with a clear thesis structure.

1.1 Background

The methods and trends of attaining higher education are evolving. Rising costs, shrinking budgets, and the increasing need for distance education, are causing educational institutions to re-examine the way that education is delivered. Many institutions are adapting the use of technology, in the form of further education in the perspective of Lifelong Learning, in response to this changing environment. (New Media Consortium, 2007)

For a number of years, different technological tools have been used to develop the communication process, collaboration and information distribution. The tools used range from blackboard and chalk, paper and pencil, printed books, photo copies, and radio and television, to the modern information and communication technologies (ICT). While we have been introduced to the uses of ICT in education, we moved the predefined times, places and ways of teaching into the new paradigm of learning at anytime, anywhere and anyhow (Petegem W. V., 2008).

Lifelong Learning (LLL) is a concept of continuing education through the process of augmenting structures that fit the realities of individuals from a professional perspective. It involves individuals and organizations in the overall process of learning. Moreover, it helps to renew or develop their knowledge as well as complete and compliment the knowledge that people attain during their careers. This new paradigm of learning promotes and motivates the continued search for knowledge, and for individuals who occasionally need it - when it is required to broaden their range of opportunities.

The learning conducted nowadays is rapidly changing, and how learners want to learn, (or can learn) as set in motion the need for this change. Lifelong Learning can be further defined as the activity a person performs throughout their life to improve his or her knowledge, skill or competence. *Lifelong Learning* has little bias, as working individuals, unemployed persons, current students and university alumni, are all good target groups for the Lifelong Learning process.

Since the inception of the World Wide Web (www), a new paradigm has been set in motion for the *distance learning* process - one component of LLL- which enhances the opportunity

for learners to be more skilled and competent even though they are at some physical distance from the centres of learning. Here the teachers not only provide the learning materials to support their courses for traditional students, but with these approaches, but offer some additional learning material through internet (Petegem W. V., 2008).

1.2 Problem

Although we are aware that many universities have already fulfilled the conditions for successful implementation of LLL, the lack of development has been identified and described. Independent learning approaches are well supported by the emerging learning environments which are in turn supported by state-of-the-art technologies. However, the appropriate strategy and business model can make LLL become an even more mutually beneficial theme in the Öresund region.

1.3 Purpose of Study

The aim of this study is to identify which Business Model could be successfully implemented by Universities trying to enlarge and increase their programs of study with Lifelong Learning. The focus will be ICT based as well as on where, and how universities could enhance Lifelong Learning programmes with the help of modern ICT; and as to what is the appropriate strategy to be used for a feasible and sustainable approach in LLL. Additionally, the question of Information Technology would have a significant impact on LLL as well as on our choice of research methods during this process. The answers to the research question or problem can be found through the use of methodology, research strategy management, model construction, and the results of such decision making processes.

1.4 Research Question

The intention of our research and the final thesis is to answer the following question:

- Which Business Model could the University develop and implement, in regard to the concept of Lifelong Learning and its application to their alumni and the higher educational model, using modern Information, Communication and Technology (ICT)?

1.5 Delimitation

In this thesis we have chosen to focus on one of the Öresund Universities, which are located in the cross-border region of Sweden and Denmark called Öresund Science Region. Although it would have been interesting to expand the study and compare the field of Lifelong

Learning processes, demand, popularity and an effective way to implement the process in the different universities, these specific issues have been excluded from this thesis. This is due to the short span of time in which to complete the study, and we could only focus on a specific short geographical area like the Öresunds Region.

The evolvement of LLL is a new phenomenon where the Universities of the Öresunds region, can derive benefits from its use in all sectors involved. There are however some limitations associated with this LLL, as a concept. It also required the right LLL policy and a precise implementation strategy.

We would have much preferred to have a broader base of schools in which to survey from, offering greater diversity of opinions. However, LUSEM will be adequate to answer the research question posed and to help in the recommendations that will be made, and to gain a comprehensive understanding of their needs pertaining to Further Education and the kind of services they are looking for.

1.6 Selecting the target group

At the beginning our focus was geared towards the Alumni from Lund University and other working individuals within the organizations in the ÖSR. After the construction of our survey questions which reflects our key issues in the thesis, it was discovered that we would not be able to send our survey questions directly to those alumni due to some internal agreement between the university and their respective alumni form by the University and their respective alumni.

To realize our objective we selected a specified target group in order to collect the appropriate information, through the means of a survey. The target group for this study research would be the Alumni of the LUSEM (Lund University School of Economics and Management) or any working individuals from different organizations who might desires to continue education beside that learnt at work.

We have chosen alumni from LUSEM as our sample target group in which to study, seeing that the characteristics and attributes and experience of these alumni is for the most part homogenous. All are connected to the University already, and most participants, are highly interested in the process and concept of LLL, as they have marginally little formal work-Learning experience. Moreover, they are interested in LLL since it can provide them with an appropriate platform to update their key competences and their general knowledge of the world as well as they can manage their daily life in this dynamic changing world.

2. Related Concepts Regarding Lifelong Learning

This chapter starts by presenting a chronological process of learning leading to Lifelong Learning. The appropriate definitions is rendered, hence commence our theoretical framework which will be discussed next.

2.1 Traditional Classroom Learning

In traditional way of learning, the teachers are the source of knowledge. By sitting in a classroom the learners gain knowledge directly from the teachers. There are some common tasks and specific syllabuses for all the learners. Several classroom examinations are taken to measure the progress of the student's skill and based on their performance they are promoted to a new step of learning. Good quality learners are identified and after successful completion of a step they are permitted to continue their education to a next step. In traditional way of learning the teachers receive initial training as well as ad hoc in-service training. Students will pass through a few different stages including pre-school/kindergarten, elementary/primary education, high school, pre-university/undergraduate, post graduate/ masters/ professional degree, and doctorate level studies. There is usually no further that a person can go. And by this stage, resorts to teaching others, and making new discoveries.

2.2 E-Learning

E-Learning is defined as formal and informal education and information-sharing that uses digital technology (EIU, 2003). It refers to the "use of Internet Technologies to provide education with advantages such as low costs and high flexibility, including accessibility, anytime and anywhere." (Rosenberg., 2001)

ICT has also created new opportunities for universities. Studying at a net based university is a way of using E-Learning, taking advantage of the technological benefits, while transforming and hopefully improving the education process. E-Learning in schools is used to reach a broader segment of the population and to meet the needs of non-traditional students (EIU, 2003).

According to an EIU report, the E-Learning concept is very important in the development of an educational environment with the help of modern ICT. We agree with this, in order to become a successful Lifelong Learning provider, Öresund University (ÖU) can adopt the E-Learning process by developing their virtual infrastructure as well as by improving their technological backbone. Since, "E-Learning is of tremendous importance to Lifelong Learning" (Petegem W. V., 2008). Therefore, with the help such low cost, high flexibility

offerings in the E-Learning process, ÖU can provide a successful Lifelong Learning environment for all who expect to achieve more knowledge.

 2.3 From E-Learning 1.0 to E-Learning 2.0

Karrer T. (2006) identified some key characteristics of E-Learning 1.0 and E-Learning 2.0. The basic trends, in E-Learning 1.0 were and are the starting point for many universities, mean that we have really started down a couple of new paths which is labeled as E-Learning 1.0 and E-Learning 2.0. From the following table we can realize the strategic changes between E-Learning 1.0 and E-Learning 2.0.

Table 2-1: Comparison between E-Learning 1.0 and E-Learning 2.0 (Tony Karrer, 2006)

Category	E-Learning 1.0	E-Learning 2.0
Main Components	Courseware, LMS, Authoring tool	Wiki, Social Networking & Bookmarking
Ownership	Top-Down, one-way	Bottom-up, Learner-driven, Peer learning
Development time	Long	None
Content Size	60 minutes	1 minute
Access time	Prior to work	During work
Delivery	At one time	When needed
Content Access	LMS	Search, RSS feed
Driver	ID	Worker
Content creator/provider	Trainer/Teacher	User/student
Training Role	Gourmet Chef	Food Critic

E-Learning 2.0 can be defined as learning that is not based on objects or contents that can be stored as in the library. However, the idea is that learning is like a utility (water or electricity) that can be taken according to demand. Here everybody is a content provider (CP). However there is a need for a common platform, which could be called a social environment (Downes S., 2005).

Downes (2005) suggested that, the traditional approach to E-Learning has been to utilize the use of a Virtual Learning Environment (VLE), which software is often expensive and it tends to be structured around courses, timetables, and testing. This approach is too often driven by the needs of the institution rather than the individual learner. On the other hand, E-Learning 2.0 (as coined by Downes) takes an approach called 'small pieces, loosely joined' which combines the use of distinct but complementary tools and web services - such as blogs, wikis, and other social software - to support the creation of ad-hoc learning communities (Downes S., 2005).

2.4 E-Learning and Hybrid Learning

From the age of E-Learning to Lifelong Learning the teaching and learning process transformed into the combined learning of E-Learning and the traditional learning. Moreover, E-Learning is still applicable in the learning environment. Therefore, we see that in most cases E-Learning is not replacing traditional face to face learning, but is mostly considered as an additional learning process. This mixture of virtual and physical learning resources and activities is referred to as 'blended learning'. It means that the learning practice is enriched and enhanced by a digital environment, which is incorporating the physical and virtual world of teachers and learners (Petegem, 2008).

2.5 E-Learning and Lifelong Learning

E-Learning has a tremendous importance to Lifelong Learning as a specific mode of attending a course or programmes of study, where the students rarely attend the classroom education or need on campus access to educational facilities, since E-Learning is naturally appropriate in terms of distance learning or flexible learning. Employees who like to be involved with the Lifelong Learning process can easily access the courses from their home or work place, and can turn it into a personal E-Learning environment (EADTU, Petegem, 2008).

Petegem (2008 describes the learning generations, E-Learning to hybrid learning and the flexible learning process. He also mentioned the importance of E-Learning and/or virtual learning in a successful Lifelong Learning environment. We do concur with this thinking as is our case in the provision of LLL by ÖU. As they do require the help of modern ICT as well as the current facilities of LMS, as it was suggested that "E-Learning is of tremendous importance to Lifelong Learning". (Petegem, 2008)

2.6 Lifelong Learning

The European Commission defines Lifelong Learning as: "all learning activity undertaken throughout life, with the aim of improving knowledge, skills and competence, within a personal, civic, social and/or employment related perspective" (European Commission., 2006).

Brookfield, Smith and other contributors have defined Lifelong Learning in such a way that, "higher and distance education both are currently exploring the new possibilities offered by E-Learning. Nowadays it is found that new, collaborative initiatives such as virtual universities, consortia and digital universities, which aspire to share learning resources, increase the quantity and quality of educational services, and explore new markets,

particularly in the field of Lifelong Learning" (Brookfield., 1987, Jarvis., 1987; Smith, 1996., 2001; Quoted by Koper et al. 2005).

In addition, "Lifelong Learning is the concept that refers to the activities of a person that performs throughout their life to improve their knowledge, skills and competence in a particular field, given some personal, societal or employment related motives" (Aspin and Chapman., 2000; Field., 2001; Griffin., 1999; Quoted by Koper et al. 2005).

People have opportunities to gain knowledge throughout their whole life. A Lifelong Learning framework, conducts the learning process from early childhood until retirement. It encompasses formal learning (educational and training institutions); non-formal learning (structured on-the-job training); and informal learning (skills that can be learned from family members, people in the community or people all around us). Through LLL, people can have access to learning opportunities since they need them, as opposed to because they have reached to a certain age. Lifelong Learning is vital in preparing the workers to compete in the global economy. (Lifelong Learning in a Global Knowledge Economy, World Bank Report., 2003, P 17).

An expert in knowledge economy said that:

"Change is so rapid that firms can no longer rely solely on new graduates or new labor market entrants as the primary source of new skills and knowledge. Therefore, schools and other training institutions need to prepare workers for Lifelong Learning. Educational systems can no longer emphasize task-specific skills however; they should focus instead on developing learners' decision-making and problem-solving skills and teaching them how to learn on their own and with others." (Ohmae K., 2001, P 21)

From the above remark, we can see the increasing importance of Lifelong Learning to the emerging knowledge society. Now it is well recognized that for the development of human resources and the economic performance of companies, organizational learning is potentially the most important activity. Many of the knowledge researchers mentioned human assets as intangible assets, which are more valuable than fixed assets from the organizational performance point of view. It might be the main strategic issue of the top management of a company to maintain and repair these human assets for the company for a public organization to be efficient and accountable to its stakeholders.

In order to achieve these aims, ÖU should offer such facilities under the LLL process. These should meet the requirements of learners at different levels of competence throughout their lives. People should also be able to use the facilities of Lifelong Learning to improve their knowledge, skill and competences in their required discipline.

According to Koper and Giesbers "the lifelong learners can also contribute to the facilities by sharing knowledge and supporting other learners." (Koper et al., 2005)

Fischer & Ostwald mentioned "Lifelong Learners are not merely consumers of learning facilities, but can be asked to actively contribute to the facilities themselves." (Fischer and Ostwald., 2002)

Therefore, our support goes to the above statements, that to implement a successful Lifelong Learning environment, ÖU could provide effective learning facilities as well as their learners (alumni, in our research) should be competent in using such facilities in enhancing their key competences throughout their lives.

2.7 Differences between Traditional Learning and Lifelong Learning

People have access to learning opportunities during their life times. In Lifelong Learning process educators are the guides to sources of knowledge. The learners learn from one another, in groups, and also learn by doing things by themselves. There is no specific schedule or syllabus in this process. To guide the learning strategies, some assessment is used to identify pathways for future learning. Here the educators develop the learning plans for the individual learners. Initial training and ongoing professional development are also linked with Lifelong Learning process. (Lifelong Learning in a Global Knowledge Economy, World Bank Report, 2003)

A World Bank report established the following characteristics of a traditional classroom learning process and Lifelong Learning process: (World Bank, 2003)

Table 2-2: Comparison between Traditional Learning and Lifelong Learning (World Bank, 2003)

Traditional learning	**Lifelong Learning**
The teachers are the source of knowledge	Educators are guides to sources of knowledge
Learners receive knowledge from the teacher	People learn by doing
Learners work by themselves	People learn in groups and from one another
Tests are given to prevent progress until students have completely mastered a set of skills and to ration access to further learning	Assessment is used to guide learning strategies and identify pathways for future learning
All learners have same task	Educators can develop their own individualized learning plans
Teachers receive initial training plus ad hoc in-service training	Educators are lifelong learners. Initial training and ongoing professional development are linked
"Good" learners are identified and permitted to continue their education	People have access to learning opportunities over a lifetime

Now it is a straightforward observation that a Lifelong Learning framework encompasses learning throughout the life cycle, from childhood to retirement. The Lifelong Learning process includes formal, non-formal and informal education and training. In case of formal education and training, the structured programs that are recognized by formal education systems are included and lead to approved certificates. For non-formal education and training it includes the structured programs that are not formally recognized by the national system, for example the apprenticeship programs and job trainings. And finally the informal education and training includes unstructured learning that can take place at home, community, workplace or anywhere. (Isan and Miron, 2006)

Therefore, agreeing with Isan and Miron, we can say that the LLL is the continuation of the learning process which might be formal or informal as well as it can be achieved at anytime, anywhere and anyhow. The University should organize their platform, curriculum and all educational materials to ensure the best quality of education through Lifelong Learning process.

2.8 Change in the Basic Model of Academic Learning to Lifelong Learning

The programme type offerings from tertiary level Institutions are formal, and considered such, whether it is a bachelor's, masters, one or two year programme, or PhD. These programs are characteristic in nature and truly represent traditional learning. Education as it is now is developing rapidly, and learner's preferences are moulding the design of how learning is disseminated. Now it is geared towards a learner centric approach which encapsulates a new paradigm of flexible form and lack of monopoly in the delivery of learning. At this point, we continued to further divulge to solicit a deeper understanding of the Education Industry within the region. Therefore, the offerings from the Universities, from their perspective of their academic training programs they could provide a common platform in delivering the education now in demand by learners. As an example, the learners prefer to complete one module in order to gain the appropriate skill and expertise rather than having to complete several courses to attain the required knowledge demanded.

However, there should be some level of cohesion of course offerings amongst these entities, as discovered that the market signal is weak due to the evolving change in learning from learners. Consequently, under this new setup the Universities should adapt to the principle of the vocational training programs which is geared towards the industries, rather than academic perspective which will enhance and attract learners, which will derive benefits for all. Moreover, vertical integration is preferred rather than collaboration, since some of the institutions are more interesting in going for the market shares within the region, thus fostering some level of competition. If there is not a win-win situation then, there will be no interest of forming an alliance, only if the laws that is defined by relevant authority what is being done as well as the demand of what is being requested. Jongbloed suggests that relationships with providers in upper secondary education, adult and continuing education,

vocational education, and for profit, corporate education and training providers will need to be reconsidered. The question is whether other educational providers can be looked at as competitors or potential partners in meeting the need for training and LLL. These relationships are conditioned by a large number of regulations and rules – some formal, some informal (Jongbloed, 2002).

2.9 Benefits of Lifelong Learning

First, we must recognise that the right prerequisite is required in going forward. This knowledge will play a vital role in allowing us to achieve the stated objectives.

Therefore, the University operates on a platform where technological progress and increased efficiency is being realized. Isan et al., cited that there is a clear linkage between education and training, innovation and right economic incentives, on one hand, and the value and level of growth rate, on the other hand. Moreover, behind the back plane, the appropriate ICT strategy is needed to facilitate this process. As for the new technology, ICT is now one of the largest economies within the world. However, the questions can be argued, is this ICT strategy one in the cloud, or can the traditional ICT meet tomorrow's innovations.

Isan and Miron (2006) further states that as for the new technology, ICT will no doubt be the centripetal force which will be applied to business services, public services and traditional industries. Consequently, the appropriate knowledge is required rather than manual labour and capital. Porter (1990) suggests that any nation's economical development can be based on the following sectors:

- Natural resources-driven
- Capital-driven
- Investment-driven
- Technology-driven
- Innovation-driven

He regarded innovation in a very large sense, as the last stage of development that could be assimilated into a knowledge-based economy.

This is already being experienced by the University, as stated before in previous paragraphs, that the combined offerings of all three entities towards facilitating alumni and others with good governance, will obviously propel the University to be sustainable. Drucker put forth his views, that education will be the main driver of the knowledge society and the school its key institution, he cited: *"Knowledge has become the key resource for a nation's military strength as well as for its economic strength. And this knowledge can be acquired only through schooling. It is not tied to any country. It is portable. It can be created everywhere, fast and cheaply. Finally, it is by definition changing. Knowledge as the key resource is*

basically different from the traditional key resources of the economist-land, labour and even capital." (Drucker P., 1994, pp. 18)

However, it should be established that for long term economic growth then knowledge is the main engine of growth that prepares us to meet and survive the next decade. However, the types of education and training to be administered are doubtful, as we enter the new concept of the knowledge economy framework.

This can holistically encompass the following elements:

- Education and Training

- Innovation and technological adoption;

- Information infrastructure;

- Conductive economic incentive and institutional regime. (Chen H.D., World Bank paper 2005)

These elements will help constitute a sustainable investment, as this will expand the growth rate of the total factor productivity and, consequently, result in sustained economic growth (Chen H.D., World Bank paper, 2005).

The path has been set ahead of us, and the appropriate framework and guidelines for Lifelong Learning (LLL), the transition being experienced, is all a consequence of transformation taking place throughout the world. Therefore, the alumni and others will be forced to meet the new demands, by acquiring more skill and knowledge, designed to make them functional in their own social world.

According to a report from the World Bank, "*A Lifelong Learning framework encompasses learning throughout the lifecycle, from early childhood through retirement. It encompasses formal learning (schools, training institutions, universities); non-formal learning (structured on-the-job training); and informal learning (skills learned from family members or people in the community). It allows people to access learning opportunities as they need them rather than because they have reached a certain age. Lifelong Learning is crucial to preparing workers to compete in the global economy. But it is important for other reasons as well. By improving people's ability to function as members of their communities, education and training increase social cohesion, reduce crime and improve income distribution.*" (World Bank., 2003, pp. 17)

2.10 Ideas and Approaches of Lifelong Learnings

The concept and application of Lifelong Learning is not new. But in order to further develop the human resources and economic performance of any business organization, it has to

recognize that Organization Learning is the most important activity, now it's recognized by academics and practitioners in the Management field. (Isan and Miron, 2006)

Organisations need human resources personnel to make their organizations successful. We believe the alumni of the regions are the best trained graduates, because of the high levels and class of teaching being rendered. Therefore, continuing learning through job training programmes, ad-hoc training, and enrolment in intensive learning programmes of schools, universities and training courses would be a good practice of HR departments whether it is in private firms or the public sector (Isan and Miron, 2006).

ÖU thus forms a competitive economic environment, which makes the idea of continuing education (LLL) more relevant within ÖSR. As an example, the EFL, LUCE, and Lund Alumni provides postgraduate programmes, customization package like MBA and MPA which is quite important. However, ÖU policy maker's foresight must be guided by the evolving changes now being experienced from the perspective of economic globalization throughout the world.

Robertson (1992, cited in Geoff Walsham, 2004) argues that 'Globalization as a concept refers both to the compression of the world and intensification of consciousness of the world as a whole' (p.18). However, the idea of LLL and the continuing approaches is critical. Moreover, the alumni, firms and others have to be cognizant of the evolving paradigms in learning, and their importance for continued learning, in order to be competitive (World Bank., 2003, pp. 19).

Based on such background LLL can be effective as a joint-venture program of government and its agencies, along with the private sector that can be aligned with the education and training providers and business organization. The call has been put forth for greater involvement of providers and users.

LLL need an effective and efficient strategy, (Isan and Miron, 2006) suggests two questions associated with this strategy, which are as follows:

  i.   Given limited resources, what type of governance framework promotes LLL for people in general and disadvantaged groups in particular?

  ii.   How can financing of LLL be inclusive, affordable and sustainable? (Isan and Miron, 2006)

In order to provide the appropriate solutions for the above problems, first it requires major alteration of both governance and financing of education and training. Therefore, there is a

need for a flexible policy and regulatory frameworks, as well as good governance which encompass a wider range of institutional actors (A World Bank Review, 1999).

As time evolves, LLL is more and more perceived to be the main element of the knowledge society framework. This has brought forth theoretical frameworks and empirical approaches which have been developed upon LLL. Therefore, the objectives, policies and actions of this LLL strategy have become very important. They foster better skills and competencies, higher work and professional mobility, susceptible of adapting to new technological and social challenges in order to be a part to the new model of education and training. However, the contribution towards LLL has seen many reports from various bodies and authors, as stated earlier that there is a linkage between education and training, hence, the following example, like, training on-the-job, adult education and continuing education have become further activities of each project designed for formal education (Isan and Miron, 2006).

Since, the world is evolving rapidly, as well as how learning is conducted, the new model of education and training has not brought forth any accurate result this far, due to the fact LLL is evolving in relation to international and national economic and technological environment (Isan and Miron, 2006). The following example can bring us to a closer understanding of the strategies in LLL. Based on an empirical study in Finland, we find a sustained investment in research and development that has been the solid background of education that R&D had been relied on. According to Isan and Miron (2006), they had adopted a strong commitment to education and training and to a stable incentive framework for competitive entrepreneurs and businesses.

Therefore, this strategy can be adopted by the University policy-makers, giving full commitment, thus will enabled its success in knowledge economy. (World Bank., 2002) suggests that good and constant policy framework, support for innovation, openness to the global economy and high quality education, will make it sustainable within ÖSR.

We concluded that, there is no magic associated with this success, but rather the commitment to continued provision of a high quality of education and training that will produce benefits for all citizens. In order to be successful regionally or internationally, an environment where economic and or political incentives are provided will help with the initial efficient implementation of LLL, if it is crafted on things and facts which already evolved in business sector and public institution. (Isan and Miron, 2006)

2.11 Competitiveness and Lifelong Learning

This high quality thus requires huge levels of competence, both in product technology and business processes amongst all employees, as this is the key factor of competitiveness. Since, for many developing industries there is a rapid change being observed, hence the technical

competence of these employees need continuous updating and upgrading in order not to become obsolete within the next five years (Otala, 1994).

Therefore, in a situation where the market changes rapidly, which definitely requires the appropriate skills and training to meet the new emerging technology. As stated, in previous paragraphs, this type of training can be rendered to the Alumni and others, thus enabling them to be competitive. Views put forth by (Otala, 1994), states, an engineer, for example, has to renew "basic professional education" four or five times during the working career.

Moreover, competitiveness can only be attained, providing that enterprises adapt to some level of strategic flexibility, whilst allowing them to seize new market opportunities and adapt to market changes being experience. However, while the stress has been placed about on the job training, there are limitations associated, as only through continuous education can strategic capabilities be developed, as well as to provide the possibility to learn new operational capabilities and new requirement quickly (Otala, 1994).

Within ÖU, they are the sources of this continuous education, thus will provide the opportunity for our target group and others, through LLL, as both operational and strategic capabilities are the contributing factors to achieving competitiveness. According to (Otala, 1994) LLL is the path that will update and upgrade competence systematically; he further suggests, it is a form of "human recycling", in cases, when the old occupation vanishes (see figure below).
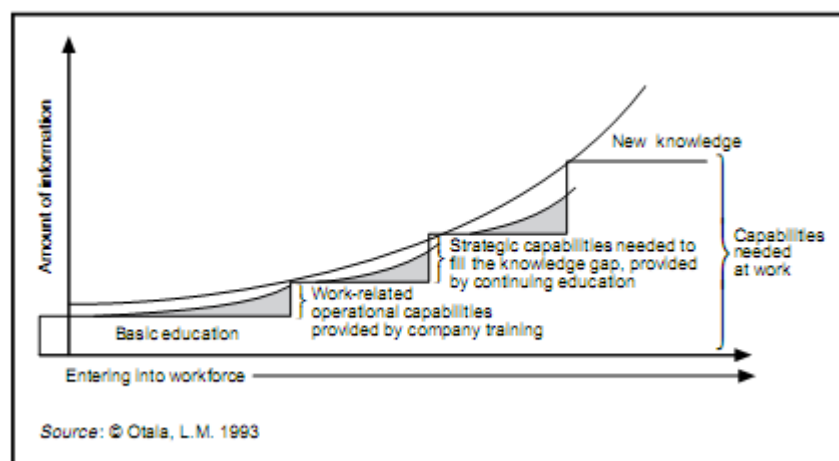
Figure 2-1: Strategic and Operational Capabilities (Otala, 1993)

While the University must play its part in providing and fostering education, it is imperative for employers within the region to provide on the job-training, as it is discovered, that learning will be more embedded within the workplace and through this training it provides operational capabilities. Consequently, Universities have to organize, as well as to present the provision of continuous education which will give the alumni and others strategic capabilities, but this must be of personal interest of their own development as well as their survival as it relates to their future working needs (Otala, 1993).

To reiterate our point, that LLL can be effective as a joint venture, means that there should be a shared responsibility in society, as for the ÖSR where there are large amount of companies currently downsizing their own in-house training and the increasing number of people employed by small and medium-size enterprises (SME's) having no company training expertise. However, as this joint venture, university and industry leaders will thus provide the strategies in the long term for competence development through LLL for the alumni and others within the region in their current and future work (Otala, 1993).
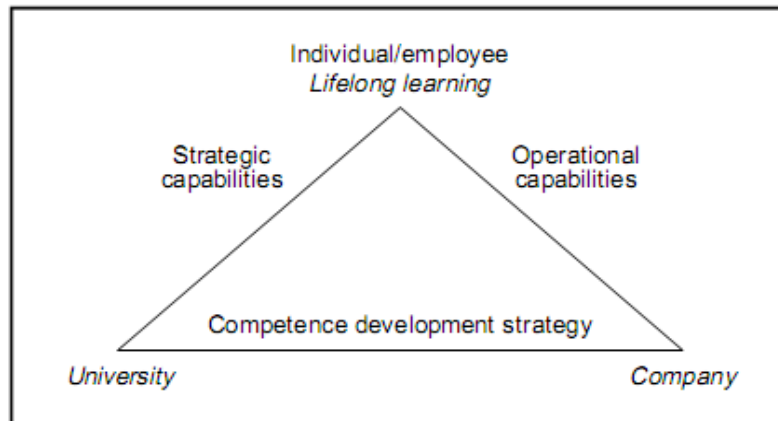
Figure 2-2: Joining Forces to Provide Lifelong (Otala, 1993)

He further cited that Universities could adopt and use the competence development strategies in order to refine the educational requirements of future generations within the region through LLL. (Otala, 1993)

2.12 Impact of Modern ICT on Lifelong Learning

 LLL is becoming demanding, hence universities and colleges will have to play an important role in serving this demand. Since we are in a knowledge driven society, the implications are that learners will have to prepare themselves for this labour market, where the situation is that they might change jobs as much as four times during their working career (Jongbloed, 2002).

Moreover, as we evolve into a knowledge based society ICT does play a key role in information. The impact of ICT does enhance and support learning and teaching in Universities, as this does have some impact on the education sector as Universities provide further education through LLL. As ICT emerges, it provides hope to all stakeholders associated with the University, It is argued that three fundamental aspects of education policy is influenced by ICT, they are as follow:

- Access
- Quality
- Cost

The benefits derived from ICT is that people can participate in their studies with increasing flexibility of involvement as compared to the traditional face to face model, providing opportunity for working students and adults, and individuals residing in remote areas. With the help of modern ICT the learners can study at any place at any time according to their needs, since ICT provides the medium in fostering this process, which was not possible under the traditional learning paradigm. However, the Öresund University need to identify the right types of technologies through which they can provide their learning facilities towards their lifelong learners according to their dynamic curriculum environment. There are several modern communication technologies that can be used by Lifelong Learners. For example, webinar, web 2.0, blogging, email, discussion forum, virtual learning environment and so on. Since the IT infrastructure in Öresund region is already established they can choose the appropriate technology tool to serve their education according to the requirement of the Lifelong Learners.

2.13 Present Situations of Lifelong Learning Approach

Under the old paradigm based of learning there is need for changes, which might appear to be revolutionary. The issues faced by the learners, inhibit their choices during their studies. Consequently, the need for change is obvious within the learning paradigm being rendered (See Table 2-3).

Table 2-3: Summary of the overall Learning Environments

	On Campus	**Off Campus**
ICT	optional	mandatory
Learning	push	on demand
Duration	long program	short program

 As an example, under traditional learning, the situation is that learners cannot create job for themselves, due to the demand of their studies. Moreover, the perception is that there are jobs waiting for them; where under LLL the learners are encouraged to become entrepreneurs.

The offerings of education to learners is currently being pushed, where learners have to complete long programs, which sometime does not fit with their lifestyle, as oppose to other learners. Moreover, different learning programs speak towards this situation, as the idea is to facilitate access to training, and encourage innovation within the ÖSR.
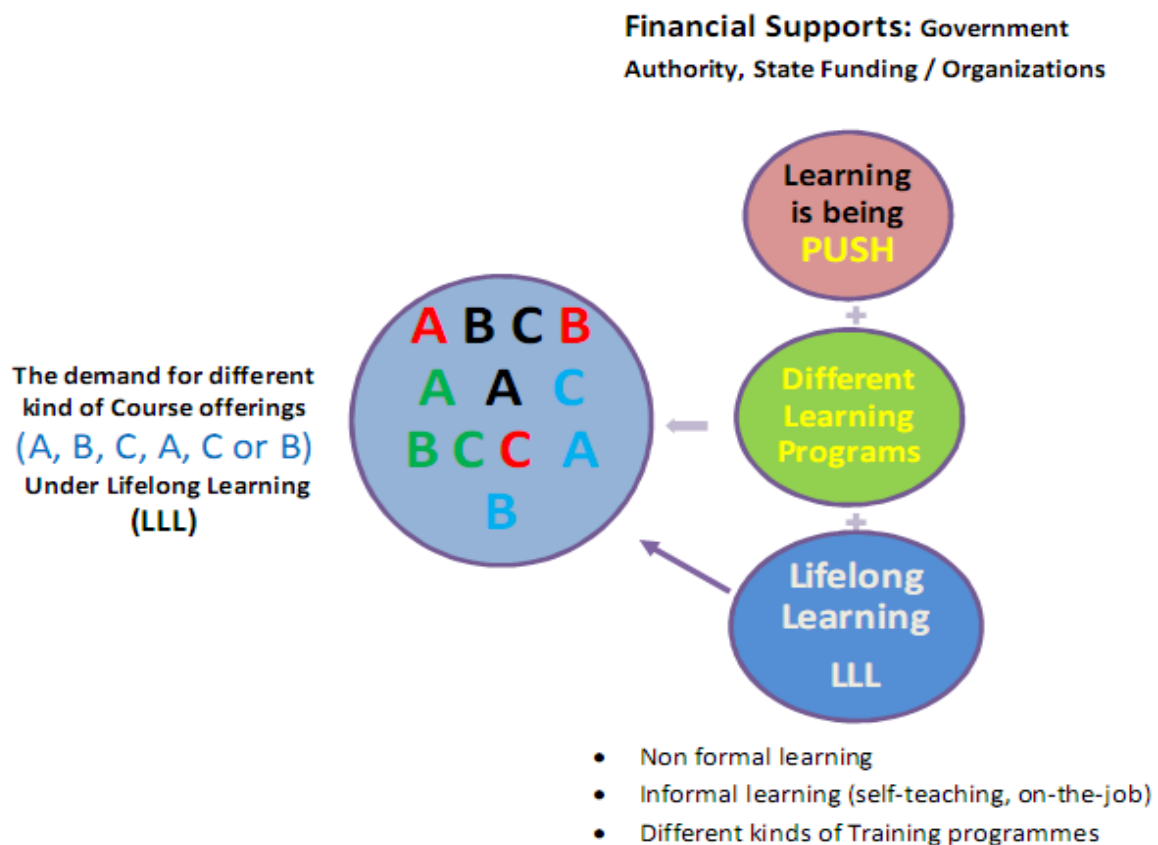
Financial Supports: Government
Authority, State Funding / Organizations

Learning
is being
PUSH

A B C B
A A C
B C C A
B

**The demand for different
kind of Course offerings
(A, B, C, A, C or B)
Under Lifelong Learning
(LLL)**

**Different
Learning
Programs**

**Lifelong
Learning
LLL**

- Non formal learning
- Informal learning (self-teaching, on-the-job)
- Different kinds of Training programmes

Figure 2-3: Education Industry Conceptual Model

As opined before, the transition of the learner and how education is delivered has changed. They are now demanding the offerings that are of mutual interest to them. The alumni can strengthen this demand side, through Lifelong Learning (LLL). This approach will no doubt see changes within the course offerings through LLL.

In our defined Education Industry Conceptual Model (EICM), government organizations play a vital role in supporting the learning programs financially, as learning now is being pushed in different programs. They can offer different courses in a common framework, from which the Lifelong learners can take courses according to their requirements in specific fields. There might be several learning packages within a specific program (Suppose A) as well as the packages can be offered jointly (Combination of A, B, and C). It would be flexible for the Learners to choose from the whole package or individual courses within the packages which suite their learning lifestyles.

As an example the European Credit System for Vocational Education and Training (ECVET., 2006, pp.7) provides the following for validating the outcomes of Lifelong Learning, are thus:

Resulting in comparable learning outcomes Lifelong Learning may take place in a wide variety of contexts (ECVET., 2006, pp.7):

- First, Non-formal learning (programmes, modules completed outside the formal system of education and training)
- Then, Informal learning (self-teaching, on-the-job training, daily experience)
- The different types of training programmes and modules of various durations, and involving various arrangements.

Moreover, standardised training programmes may be pursued by different categories of learners (full-time, part-time, intensive or non-intensive training, ICT based learning and so on). Therefore, this is a way of enabling people in their pursuit of new learning pathways, by building on their learning perspectives from the transition from one learning context to another suggested by the European Credit system for Vocational Education and Training. (ECVET., 2006)

2.14 Competences for Lifelong Learning

Since we are in a knowledge society, there is a deeper understanding of Lifelong Learning and the key competences involved. Also there is a better understanding of what designs can facilitate such competences from the perspective of digital competence; as well as Entrepreneurship as a case study within the Öresund Science Region, while ensuring that all citizens can acquire them through LLL.

As cited by the Lisbon council *"this can be defined as a combination of knowledge, skills, and attitudes appropriate to a particular situation."* (Lisbon strategy., 2005, pp. 3)

To maximise the benefit of personal, public and professional spheres in a continuing knowledge society; these key competencies have to be properly implemented and adopted. As these key competences play a vital role in personal fulfilment, social inclusion, active citizenship and employment. However, these requirements are always evolving.

Moving forward, this rapid and uncertain change does affect the economics, as organizations face new technologies which required new approaches. Therefore, the appropriate skill set obviously needs to be reviewed and upgraded accordingly, in order to meet or adapt to this change. The quality of work does however; depend on the knowledge, skills and attitudes of the workforce within the Öresund Science Region, in innovation, productivity and competitiveness. (Lisbon strategy., 2005, pp 3)

Moreover, the same can be beneficial of such proposed recommendation, fitted with the key competences while yielding the appropriate financial return in the long term. Being cognizant of this fact, from an entrepreneurial perspective, these businesses need to adapt quickly in order to remain competitive within the Öresund Science Region.

For these companies to be sustainable, then they must align themselves under new paradigms of this Business Model called Societal Entrepreneurship, which aims to solicit change as well as to improve where the typical business sees as rewarding. While at the same time yield the appropriate return in the long term. This new business opportunity will address the fact that there is lack of knowledge of how to tackle these issues while creating a sustainable society.

The question can be asked as what kind of business model is involved for this type of need. As an example, if the authority of the Öresund Science Region should reduce travel costs for both students and teachers, hence reducing CO emissions; this results in a more self directed populace with more virtues, while realizing profit in the long term. Under the framework of Societal Entrepreneurship this new solution provides as well as creates a sustainable society - economically, socially and ecologically.

This new concepts can benefit many if companies take a more responsible approach. One way to realize this is the concept of the Triple Bottom Line Model, otherwise called the "triple Ps". This can be defined as a sustainable enterprise which contributes to sustainable development by delivering simultaneously economic, social, and environment benefits (Hart et al., 2007).

According to (Hart et al., 2007) that businesses must increasingly adopt a business framework based on building sustainable value. John Elkington (as cited in Hart S L., 2007) suggests that businesses need to measure their success not only by the traditional bottom line of financial performance, most often expressed in terms of profits, return on investment (ROI), or shareholder value, but rather their impact on a broader economy, the environment, and on the society in which they operate.

Based on current research, on key competences, as well as the continued work of a European Qualification Framework; these competencies are applicable to the Öresund Science Region, and is an initiative that seeks to strengthen transparency and recognition of qualifications and competences, such as principles of validation of non-formal and informal learning and credit transfer systems. This main focus, seeks to address the changing role of schools in developing competences of young people within the Öresund science region. (Lisbon Strategy., pp. 4)

Based on this background, we have selected two competences, as these reflect the attribute of our target group who requires appropriate skills and competences in order to meet the challenges through Lifelong Learning.

2.14.1 Digital Competence

Digital competence involves the use of Information Society Technology (IST) for business, recreational and communication in a knowledge related way. It is directly supported by the use of basic skills in ICT: the use of computers to retrieve, assess, store, problem-solve, produce, present and exchange data, and to communicate and participate in collaborative networks via the Internet. (Lisbon Strategy., 2005, pp. 16)

In order for a group, team or society in general to attain 'Digital Competence' they need the essential knowledge which is founded on the key points and practices of IST in its 'everyday' contexts. This includes the use of major software applications such as word processing, spreadsheets, databases, information storage and management, as well as an understanding of the resourcefulness of the Internet, electronic media, email capability, networking, research and continued learning. They should also be well able to understand how IST can support creativity and innovation, and be aware of issues surrounding the use of such information, ethics and safeguards involved. Also to be keenly aware of the issues of reliability and validity and how they will shape the tasks they set out to. (Lisbon Strategy., 2005, pp. 16)

The needed skills include: a given ability to search, collect and process information, which then needs to be used in a systematic way, to assess the relevance of the important from the unimportant   virtual links. The skills required, are those used to produce, present and understand complex information. Additionally they are required to be able to readily access, search and use internet-based services. IST should be used to support problem-solving, brainstorming activities and other creative innovations. (Lisbon Strategy., 2005, pp. 16)

According to Lisbon "the use of IST requires a critical and reflective attitude towards available information and a responsible use of the interactive media; an interest in engaging in communities and networks for cultural, social and/or professional purposes also supports competence." (Lisbon Strategy, 2005, pp. 16)

2.14.2 Entrepreneurship

Entrepreneurship refers to the process of being able to transform ideas into business-based actions. "This includes creativity, innovation and risk taking, as well as the ability to plan and manage projects in order to achieve their objectives". (European Commission, November, 2007) These actions are far-reaching and impact on human life and society in inconceivable forms. In the workplace it is a foundation for more specific skills and knowledge needed by entrepreneurs establishing social or commercial activity. (Lisbon Strategy., 2005, pp. 18)

Essential knowledge, skills and attitudes that enhance this ability includes the innate propensity to view society, business and the like in a broader sense. One can see what they most need and interpolate this need to other members of the society, balanced against economic forces, monetary challenges and marketing related activities to achieve their goals. Individuals should also be aware of the ethical standing of enterprises, and how they can be a force for good for example through practice of corporate social responsibility (Lisbon Strategy., 2005, pp. 18).

Skills speak of the foresight and use of primarily business related skills, such as project management, leadership, analysis, forecasting, as well as the ability to work in collaborative and team environments. Much cannot be said about entrepreneurship, without that of risk-taking. It is inherently related, and dependent on the appropriate time and setting in which to take the risk. (Lisbon Strategy., 2005, pp. 18)

Entrepreneurial attitude is characterised by independence, initiative, pro-activity, and innovation in personal and social life, as much as at work. Moreover, it includes motivation and determination to meet objectives, whether personal goals or aims held in common with others, and/or at work. (Lisbon strategy, 2005, pp. 18)

2.15 Summary

A collective effort by different stakeholders involved has brought the current successes within the ÖSR coupled, with the insatiable competitiveness of ÖU through ÖSR, which indeed is an appealing experience shared among local and International students.
Moreover, sustainability is the new paradigm going forward, which will require the policy-makers to continue on the path which has yielded the current successes being experienced by ÖU. Therefore, that level of complacency being showed now, will inhibit the competitiveness bound to be experienced in the next decade. One implication that surely will be regretted is the decline in enrolment, status and relevance of the traditional university, for the sake of lack of foresight and insufficient governance.

3. Theoretical Framework

As stated above, that our research purpose is to investigate what kind of business model is appropriate for the implementation of a Lifelong Learning policy. To identify this, the following theoretical framework was therefore used to accomplish the tasks to support our research. Since LLL is all about how the Learners learn throughout their life cycles, therefore for the University to continue to be successful, the key policy makers need to exercise policies that will make the Universities model more sustainable for the next few generations.

Steps to Theoretical Framework

➢ Firstly, we present the model for entrepreneurship called People, Place and Profit (PPP) model which provides the base guidelines and principles of how to provide more affordable products to Lifelong Learners within the region.

➢ Secondly, we adopted Porter's Relationship showing Market Share and Profitability Model for the right strategy to provide the options of LLL for our target group in a cost effective manner.

➢ Thirdly, we adopt an Independent Partial Model of an ideal business strategy by Timmers, as this provides us with the architecture for our product, service and information flows, which are needed in order to gain a clear understanding.

➢ Finally, we combined these partial models into a comprehensive Business Model that can be used to achieve this objective. The Theoretical framework Model was developed to represent this. (See figure: 3-1)
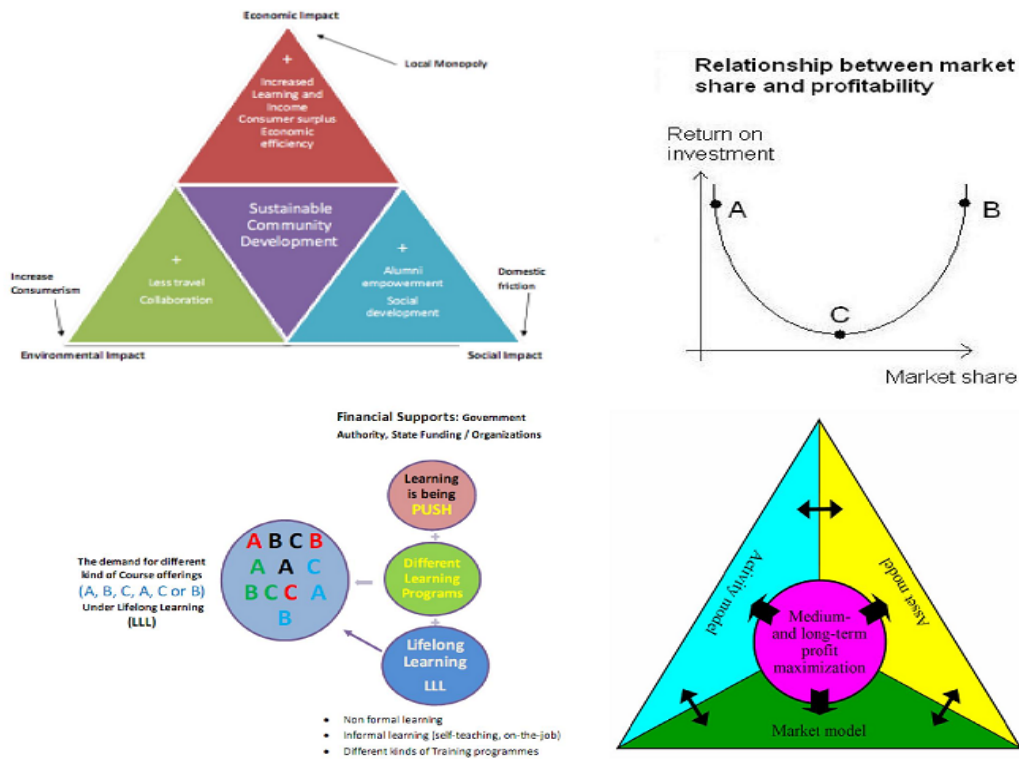
Figure 3-1: Theoretical Framework Model in our research

3.1 Business Model for Lifelong Learning

Our research model was motivated based on the model composition of the theoretical framework of LLL, E-Learning support and different kind of learning, as this present the characteristic in making LLL sustainable for the University. As for this, how do we create formal training, as one of the dimensions of LLL is twenty minutes short, for example, off campus people cannot go for full time learning / training. Consequently, our researched Business model thus illustrates how to make LLL sustainable from social impact, environmental impact and economic impact, please see the model below.

3.1.1 The model for entrepreneurship: People, Places and Profit, PPP model

The PPP Model identifies the characteristics necessary for making LLL sustainable for the alumni, who will be interested in further continuing the development of their education. This, bearing the impact of ICT in mind, will bring some level of empowerment through social development and will provide the opportunity for collaboration through the latest innovations and technology; financial benefits will further be realized by the reduction of travel time of the students, in their commute to their respective Universities.
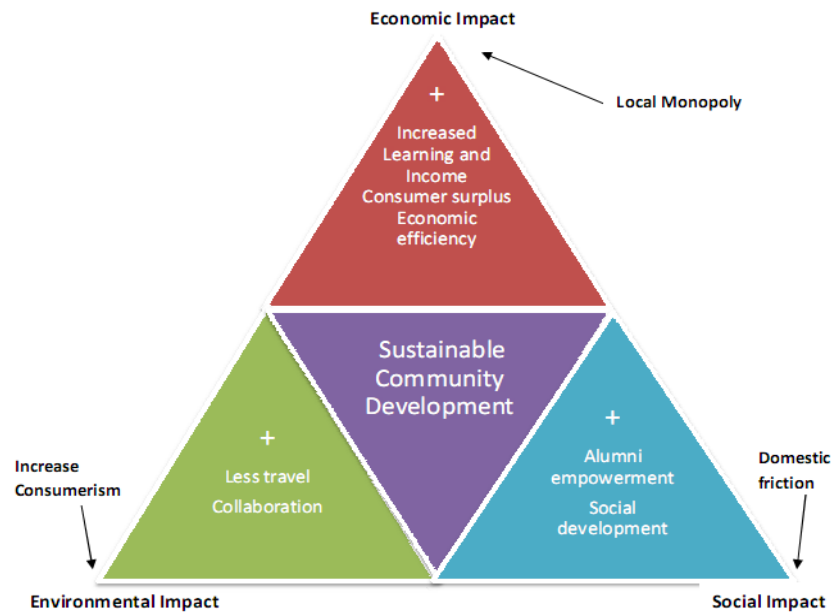
Figure 3-2: Sustainable Assessment: Öresund Universities

For the University to achieve its objectives, it requires them to provide more affordable products to the learners within Lifelong Learning (LLL) in the region. Thus, it requires an alliance with alumni, employees and agents while fostering new businesses. Hart cited that tracking the economic and development impact of BOP (Bottom Line of the Pyramid) business initiatives throughout their entire value chains from raw material sourcing and production all the way to distribution and product use is therefore crucial (Hart et al., 2006).

Based on a recent research project, on Unilever's Indonesia (UI) businesses, proved that majority of revenues generated by UI remain in Indonesia, through it locals sourcing, wages margins, taxes, and dividends to local shareholders. Therefore, we believe that with the proper adoption and use of this model by the University, will result being beneficial for the Öresund science region. However, Universities in ÖSR can thus bring forth significant benefits for the wider community of this region, particularly in the distribution end of the value chain (Hart et al., 2006).

Additionally, it's important to choose one strategy and stick to it. Since the University business model is based on LLL throughout the alumni lifecycle, this strategy however, should focus on being the main choices among alumni for Universities within the ÖSR. Porter (2001) argues that it is may be difficult to trust the market signals providing that the market is enabled by a new technology. Consequently, Universities must align themselves to provide low cost strategy, in which we think is important in order for their objectives to be realized.
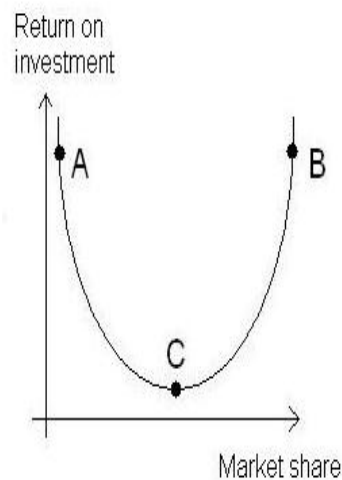
Figure 3-3: Relationship between market share and profitability (Porter, 1980)

Bearing in mind, the objective is to provide LLL for alumni in a cost effective manner, based on Porter's model over the relationship between market share and profitability (Porter M., 1980) (fig: 3-3), this provides the option of LLL in a cost effective manner as the A mark in the figure. The current way of learning practices (LMS) is becoming obsolete, hence, only a small share of the sum recruitment market will be gained, however, this new paradigm of learning EL2.0 (CP), which is more of a community practice does provide the vision for LLL. This is where the University will obtain a higher ROI.

Therefore, if the modus operandi of tradition learning still remains as the best way to operate, (B in figure 3-3) this, may yield some level of returns. While still being cognizant of the fact that the evolution of how we learn will inhibit University from being competitive in this global sphere. As for C, the figure signifies the ending and beginning of each learning cycle. Views put forth (Hart et al., 2007) are that while keeping abreast of the direct economic impacts, it is also imperative to have a broader knowledge of the social, cultural, and environmental affects – the "triple P's" sustainability impact on both customers and the ecosystem of partners making up the supply chain.

The PPP could be appropriate for the University to achieve its objectives as the Business Model which can be adapted, so as to maintain their key competences for Lifelong Learning strategies within the Öresund Science Region.

Hart et al., (2007) state that it's about corporate sustainability, as these companies ought to think about being sustainable which means delivering not only financial returns or shareholder return but also social and environmental returns, which is the core idea of the PPP. However, the challenges associated with PPP, is that each component must achieved at

their highest potentials, in order to be effective, so as to achieve the strategy that is sustainable and competitive for ÖU.

We believe that this is appropriate, as the world is impacted by these specific components, economic impact, environment impact, and the social impact at the same time. Thus, provides the true definition of sustainability. The world as it is now is experiencing structural changes; therefore, ÖU and ÖSR could align with this strategy of the PPP model which will no doubt assist them in obtaining and maintaining dominance in this regard.

3.1.2 Interdependent Partial Models of a Business Model

Timmers states, a *Business Model* represents the "architecture for product, service and information flows, including a description of the various business actors and their roles; and a description of the potential benefits for the various business actors; and a description of the sources of revenues" (Timmers P., 2000).

A business model is said to merge aspects of specific sectors of business economics by representing each sector as a single model (Osterwalder et al., 2002; Timmers P, 2000; Wirtz, 2001). Their contribution has brought forth three independent partial models that are represented in Figure 3-4. However, this business model influences important decision making, which is difficult at times to convey in a simple format by the individuals (Linder et al., 2000).
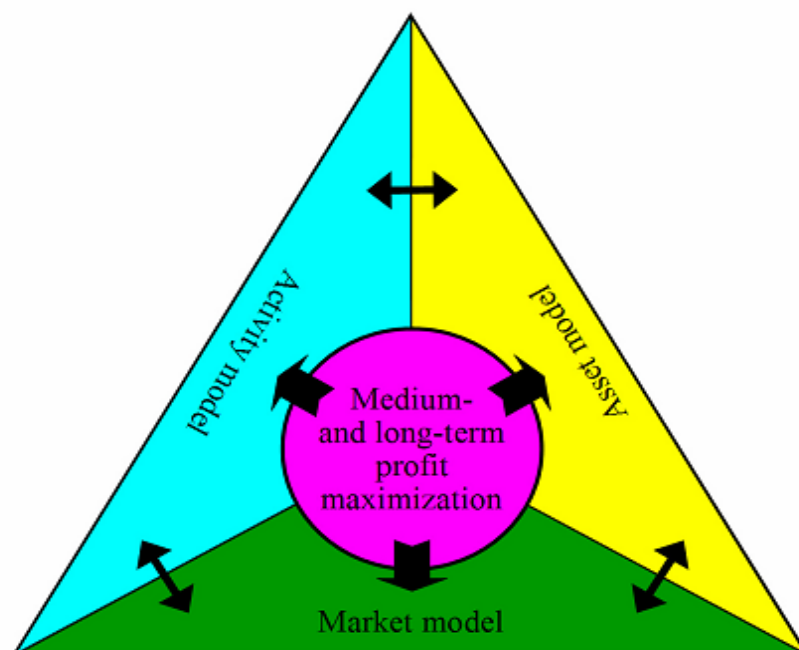

Figure 3-4: Interdependent partial components of a business model (Hoppe and Breitner, 2003a, P-5)

By this, Porter (1996) proposed that the business model does play a vital role in the business activities. The activity model however, does provide after sale support as well as works on the basis of the value chain concept, from the disciplines of manufacturing and marketing (Porter 1996; Quoted in Hoppe and Breitner, 2003).

Consequently, in the case of ÖU, assets model, however, provide the guideline for the cost and revenue model. Our intention in this study is to adopt such a business model that the ÖU will be able to maximize their profit by implementing this model to make LLL more profitable, popular and sustainable.

Views put forth by Wirtz Business models provide an architectural framework for a business strategy. Therefore, the analysis of this business models will help us to classify different business strategies, by identifying the proper framework to established LLL policy successfully by the ÖU, as this provides, the protocol that are required for performing any such strategies (Wirtz , 2001).

To reiterate our point that the paradigm shift of conducting a business must be adapted, as well as to render the appropriate cost-efficiency in the long term, as this business model will have to address all aspect of sustainability. In order to have medium and long-term profit maximization, then there must be some level of economical sustainability for ÖU through Lifelong Learning within the Öresund Science Region.

Sustainable Products help us meet our basic needs and enhance our quality of life. Therefore, the need for a sustainable business models is required for a sustainable supply of products, thus providing a friendly environment for all within the ÖU.
According to Hoppe and Breitner (2003) the following conditions for Lifelong Learning could be considered in sustainable business model.

- Provide a constant review of the three partial models of business
- Identify the appropriate Target group and market segment
- Must aim to minimize cost on the medium and long term profit, hence, maximizing revenue.
- Therefore the minimization of costs has to aligned with the core key competences of ÖU in order to meet the needs of learners, as well as to support each other (Porter, 1996)
- Consequently, the paradigm shift in learning is rapidly changing, therefore, the adaptivity and scalability of a business model has becomes an important issues. Adaptivity refers to the ability to adapt to changing market structures, e. g. customers' needs. Scalability encompasses development, delivery technology and/or distribution. (Seufert S., 2003), (Hoppe G. and Breitner M. H., 2003)

Market for Lifelong Learning

Regarding the demand side of the Lifelong Learning market, it can be observed that Lifelong Learning and continuous qualification approach is in more demand in various companies to enhance the key competences of their employees and also among the individual working persons. (Hoppe & Breitner, 2003)

The demand is not only huge but also varied. Lifelong Learning might be demanded by individuals or independent learners focusing special learning objectives. What the learners pay for education in general and especially for Lifelong Learning depends on societal, especially cultural conditions. In the USA, education fees are common practice however; Swedish learners are not used to paying extensive fees for higher education. Therefore, Universities could choose suitable revenue sources considering these national aspects. Furthermore, it should be taken into account that the user of a Lifelong Learning product is not always the one who chooses it, implements it or pays for it. (Hoppe & Breitner, 2003)

Activity Model Prototypes for Lifelong Learning

"*Successful Lifelong Learning with consistent and pleasant concept includes organizational, social, economical and technical aspects. Depending on the didactical and technical complexity of the Lifelong Learning system the prerequisites for its use vary. Benefits and costs of Lifelong Learning system are thus combined with its overall complexity. Each component of the Lifelong Learning system has its proper benefits; by offering additional services or by embedding it in a comprehensive arrangement, a benefit surplus can be realized. Since the customer delivered value results from benefits and costs, less benefit does not mean less delivered value.*" (Hoppe & Breitner, 2003, pp-7)

For example, every type of Lifelong Learning application meets specific learning goals. Universities can fulfil all activities by using its resources properly.

Asset Model Prototypes for Lifelong Learning

Depending on the activity Universities could concentrate on the cost issues. For example: fixed costs to maintain the company, periodical costs for surveying market structures, variable costs for making content, promotion costs depending on the chosen promotion media, costs for packaging and distribution, and costs for after sales services. (Hoppe & Breitner, 2003)

Kröpelin P. cited in the article *Business Model for e-learning* by Hoppe G. and Breitner M. H., (2003) "*Some businesses are dependent on revenues that are generated by selling Lifelong*

Learning policy by charging fees for specific additional services, and so on. Fees for tutoring paid per time unit or fees for Lifelong Learning news paid per use. Operation independent revenues are generated by charging fees for services which are rather unspecific, e. g. membership fees for Lifelong Learning portal even nobody use it regularly. Moreover considering the organizational effort; implementation of the models differs." (Hoppe & Breitner, 2003, pp-9)

Concerning the revenue aspect, Rappa differentiates nine business models for e-business (Rappa M., 2003). It might be fitted for the Lifelong Learning business policy. Moreover, there is another six revenue models that might also be applicable in this revenue aspect.

3.2 Summary

Based on our theoretical framework, that renders the appropriate contribution on the practices and examples for LLL business model. As for the current model which focuses on the core activities of LLL, and identified two business models, which we joined to strengthen the framework of our propose business model, being cognizant of the fact that there is an advantage associated with this business model which could be adapted and applied to LLL by the Universities to promote and achieve sustainability in this regard.

4. Research Method

The appropriate models were constructed to support our strategy on LLL in our empirical study in the previous chapter. In this chapter, we have described our general research approach as we followed quantitative methods; also to conclude our empirical research strategy as this quantitative method is used to address our research questions to carry out this thesis.

4.1 Our Research Approach

As for the purpose of the thesis, we chose a quantitative approach, as being the most effective research method. Basically, we aimed to render a thorough explanation of the method about the process of collecting and analyzing data. Consequently, this provides an advantage for us in that the possibility to analyze the data with statistical methods, as this could not be achieve through the use of a qualitative method. Seale (1999) highlight the fact that within qualitative social research, there may be some bias being encountered which is not attributed to numbers.

We designed and distributed our survey questionnaires to collect our most important data in this study. In this chapter our approach and process in collecting and analyzing empirical evidence are described in our research method. Qualitative and Quantitative are seen as the two approaches to research (Creswell, 2007).

Lekwall and Wahlbin (2001) argued that, the method is a tool that can generate solutions to problems and can obtain new knowledge. For our thesis we have chosen a quantitative method as an empirical research strategy and we have arranged a questionnaire based survey to address the research question posed in our thesis.

In this thesis we followed the explanatory approach since this study goes in depth about an issue and tries to explain why events happened as they did or particular outcomes occurred. It can be able to compare what was found in the case of theories from the literature in order to see whether one theory matches the case better than others. We think this type of study is fit for the topic chosen, as we stated above that the main theme of the study is to discuss the right strategies of Lifelong Learning process, a suitable business, and its impact on higher education.

4.2 The Quantitative Research

It is said that from a scientific perspective that the means of collection of data should be quantitative as its findings is often represented in numbers. The following quote from Kvale supports this approach:

"The aim of Quantitative research is to reach a scientific explanation that could simply be represented as the scientific approach. Therefore, a survey will be established to gain the views of our target group (alumni) on continuing education through LLL." (Kvale S., 1997, pp. 67).

Based on these core ideas, we have chosen to apply a quantitative method. However, our choice of research method is derived from the research problem itself, that is, "What should the approach of the University be with regard to Lifelong Learning, and what is the appropriate business model?" The most appropriate approach is a quantitative one.

In an attempt to garner a deeper understanding of our target group, as a strategy, the main primary source of data in the thesis was gathered through answered questionnaires.
We believe that this is an effective approach to define and help shape our argument, strengthened by the concepts presented throughout the thesis.

4.3 Preparing the Survey Questions

In the survey questionnaire, we had constructed 15 questions but after reviewing them, they were amended in accordance with how the research questions were formulated. Then, finally, we devised 23 questions which we intended to cover the data in order to aid us in acquiring a better understanding in our research area. By this, we had 21 respondents who completed our survey and 33 respondents abandoned it. (See appendix A)

During the process of developing our questionnaire we had to decide what kinds of questions are most suitable to render to our respondents, as these questions fall under two different categories, they are as follows:

- Pre-coded (closed) questions: The respondent has to choose one of a range of possible answers.
- Open-ended questions: The respondent can give any answer. (Buckingham and Saunders., 2004, Jacobsen., 2002)

Both open and closed questions reflect more accurately the degree of support for each suggestion by respondents, than either alone by themselves. We provided the appropriate definitions so those not familiar with LLL could understand, as well as structured the questions so that they could be easily be navigated. We provided the respondents with clear and concise statements, which were formulated in a closed form based. In order to achieve this, we provided space for respondents to give their views and comments on their comprehension about LLL offerings. Moreover, we had to ensure that the language was clear from the initial creation of our survey which was a difficult process.

Since this is a quantitative approach, which permits us to investigate a phenomenon's extent, variation and connection, regulated answers were chosen. However, we provided answers beforehand, and some of the questions provided for choice called "other". It was important for us to allow the respondents to be able to write another selection not predetermined by us.

After a thorough process of formulating our survey questions, we used a web form process, by choosing surveygizmo.com to host our survey online. Therefore, after having completed several self-tests in order to improve the quality of the survey; the (link containing our survey) was forwarded to the Alumni Coordination Department of LUSEM, which uploaded it to the alumni web page of the Lund University website. Our aim was to solicit data that would be fitted with our theoretical research and to garner comprehensive knowledge of the topic of the thesis which will eventually answer the research questions. The survey results were then analyzed and discussed so as to ascertain the findings and conclusions. The survey questions and distribution of answers to the multiple choice questions included in the survey as well as the statistical analysis are listed in Appendix.

Undoubtedly, this process was critical in order to gather the understanding of the alumni as it related to their perceptions towards LLL (21 respondents). As stated previously, the focus of the survey was used as the main research method, which provides us with much important knowledge even though there is a bias associated towards the process of conducting our survey. The implication of our survey bias is attributed to the order in the constructs of our questions as it were presented to the respondent. Seale C., 1999, cited that generalization in quantitative survey research is based on choosing representative samples and using ideas about probability and change to estimate the likelihood of events occurring in similar cases outside the sample. However, pursuing this kind of argument, Lincoln and Guba (1985, cited in Seale, 1999) suggest that naturalistic inquiry can therefore be effective in achieving 'transferability', as was demonstrated above in the thesis.

 4.4 Conducting the Survey

After distributing the questionnaire to our respondents, we selected a deadline (two weeks after delivering the questionnaire) to conclude our survey, since the time is limited to formulate and present our findings in the thesis.

4.5 Data Collection

The web form was our proposed strategy for our survey type. In our case a notice was placed on the University Website soliciting each respondent to complete our survey. This included the appropriate instructions describing the purpose and nature of the survey, as well as the location where the link to the website where the survey was placed. We believed that this is effective, since the time for completion of the thesis is limited, as well as it is faster and easier to answer a web form rather than to venture out and to hand out paper forms to the respondents.

4.6 Data Analysis

After the completion of our survey, the survey tool provided the statistical summary of all questions and the appropriate data in terms of percentage, pie charts and bar charts. It helped us to calculate, store, and analyze our data in an extremely efficient manner.

However, the next step was to organize the survey sample data. Since the answer for each question was a kind of explanation, instead of numbers, we tried to simplify and clarify the responses from the respondents. We designed our survey interface in such a way that all the respondents could respond to all the questions since we marked all the questions as compulsory. Therefore, we didn't have any partially completed responses. Having fully completed responses made our analysis much easier.

After the preliminary step, we started to perform some statistical analysis, then analyzed the data table and drew graphs to representative of the responses. We focused on several factors that asked about their preferences and choices regarding Lifelong Learning.

As we mentioned before, we used a multiple choice questions that focused on several factors. For example, we had a question regarding the appropriate internet based communication alternatives. Different respondents had different opinions regarding this issue. We now could analyze the answers and show the percentage of preference in a pie diagram. Moreover, we could know the percentage of people's opinion regarding their interest in further education, type of learning process, preferred time, length of LLL and etcetera. Since alumni from LUSEM was our target group, we asked about their interest to come back as guest lecturers or researchers, plus their opinions on the effect of alumni associations.

Based on these tables and graphs, we could analyze quantitative information. Generally we can say that for data analysis our survey tool is quite appropriate and convenient to analyze the data and helps us to draw a conclusion.

4.7 Research Quality

Methodological awareness is an important factor of good quality research. In order to ensure good quality research we needed to be careful about the characteristics. Collected empirical data should have to be valid and reliable. According to Seale C. (1999), "trustworthiness of a research report lies at the heart of issues conventionally discussed as validity and reliability". The concept of trustworthiness has four elements such as: credibility, transferability, dependability, and conformability. These elements are very much related to the concept of reliability, internal validity, and external validity.

4.7.1 Internal Validity

Validity is applicable on major population samples, and refers to the empirical data collection measuring, compared to what it is supposed to measure. Internal validity describes the truth and confidence of our research results and findings (Lincoln and Guba., 1985; Norris., 1997). To achieve the internal validity our research findings and results must have relation with our perception and expressions of our research subject and avoid an insensitive point of view that only reflect our own ideas. By measuring incorrect things, internal validity can be intimidating that automatically may lead to incorrect interpretations.

There are different ways to test the validity of a result such as going back to the respondents to see if they agree or support the result. However, this could happen in personal conversations or in groups and is called face validity. Since we have done a survey based method therefore this concept is not much relevant based on our approach.

Another way of testing the validity is to compare the result with other theories and empirics. If other surveys are conducted the same topic with other types of methods and if it shows the same result as we have, it strengthens the validity. This part is being tested in the analysis and conclusions chapter. However, to test validity in our case, we had to be critical in the choice of respondents and sources.

In validity, respondents fall out is another risk. A high value of fall out might deform the results. Moreover, the total number of respondents is important to generalize the result. In some extent, a larger numbers of respondents make the results more valid. For our survey at first we expected to have at least 50 respondents answering our questionnaire. We chose a web-based quantitative questionnaire for empirical analysis. To fortify the validity it would have been appropriate to include some qualitative approach for example interviews which is a good way to increase validity.

4.7.2 External Validity

Seale (1999) mentioned that "External Validity is referred to the level of generalization of our research results and findings". Moreover he cited, "External validity involves the extent to which the results of a study can be generalized (applied) beyond the sample" (Seale, 1999). Our empirical research is directed toward constructing a questionnaire, conducting a survey and analyzing the collected data from the survey which is conducted among the Alumni from LUSEM (Lund University School of Economics and Management). We collected our data that focused on different issues of Lifelong Learning and we tried to retrieve their consent regarding this issue. We tried to provide much logical reasoning of each different context under Lifelong Learning approach. Rather than focusing on its typicality which ensures an adequate level of generalization for our research results and findings, we tried to focus the deeper understanding and analyzing of the particulars in different contexts.

4.7.3 Reliability

Another quality of the analysis is that it has to be reliable and believable. According to (Lincoln and Guba., 1985), "reliability means that the use of the same methods should produce the same results". Therefore, if we tried to do the survey the same way one more time, we might not be able to come up with the same result. It is difficult to achieve the same result since the process of collecting data might be different and is subjected to change. Therefore, if we do not get the same result there is a low reliability. Reliability is all about trust and there must not be any errors in the measurement (Djurfeldt, 2003; Jacobsen, 2002).

4.7.4 Research Ethics

According to Creswell (2007), researchers should be sensitive to ethical considerations. In our research writing, we tried to maintain ethical quality along with scientific quality, while conducting the different phases from the theoretical framework, constructing the questionnaire, conducting the survey, analyzing data, and reporting the results and conclusions.

We were careful not to collect the e-mail addresses of the alumni. Since our sample target group was the alumni from LUSEM, therefore, we had to contact the department directly involved with alumni affairs. Usually they keep all the records of the previous students. There were some ethical issues in handling the e-mail addresses of the alumni, since usually they keep their (alumni) records and they don't want to disclose their information to the general public. Moreover, alumni students might not take to the idea of getting any e-mails from general people. Therefore, in our case we published our survey link on the alumni homepage of LUSEM with help of alumni coordination department of LUSEM.

In the preparation phase of our survey questionnaire we tried to maintain the ethical issues. In designing our questionnaire, we considered the possible consequences of the study for our research subjects.

However, one of the important issues at this stage is confidentiality. Moreover, the contributions of Singer and Vinson (2002) as well as (Israel and Hay, 2006), suggest that the ideal protection of anonymity involves not collecting any data that can be used to identify participants, not even names; they further cited, that within the reports, confidentiality and anonymity can be protected by aggregating the data. We worked hard to keep the confidentiality of our survey respondents, since our survey is anonymous and there is no way to keep track of the respondents.

In the analysis phase we also tried to maintain the ethical quality. Here we were very much careful in data handling. We did not want to hide any results. Since the subjects have the right to say how their statements and behaviours are interpreted Kvale S. (1996), we mentioned in our survey questionnaire that if anyone want to see the result of our survey they are welcome to contact us through email.

5. Description of the Target Region

In this chapter we provide a short introduction regarding Öresund Science Region and Öresund University (ÖU). Subsequently, we discussed the current happenings and strategies regarding alumni from Lund University School of Economics and Management (LUSEM), Executive Foundation Lund (EFL) and Lund University Commissioned Education (LUCE) points of view. Finally, we provided a summary of the chapter.

5.1 Öresund Science Regions

The Öresund Science region (ÖSR) is a trans-national initiative between Denmark and Sweden which serves to strengthen, develop and preserve the regional knowledge-based economic growth. This capture, transfer and commercialization of knowledge is seen as one of the most important factors for economic growth in an increasingly more competitive global economy. The Öresund University is at the forefront of this process.

Figure 5-1: The Öresund Region encompasses Scania. The biggest cities in the region are Copenhagen (Denmark) & Malmö (Sweden) Source: http://www.uni.oresund.org/sw16342.asp

The Öresund University (ÖU) is made up of eleven universities from the Öresund Science Region (ÖSR), approximately 3000 companies and business entities, and local and regional authorities combined together in a so-called "Triple-helix approach to creating the optimum conditions for knowledge-based growth in the region. The main objectives of ÖSR are:

- For economic growth for the countries involved,
- To provide regional integration,
- To establish state-of-the-art networks and clusters in each industry type,
- Lastly to foster new knowledge and research projects in competitive areas.

The key industries or clusters in the ÖSR include: biotechnology, pharmaceuticals and health; information technology and communications; food; tourism, culture and recreation; transport; building construction; and business and financial services.

With all the actual and potential benefits of this integration to both countries and the global environment on a whole, the Öresund Science region, like any other initiative, faces some strategic challenges. One of its current projects is to provide Lifelong Learning to professionals who wish to improve their skills and knowledge.

Since, our focus was not to capture all the institutions under this Triple Helix cluster, As such; we have chosen the alumni from Lund University School of Economic and Management. Therefore, in the following sections we tried to analyze the current happenings in Lifelong Learning by Lund University School of Economics and Management (LUSEM), Executive Foundation Lund (EFL) and Lund University Commissioned Education (LUCE).

5.2 Lund University School of Economics and Management

Within the LUSEM, the Executive Foundation Lund (EFL) is responsible for charting the skill and knowledge obtained from the university, within the area of research, education and organisation behaviour in a global environment. And at the same time collaborates with more than eighty organisations in over twenty countries; thus, enabling them to benefit from a huge reservoir of knowledge.

5.3 The Current Strategy Regarding Alumni

EFL provides customization packages to organisations, which requires key people from the organisations that want to be developed, as well as to qualify education to the same within the field of research, education and organisation behaviour in a global environment, as a basic of the school of economics. This is done by the client choices, even though this is conducted by the traditional method of learning. EFL scopes the environment, by looking at the market needs, the challenges, for instance current trends, and research, thus identifying these changes to the company. They will however, provide the right pre-requisites to which it is the university's challenge now being faced by potential revenues, and what is being taught, thus, looking into the short term perspective.

Jongbloed (2002) suggests that LLL presupposes that citizens move in and out of education and training over the course of their lives, particularly their working lives. Part of this LLL demand can be catered for by universities. Universities that decide to leave the supply of LLL programmes to other providers' even risk losing a share of their traditional market that is the training of before-working- age citizens (Jongbloed, 2002).

Since the foundation is already being laid by the University, the EFL which acts as the cradle by working closely with the school of economics, in order for them to acquire the accreditation required by EQUIS, they will need to implement a *Working Executive Education* program which is administered by EFL. This, will however, allow the School of Economics to be able to attract better international students and guest professors, to be a part of their faculty and curriculum in their respective capacities.

(Otala L., 1994) cited, that these learning institutions, contribute a key role in providing the framework for LLL, and they are authorized to provide accreditation, diplomas and degrees, and the transfer of these to support the mobility of employees.

5.4 The Executive MBA programme – An Overview

Business Applications Part Three	Change Management		Innovation Management	Corporate Finance	International Management and Leadership Project
	International Week				
Business Fundamentals Part Two	Business Environment	Organisation and Leadership	Marketing Management	Management Control	
Mini-Bachelor Part One	Economics	Strategy and Organisation	Marketing Management	Management Control	

Figure 5-2: The executive MBA programme is comprised of three main sections (EFL Brochure)

EFL is the link between the business community of southern Sweden and the University. However, their plan regarding the Alumni is to "stimulate, motivate and help develop executives who aspire to meet the professional demands of the future. They also provide the tools to improves analytical skills and the ability to act in situations which require new perspectives and knowledge, which is geared towards innovation and development as well as entrepreneurship and growth; hence, making contribution in the long term yielding a sustainable profitability in a global environment", for the appropriate business skills within the Oresund Science region (Executive Foundation Lund).

Secondly, EFLs purpose is also to gather information from the community back to the University, giving a knowledge contribution to R&D. Basically, they are a meeting place.
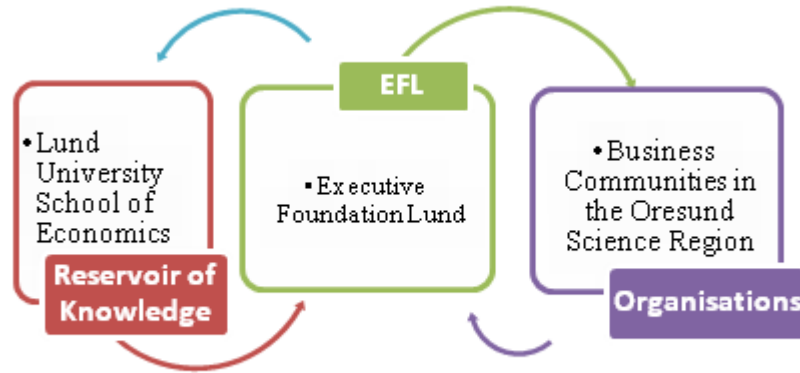
Figure 5-3: The link between LUSEM and Business Communities

However, since EFL is a part of the activities oriented towards people outside, but within the field of LLL, therefore, a comparison will be drawn on the basis of what is the current and proposed strategy for alumni through LLL. According to the Project Manager- Alumni, Magnus Lindqvist, "the purpose of the alumni is to build their trademark higher up for Lund University, which will enable them to attract internationals as well as locals to the university. There is no doubt that the alumni are the best ambassador, because they will and have shared with others the high class of education being rendered.

Being cognizant of this fact, with a higher trade mark, this will influence the resumes of job seekers, who have studied at Lund University. This can be seen as a "win and take" situation for everyone involved. Moreover, it could be said that all alumni need LLL, however, Lund may not be the university they require it from, therefore, at present, alumni is not being used for LLL, and the available offering to them falls under the U21 networks of universities, where they now received a 25% discount in tuition fees, which is defined as open enrolment. Even thou, there is a strong platform available for this network; obviously, there is a requirement to understand the alumni needs, which require further understanding. He further suggests the proposed strategy can and must be aligned closely to the alumni. As a starting point they are as follows:

Career offering: By providing a common platform, for students, alumnus, and companies, and through this medium, the following will be introduced through LLL to the alumni in the future.

    a. By making the initial contact with them
    b. Study them and get them involved with more detailed understanding, as it relates to their needs
    c. Next, is to established communication with them, in order to develop a formal relationship, so as to make them aware of the available offerings for them.
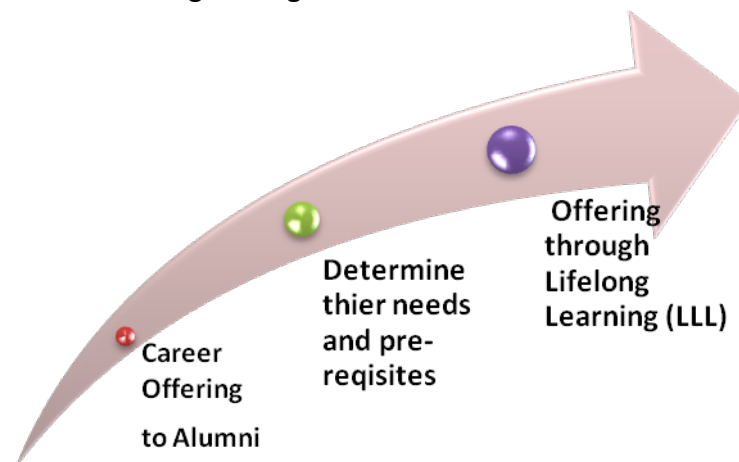
The model depicts the following strategies stated above.

Figure 5-4: LU career offering to alumni / others through LLL within ÖSR

5.5 Lund University Commissioned Education (LUCE)

Lund University Commissioned Education (LUCE) [1] is Sweden's largest provider of International Training programs. It is a company fully owned by the university specializing in marketing, sales and quality assurance of commissioned education from Lund University. The university departments are responsible for the content of the training programs, while the Lund University Education functions as a distinct portal towards the outside world, taking care of the administration of the training programs.

They give some sophisticated training in the following fields:

- Staff Development
- Staff Cooperation
- Reduce Unemployment

LUCE offers some special educational programs, ranging from one-week short courses to year-long masters programs in management, engineering and other areas. Some web-based courses in English are available as commissioned education through Lund University Education. Courses can be personalized to meet the specific needs of education.

It is possible to provide education as traditional classroom learning, internet-based learning or a combination of both. Moreover, due to the expansion of internet-based distance courses it increases the possibilities of life-long learning, since the participants can take the course when it suits them the best, anywhere and at any time.

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[1] Lund University Commissioned Education: http://www.education.lu.se/

In reducing unemployment rates they have taken some proper initiatives to involve the unemployed person into their job again. Those who are being fired from a company, they can take special training according to their requirements from Lund University Commissioned Education. Since the unemployment rate is increasing due to the current economical crisis, therefore, this issue is their main concern now.

Lund University Education is one of the program organizers appointed by SIDA. Their aim is to contribute to capacity development and processes of change in partner countries and other developing countries. They do this by offering key persons training opportunities in subject areas given priority in Swedish development cooperation, of which Swedish expertise is in demand. In this, use is made of different country experiences at the different stages of development. SIDA's international training programs – each with 20–30 participants – have duration of three to eight weeks which are held in the English language.

5.6 Summary

Even though they use a traditional learning method within their processes, this method, is adaptable, and can meet the evolving changes in the learning paradigm of the next decade. Consequently, the policy-makers within ØSR need to cultivate this network link, and to continue to be the main choice among the alumni within the field of LLL for ÖU within the ÖSR.

Going back to the research question about Lifelong Learning and the appropriate development model; from our observation, we see that the characteristics of both EFL and Lund University, irrespective of their offerings, complement each other within all segments of learning. As stated earlier, that ÖU should focus on one strategy and stick to it, as this would be the main choice amongst alumni and others for the ÖU within ÖSR through LLL. It is imperative that the policy makers of ÖU be proactive, so as to further develop and maintain the current and proposed strategy being rendered by all entities, as well as to perform the proper promotion of these offerings, which will elevate the awareness both internationally and locally. This will enable them to continue achieving sustainability in the long term through LLL.

Moreover, to reiterate our point, LUCE's strategy can provide a greater platform for the development within the region as well as internationally. Consequently, their primary function is to provide courses according to the requirements of the employers. However, they will facilitate courses if the appropriate request is being made or sought from these important stakeholders. This is cost effective, if looked at from a social perspective of those who will be, and have been unduly affected by the world economic crisis.

LUCE has taken some effective strategies geared at towards up-grading and refreshing their knowledge, so as to make them more attractive. Hence they will realize greater success, better products, and be more influential on their local organizations; thus, fostering better social, economic and environmental impacts where all stakeholders would derive benefits. (See figure: 3-2, PPP Model)

6. Empirical Findings and Result Analysis

In this part of our thesis, we present the findings and results that attempt to empirically answer the research questions outlined in section 1.4 of chapter one. With respect to our main research question we present our results obtained from our survey questions.

6.1 Findings from the survey

The questionnaire results from the survey are presented in this section. The survey results are based on the final total of 21 respondents (Alumni from LUSEM) who had fully completed our questionnaire (33 abandoned). In order to identify the basic characteristics and issues of Lifelong Learning, an exploratory analysis of the sample was carried out. The results are placed in Appendix B section of this research paper.

We closed our survey on May 11th, 2009. Given the fact that the numbers of respondents to our survey were low in our estimation, since we were expecting 50 respondents, as our analysis was limited to the alumni of (LUSEM) and not all the alumni of the University.

Based on collected data we identified different aspects of Lifelong Learning and their (alumni) views on continuing education through LLL within the ÖSR.

After getting some basic information regarding location, profession, field and year of study; we are going to focus on some specific questions regarding our main focus. From the collected data we see that 61.90% of respondents never heard about Lifelong Learning. However, they are interested (66.67%) to study more.
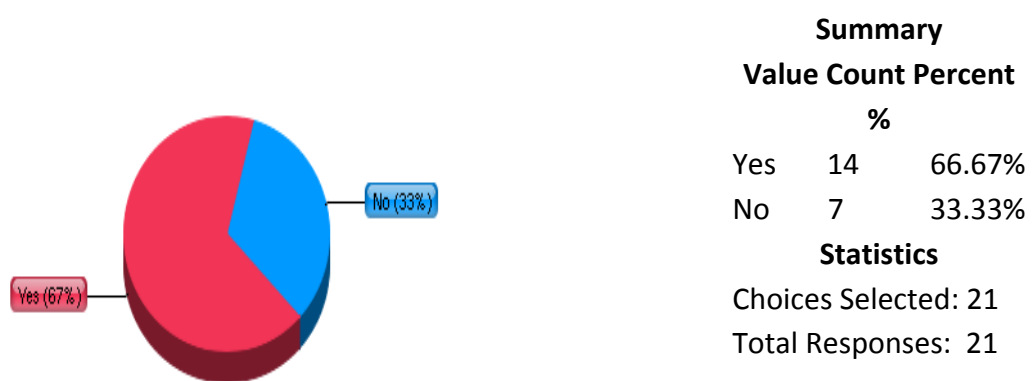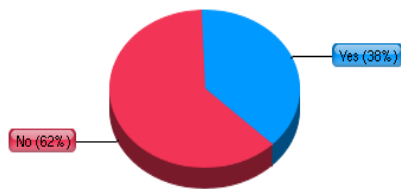

Summary		
Value	**Count**	**Percent %**
Yes	14	66.67%
No	7	33.33%
Statistics		
Choices Selected: 21		
Total Responses: 21		

Figure 6-1: Are you interested to study more?

Summary		
Value	**Count**	**Percent %**
No	13	61.90%
Yes	8	38.10%
Statistics		
Choices Selected: 21		
Total Responses: 21		

Figure 6-2: Have you heard about Lifelong Learning (LLL) before?

From the survey we tried to get a suitable estimation of what period of time would they pursue Lifelong Learning. 61.90% respondents like to study while they work. Moreover, the same number of people (61.90%) thinks continuous on-campus learning is most convenient for Lifelong Learning.
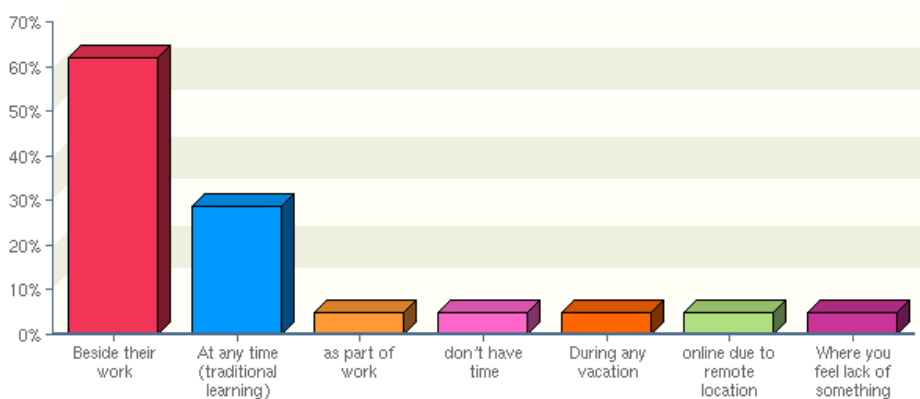
Figure 6-3: Please, specify which time is suitable for you to pursue Lifelong Learning?

We asked their opinion regarding the type of learning which is effective under LLL. Most of the respondents (80.95%) think Hybrid Learning (Combination of E-Learning and Traditional learning) is more efficient.
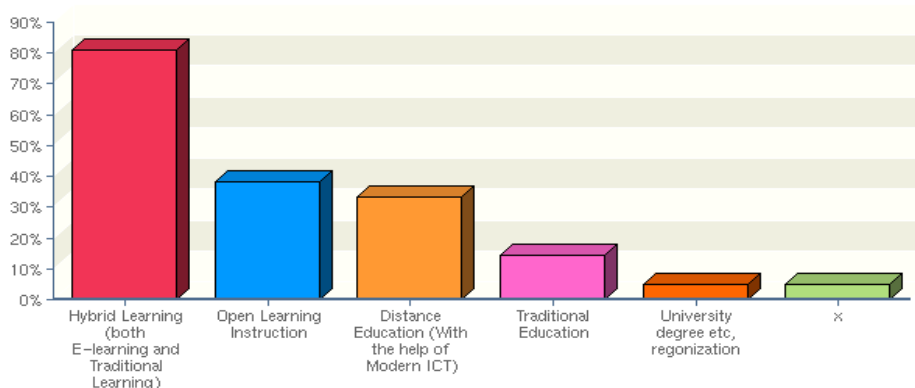

Figure 6-4: Which type of learning do you think would be most effective under LLL?

Next, we asked a question regarding technologies that are effective under Lifelong Learning environment. Here we see that the same number of people (61.90%) think that Discussion Forums, Virtual Learning environments, Web 2.0, Wiki-style resources are most effective technologies under LLL environment.
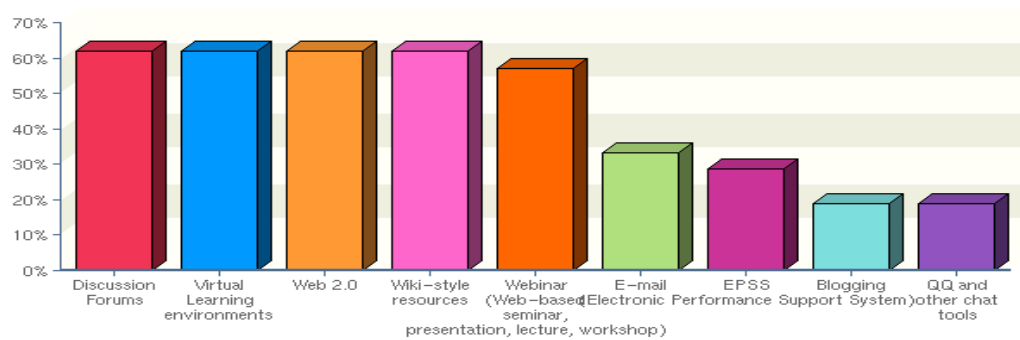

Figure 6-5: Which of the following technologies might be appropriate for an effective learning environment under Lifelong Learning for you?

Furthermore, we asked their opinion regarding the benefits of engaging in continuous and further education from their point of view. Around 95% respondents think they need further education for personal development.
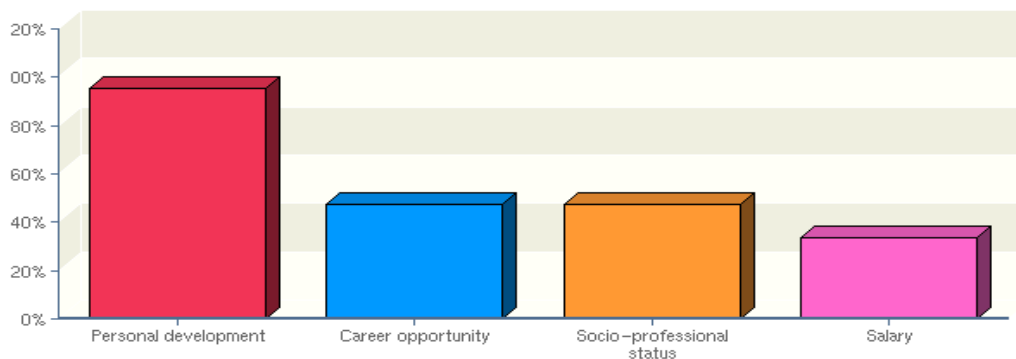

Figure 6-6: What do you see as the benefits of engaging in continuous and further education?

Moreover, we sought their outlook regarding the benefits of engaging in continuous and further education from their own perspective. For professional development most of the people (76.19%) like to have Lifelong Learning as their learning source.
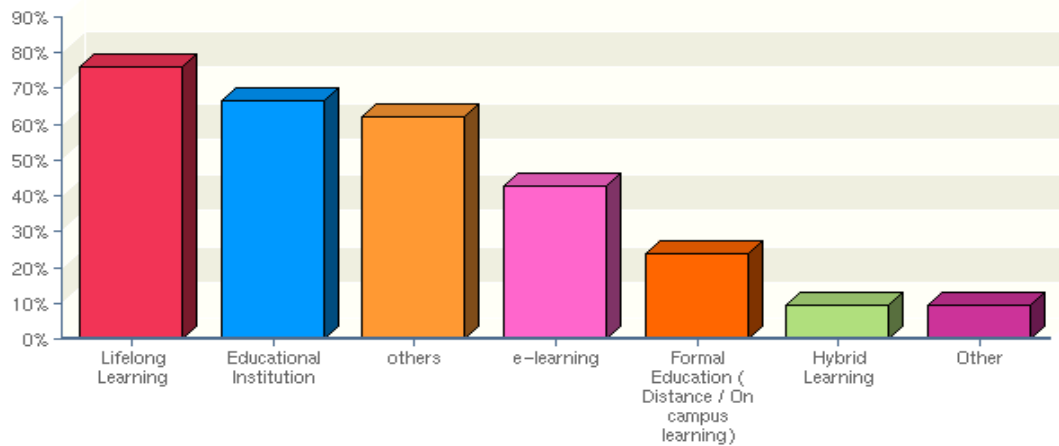
Figure 6-7: What sources of learning do you use for your own professional development?

And finally we asked them to explain the importance of Lifelong Learning from their perspective in continuing their education. Everyone has explained their own view regarding this matter which is placed in the Appendix section.

As mentioned in the method section we have used web form method to construct our survey questions. The questionnaires were distributed to the alumni from LUSEM via Lund university websites, as they are our sample target group to investigate their views on further education through Lifelong Learning (LLL). The following Education Industry Model of Learning was established based on our survey questions which provide us with a clear relationship of the kind of offerings is preferred through LLL by our target group.

6.2 Result Analysis

Based on data collected from our survey questionnaire and the problem discussed, also with the general empirical result we present our analysis in this section. As part of the limitation associated with our survey, that analysis was based on small sample of (21 respondents) as in this study, and not from a general perspective.

Structure of our sample

In our analysis, we did the calculation using the statistic tool called SPSS and the summary of our survey report from (www.surveygizmo.com), for those questions that were no multiple choices we used by the SPSS tool to represent it in percentages or counts. As this regards, the alumni are willing to continue their studies, the majority of them want to improve their studies. The frequencies of these are 67%, and 33% of them preferred not to continue with this process. Our target group express their sincere views of wanting to continue with their studies, but are not aware of the concepts of LLL.
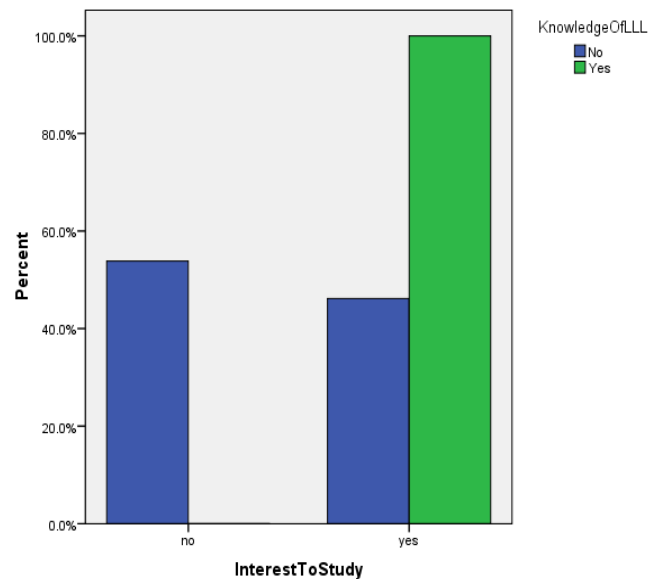

Figure 6-8: Knowledge of LLL in relation to (alumni) Interest to Study More

Consequently, it can be argued that, since 71% of our respondents (alumni) reside within the region, and they are interested to the continuing of their own development, then we can assumed that our survey sample consists of learners who are willing to engage themselves through LLL. Moreover, our aim was to demonstrate the importance of LLL and its implication associated with this to our target, the graph below, illustrate the relationship between Knowledge of LLL against location, association with the University and interest to study further.

These results provide us with the information that the University needs to get the alumni involve so as to make further LLL developments. Since the basic questions of this study is how the University could develop its approach to Lifelong Learning and what model to follow, in enhancing the higher education model. These beliefs foster a favourable disposition that the University will have a successful implementation of LLL.
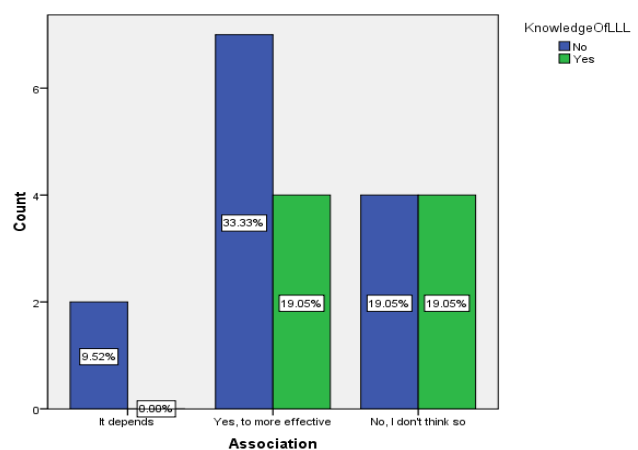

Figure 6-9: Knowledge of LLL in relation to Association (U)

Even though the alumni are not the central part of the process, no questions were asked about their opinions for a business model. However, they are instrumental in the University achieving their objectives. The objective was to make sure that our Target group (alumni) was familiar with the concepts of LLL and its importance.

Benefits and Continuing Learning

The benefit of engaging in continuous and further education were also a topic of the survey. Respondents were asked earlier if there are interested in studying more, the majority of respondents (67%) wanted to further their education. Moreover, it is being observed that (95%) of them think that the benefit of this will contribute to their personal development. However, the respondents think that their present skills and competences are enough to meet their current Job requirements.

57% replied that their skills and competences are in line to match their tasks. We were not surprise with this result, given the fact that the quality of education rendered by the Universities within the region is of high standard.

As it relates to their involvement whether (formally or informally) with any other universities, competences, social networks, or community-of-practice in terms of Lifelong Learning is 67%, which indicate that the University can try to get them involved.
Around 52% of the respondents think that the alumni associations can work to establish a mutual beneficial relationship between the university and the alumni.
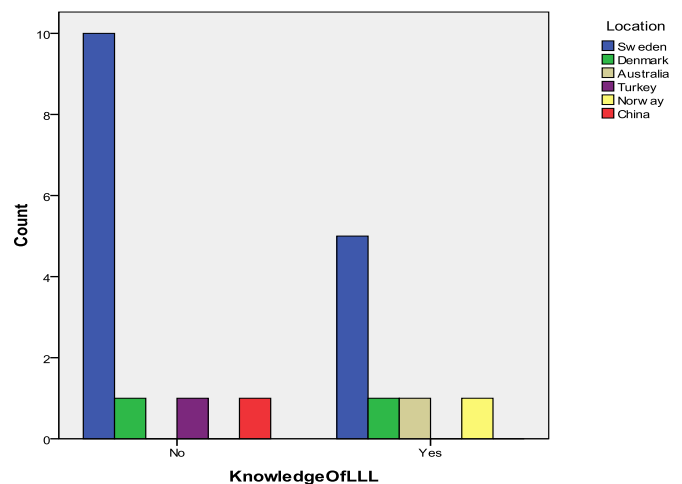

Figure 6-10: Location (alumni) in relation to Knowledge of LLL (U)

However, 86% of them think that the university should organize different alumni events to make it more successful. Therefore, the universities need to be more effective in organizing different alumni events through which they can provide new types of offerings like Lifelong Learning. The alumni (target group) feel that continuous learning is the most appropriate period (schedule) for LLL as a source of learning (61.9% of responses), this show that our respondents want to engage in Learning through LLL as this quite important for them and the University.

ICT and Lifelong Learning

Since, one of our research areas was to know about the modern ICT to enhance the higher educational model under Lifelong Learning environment. According to the opinion of the respondents 61.90% think that Discussion Forums, Virtual Learning environments, Web 2.0, Wiki-style resources are most effective technologies under LLL environment. Therefore, the ÖU needs to be concerned about these techniques in providing their education under the LLL platform. Since the ICT infrastructure is already available in the region, now they just need to make these IT facilities easily accessible to serve their education according to the requirement of the Lifelong learners.

6.3 Summary

With the involvement of the alumni, this can provide as stronger impact on LLL adoptions for the Universities, Moreover, the alumni is the central part of this adoption, as part of the reason why they are such important antecedents to the implementation of LLL. Notwithstanding that fact, the alumni association will have been more active in engaging the alumni to have a good platform under LLL, as we are in a knowledge based society.

7. Discussion

In this discussion section we try to examine the relationship of our findings with the research question. As in our introductory chapter stated, how and what Business Model the University could develop and implement, in regard to the concept of Lifelong Learning and its application to their alumni and the higher educational model, using modern Information, Communication and Technology (ICT).

Throughout the research process we presented the framework regarding LLL, which highlights the perspectives of different types of learning, leading to the concept of LLL. Then, we presented the idea and approaches, competitiveness and impact of modern ICT, the current situation, and the key competences of LLL. After which, the business model for LLL, was discussed from the various prespective of the different authors in our theoretical framework which provide us with a better understanding.

In order to answer the questions we went through different sources like articles, journals, books, publications and different internet sources. We used the quantitative method to gain a better understanding on our research area as well as to construct our proposed models. Since the method of data collection is of a quantitative approach, we conducted a web-based survey to know the opinions and interest of our sample target group (Alumni from LUSEM) in continuing their education, and the proper way to implement the LLL process. We also tried to have the respondents disclose to us, about a suitable time and appropriate ICT strategy, to establish a successful learning platform under LLL.

7.1 New Versions of EICM Model

In order to answer our research question, from our study as well as taking into account the responses from our target group (alumni) as their views, we proposed a new version of EICM model. We believe that this model can create a good platform in implementing LLL with the help of Modern ICT, to enhance the higher educational model. In all of this, greater communication is required by the University and the alumni, as this can contribute to a favorable outcome for all stakeholders, even though the concept of LLL has not yet been incorporated in the curriculum of the University. Based on this, it does not mean that to have a successful implementation of LLL is inextricably bound to failure.

Based on the EICM model derived in our theoretical framework (See figure 3-4); here we have identified some key factors that will enhance the development of Lifelong Learning within the region by the Universities. However, for implementing Lifelong Learning ÖU should focus on these key factors which are essential towards the framework for a successful adoption and implementation of LLL. As we, embarked on preparing for a new

chapter of LLL for the next generation of learner, we must be cognizant of the importance of LLL, within the knowledge based society. Moreover, there is room for introspection to make LLL more popular amongst the individuals within the ÖSR.
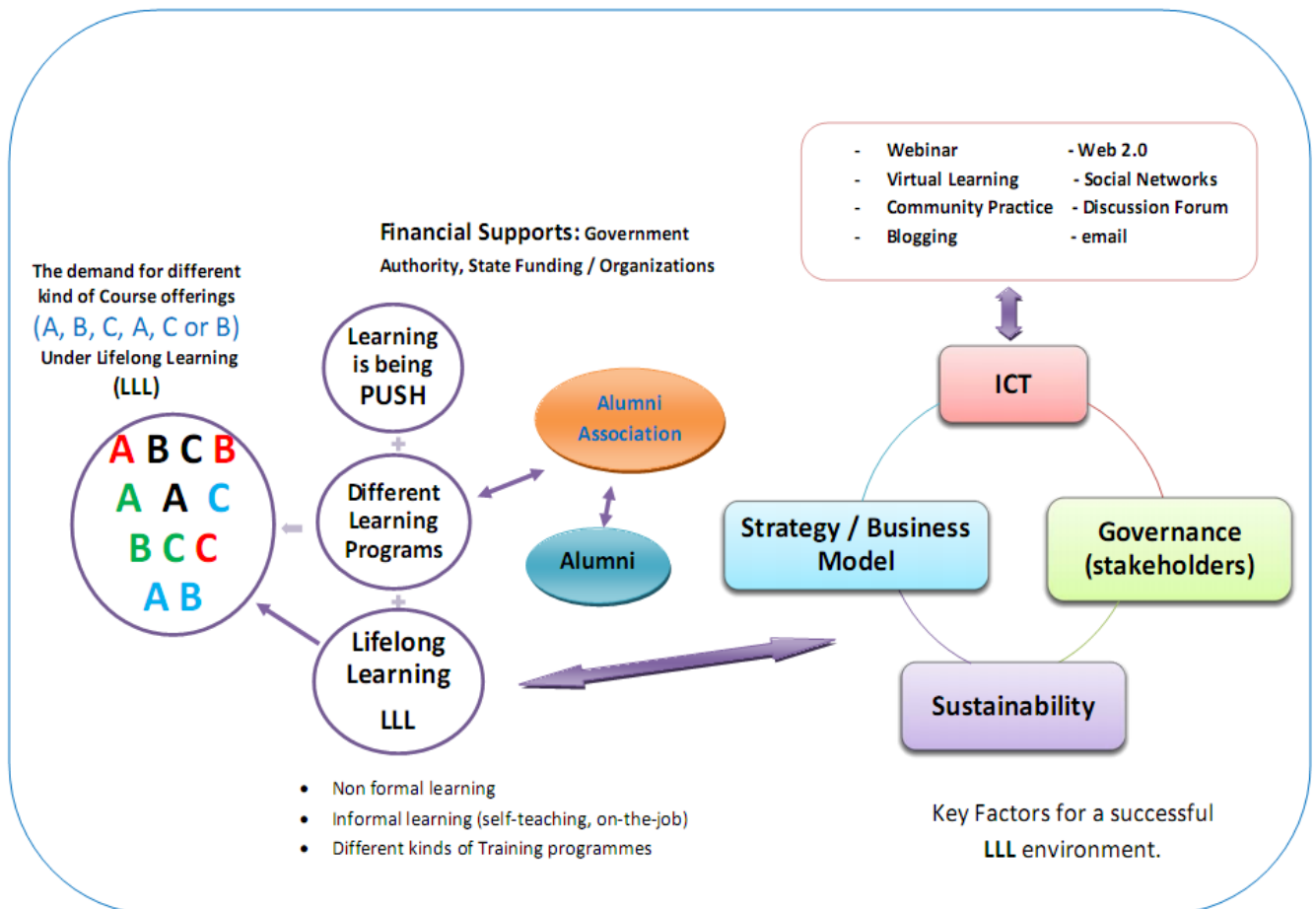

Figure 7-1: The New Version of Education Industry Conceptual Model

We have identified some factors which are needed for a successful Lifelong Learning environment in the region and the benefits of these key characteristic are thus follows:

- **ICT**: With the help of modern ICT the learners can study at any place or at any time which is the key concept of LLL. Therefore, ÖU needs to identify the right types of technologies through which they can provide their learning facilities toward their learners. The infrastructure of ICT in the region is already at an advance stage. Therefore, the communication technologies are available that can be used by the Lifelong Learners. For example: webinar, web 2.0, blogging, email, discussion forum, virtual learning environment and so on. With this established learning management infrastructure they can choose the appropriate technology and tools to serve their education according to the requirement of the Lifelong learners.

- **Business Model:** For successful implementation of Lifelong Learning ÖU needs an appropriate business model. Since, without a proper business model it is not possible for them to stimulate and nurture the LLL policy. As in the next section we will broadly discuss an ideal business model.   Since 62% of our target group are not aware of LLL, ÖU themselves have realized the importance of such framework for their own social development, having realized this, 67% are very much interesting to continue their education, update / upgrade their skills and competences.

- **Governance**: ÖU needs good governance to make their project successful nationally and internationally. With the combination of the local and regional government and their focus on this region can enhance the opportunity to establish a good environment for LLL.

- **Sustainability:** Sustainability is also an important factor in proper implementation of LLL. Providing that ÖU can reduce the impacts of the Universities on a local environment, economic and social, as our PPP model of sustainability has demonstrate the need for this strategic plan which can guide the Universities through to the next five years as an example. (see figure 3-2)

7.2 Ideal Business Model

By this, our research question was to identify what kind of business model that is appropriate for the University in implementing LLL. However, to answer this question we derived the model from our empirical analysis, and constructed the Ideal business model that can be fitted to help realize this objective. This model which reflects the strategies coupled with the key competences as well as the appropriate guidelines from a sustainable perspective that could help the University to commence their initial process to complete their business model in implementing LLL**.**

Learning as it is nowadays, is evolving rapidly, and the Universities have to provide good practice of human resources management coupled with the right startegies and Business model required. Our research question reflects what kind of business model for Lifelong Learning is appropriate for this. Based on this, our Ideal Business model was established.
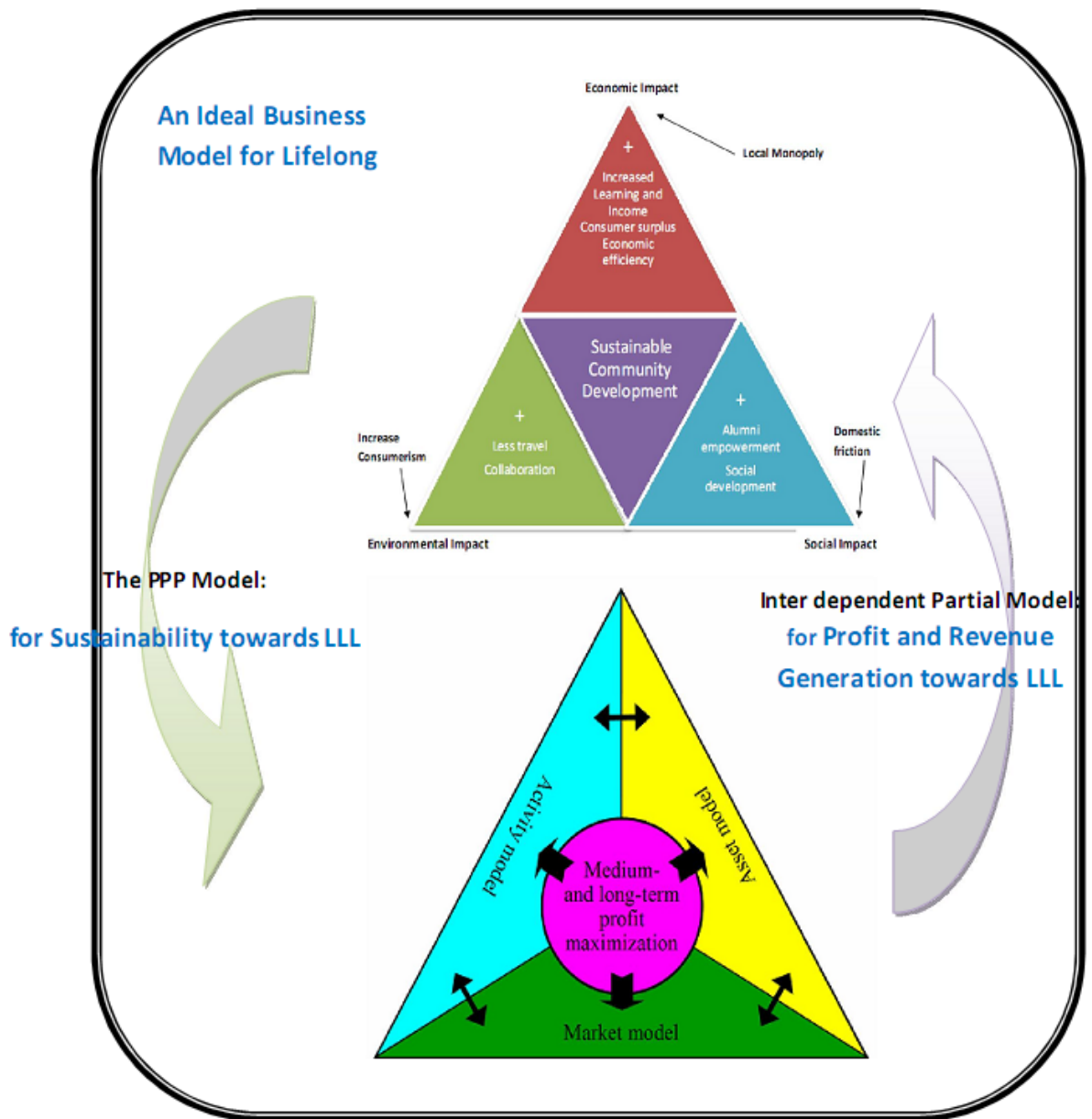
Figure 7-2: The Ideal Business Model for Lifelong Learning

The Ideal Business model illustrates the combination of the PPP model and the Interdependent Partial model, which is our proposed Business model to provide that business strategy to establish the proper LLL policy by the ÖU. The benefits deriving from our Business model in that, by making LLL more profitable, popular and sustainable for learners it addresses all aspect of sustainability, on the other hand.

PPP model will help to identify the obstacles encountered throughout their economic and development impact, however, from a social impacts, the alumni (our target group) will gain that level of empowerment as well as social development, therefore, the environmental impact is also crucial in evaluating the sustainability impacts for our target group which provide them less travel, as modern ICT has provided the appropriate infrastructure where

collaboration is possible amongst them. Finally, the economic impacts can provide increased learning and income as well as economic efficiency within the region.

Since, according to Porter M. (1996) business models play a vital role in business activites. The interdependent partial model provides the concept of value chain in the prospect of business. For medium and long term profit maximization interdependent partial model works with the combination of three independent models as we discussed in our theoretical framework.

Market for Lifelong Learning

To enhance the market's demand for Lifelong Learning, Universities could adapt and implement their specified offerings more accurately and carefully**.** Universities should take care in their market strategy, to make Lifelong Learning policy more popular among the companies and the individuals and alumni. However, since the individual learners are not used to paying extensive fees for higher education in Sweden, universities, government and individual also need to choice suitable revenue sources to implement and run these LLL processes.

Activity Model Prototypes for Lifelong Learning

From the marketing perspective, the Universities need to identify the demands of the respective companies. Moreover, they can provide some services like hosting, and tutorial assistance. Marketing characteristics like designing their learning package, pricing, promotion and product distribution to improve their market demand, all need to be identified. Therefore, in order to enhance their product of Lifelong Learning*,* the Universities need to put policies in place to address these issues.

Asset model prototypes for Lifelong Learning

Asset model can provide the guideline for the cost and revenue model. Universities and their stakeholders should choose suitable revenue sources considering their national reach. In general, revenues can be acquired by involving a group of companies as subscribers of Lifelong Learning. Moreover, instead of the LLL end users as probable payers, there are various revenue sources like sponsors, non-profit organizations, and companies who might be the possible payers. Based on this background, it is possible to generate profit indirectly.

Seeing that one of the aims of this research paper is to seek the kind of business model that is appropriate for Lifelong Learning. Therefore, having proposed the above models which reflects the strategies coupled with key competences as well as the appropriate guidelines from the Triple P model from a sustainable perspective. In order to answer the posed research question we tried to combine the attributes and principles of all these models with the Interdependent partial model (Figure 3-4) which could be used by the university to make Lifelong Learning more sustainable within the region.

Therefore, our holistic views on both models and the benefits gained, and with the proper implementation, into a single model, which will no doubt allow the University to realize their objectives by providing sustainable LLL within the ÖSR throughout the next decade. The Interdependent Partial Model and its three sub-components culminate with the triple P's (TBL) will set the stage by providing the added value to commence the initial process to complete their business model. Notably, the benefits being provided will be advantageous to the ÖSR region.

7.3 Implications

Our intention in carrying out this research study, was to find the most appropriate and beneficial model to follow where LLL was concerned. The policy makers of the universities should also be concerned with the principles the known to give success (Appropriate Business Model, Sustainability, Proper ICT, and Good Governance) to establish a good LLL platform. Therefore, we believe that our proposed Business Model as well as the Education Model can be a good implication in the education industry in implementing a successful LLL environment.

7.4 Limitations

The findings in this study may be subject to some limitations. This can be assumed from the viewpoint of external validity. The data gathered in the study was from the alumni of LUSEM and not the entire alumni of the University, which limits the generality of these results. Moreover, access to the alumni of the University was not permitted, which explains the relative small amount of respondents in our sample, bearing in mind we had no control over who would have participated in our survey. By this background, to avoid any misunderstanding, our figures were presented in percentages, even though we only had 21 respondents. By this, every persons gives about 4 %, this also poses some level of limitations. Moreover, we believe that there is room for introspection, as this is an area for future development, as we are doing; we are making a first study, in this field.

8. Conclusion and Future Research

This chapter we summarized and concluded this research study. We also present in as transparent a way as possible our findings, of the outcome of the research on the question. This is followed by limitations of the study as well as the suggestions for future research of this and similar thesis.

8.1 Concluding Remarks

One of the main motivations for undertaking this study was to determine how university could work with Lifelong Learning with the help of modern ICT to enhance the higher educational model. As well as we focused on the alumni as a group of Lifelong Learners in terms of their views on continuing education within Öresund Science Region. Our approach, methods and processes, used to collect the relevant data, was aimed at shedding some light on this particular research topic presented. As well as to describe it in a systematic way, based on current models and other such literature on how Universities could shape their policies, and growth and relevancy strategies, bearing in mind that ICT plays the key role in its success.

Therefore, as we try to motivate and to foster understanding of this, we examined and investigated various theoretical and empirical studies that have been carried out by the different researchers.

We were extra careful in our selection of the appropriate models, making sure that they possessed the characteristics that would make LLL sustainable and beneficial for all stakeholders involved.

All models discussed in the thesis, were suggested to be amalgamated to form one model to achieve this objective. The Ideal business model is simple, and with its included attributes can aid policy makers in the development of LLL. This approach is derived from the benefits and sound principles in the various models, and we are confident can be adapted. Additionally, the Triple P's model better known as the PPP model (People, Place and Profit) as the core idea, is not only to deliver financial returns, or share holder return but also social and environment returns, thus fostering to sustainability of LLL throughout ÖSR.

The appropriate strategy in decision making is vital. To achieve this, an institution must have good governance. The contribution of the Independent model thus provides the influences important to achieve this objective. As for these two models the union was proposed as their principles can be exploited by the policy makers which seem fittingly important in order to aid them in decision strategies, which is critical for all.

The characteristic of traditional Education and its delivery, was very limited, and often times in a one size fits model. Learners had little control over what was being presented to them. Since the world as it is now is evolving rapidly and the way how education is being presented is more representative of how learners can learn, and geared towards a learner demand orientation perspective. This new way of Learning is represented in the offerings of new version of Education Industry Conceptual Model (EICM). We believed that the synergies in this new model, coming from the old policies, can broaden the current study and highlights the importance and richness pertaining to this research area.

From the perspective of University (ÖU) they could adopt such strategy and design their curriculum that makes the learning process more structured and easily accessible for all the learners at any time. As (Petegem W.V., 2008) concurred to this that "LLL's flexibility exists in the fact that learning could happen anywhere, anytime and anyhow". Therefore, with the approach of such concepts, the University could enhance their educational quality and status to make LLL more appealing through which the learners will be able to have ability to enhance their learning environment.

8.2 Suggestions for Future Research

In performing this research study we gained monumental amounts of information on the field of Lifelong Learning. Since Lifelong Learning is somewhat of a new area, therefore, a number of suggestions for further research within this field can be found. The assessment that we have made in the field of Lifelong Learning is in context of Öresund Science Region. However, studies based on other countries or region in the same comparative approach would be a suitable concern in further research; since, each country or region faces different barriers and issues from different perspective. Moreover, in performing this study we gained an overall view of Lifelong Learning by studying all of the Lifelong Learning issues in our framework. Focusing on few of these issues in a broad manner, as well as examine these areas in more critical manner for the success of Lifelong Learning than others, which might be a good platform for further research.

Appendix A: Online Survey Question

Lifelong learning (LLL) in the context of Öresund Science Region

LUND UNIVERSITY

Dear Sir/Madam,

We are master students in Lund University (Lund, Sweden, http://www.ics.lu.se/) in major of Information system. We are doing our Thesis research on "How Universities could work with Lifelong learning (LLL) with the help of modern ICT in the context of Öresund Science Region". Our supervisor is Associate professor Erik Wallin (erik.wallin@ics.lu.se, phone: 046-2228027). We would like to ask you to complete our online survey about your views on continuing education through LLL within the Öresund Science Region.

Lifelong learning (LLL) refers to the activities a person performs throughout his/her life to improve knowledge, skills and competence.

Please note that, the result of this survey will be used in our research. If you would like to see online survey result, please contact us via email (below) and indicate your name and email. We will contact you back with result of this online survey after this survey is finish.

Thank you for your time,

Barrington Clifford
Email: Barrington.Clifford @hermes.ics.lu.se
Zahidur Rashid
Email: Zahidur.Rashid @hermes.ics.lu.se

1. Your current Location?*
-- Please Select --

2. Profession?*
-- Please Select --

3. What was your major field of study?*
-- Please Select --

4. In which year did you complete your studies?*
-- Please Select --

5. Are you interested to study more?*

▢ Yes

▢ No

6. Have you heard about Lifelong Learning (LLL) before?*

☐ Yes

☐ No

7. Are you currently involved (formally of informally) with any other universities, competences or social networks, or community-of-practice in terms of Lifelong Learning?*

☐ Yes

☐ No

8. As an alumnus do you have any connection with your former university? *

☐ Yes

☐ No

9. Do you visit to your university to attend different activities?*

☐ Yes

☐ No

☐ It Depends

10. Do you think that the alumni associations help to establish a mutual beneficial relationship between the university and the alumni?*

☐ Yes, I think so

☐ Yes, but they need to be more active/effective

☐ No, I don't think so

☐ It Depends

11. Through which of the following activities alumni can connect again with their university?*

☐ Lifelong Learning

☐ Online Services

☐ Alumni Events

☐ Others, Please Specify [   ]

12. Do you think that the alumni can help to establish a mutual beneficial relationship with the university? If yes, please specify the appropriate options:*

☐ As a guest lecturer

☐ As a research fellow

☐ Seminar / Debate

☐ Others, Please specify [   ]

13. Do you think that it is a good way to update the key competences by keeping in touch with your former university?**

☐ Yes, I think so ☐ No, I don't think so ☐ It depends ☐ May be

14. Please specify, which time is suitable for you to pursue Lifelong Learning?**

☐   At any time (traditional learning)

☐   Beside my work

☐   During Summer

☐   During any vacation

☐   Others, Please specify [   ]

15. Please Comment on which period (schedule) would be most convenient for Lifelong Learning?**

☐   Continuous learning

☐   Once a month

☐   Every six months

☐   Once a year

☐   Others, please specify [   ]

16. Which type of learning do you think would be most effective under LLL?**

☐   Traditional Education (Workshop, Seminar, and Classroom Education)

☐   Distance Education (With the help of Modern ICT)

☐   Hybrid Learning (both E-learning and Traditional Learning)

☐   Open Learning Instruction (Reading articles, Literature review and Reading Newspaper)

☐   Others, please specify [   ]

17. Which of the following technologies might be appropriate for an effective learning environment under Lifelong Learning for you?**

☐   E-mail

☐   Blogging

☐   Discussion Forums

☐   Chat Tools

☐   Wiki-style Resources

☐   Web 2.0

☐   Webinar (Web-based seminar, presentation, lecture, workshop)

☐   Community of Practices

☐   Social Networks

☐   Virtual Learning environments

☐   Others, please specify [   ]

18. Do you currently plan to pursue any specific academic course in order to update and upgrade your skills?*****

☐   Yes

☐   No

☐   It depends, since the market is rapidly changing

Since the labour markets demand ever changing profiles of skills, qualifications and experience.

19. In your current position which option is most appropriate for you to pursue any academic course?*****

☐   Inside Work

☐   Beside Work

☐   Part Time

☐   Others, please specify [   ]

20. Do you think that your present skills and competences are enough to meet your current Job requirements?*****

☐   Yes

☐   No

☐   It Depends upon situation

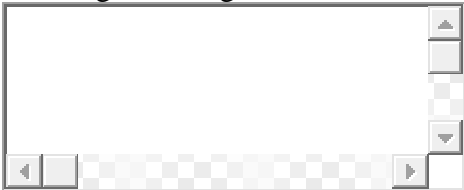21. What do you see as the benefits of engaging in continuous and further education?*****

☐   Professional status

☐   Salary

☐   Career opportunity

☐   Personal development

☐   Others, please specify [   ]

22. What sources of learning do you use for your own professional development?*****

☐   Job Related Training

☐   Conference

☐   Meeting with Others

☐   Expo

☐   Newspapers and Journals

☐   Formal Education (Distance / On campus learning)
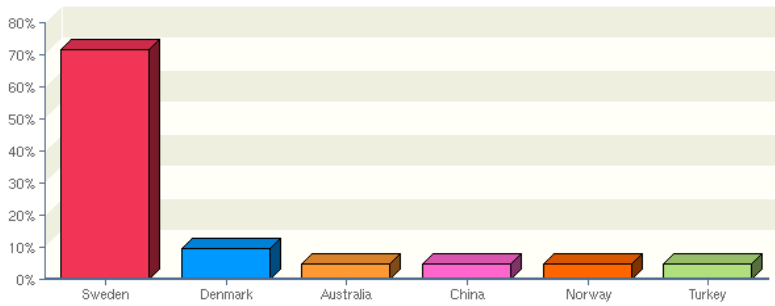
☐   Others, please specify

23. Please explain in short how important is it for you to continue your education through Lifelong Learning?*

Appendix B: Survey Questionnaire Feedback

The Feedback from our survey respondents that represents their opinion (in percentage) in different issues regarding *Lifelong Learning* are as follows.
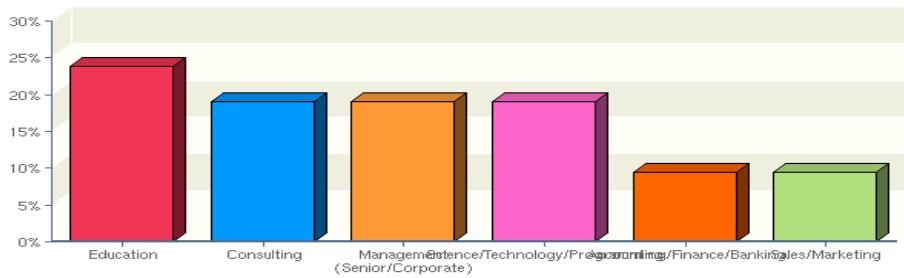
1. Your current Location?

Summary

Value	Count	Percent %
Sweden	15	71.43%
Denmark	2	9.52%
Australia	1	4.76%
China	1	4.76%
Norway	1	4.76%
Turkey	1	4.76%

Statistics

Choices Selected: 21

Total Responses: 21

2.   Profession?

Summary

Value	Count	Percent %
Education	5	23.81%
Consulting	4	19.05%
Management (Senior/Corporate)	4	19.05%
Science/Technology/Programming	4	19.05%
Accounting/Finance/Banking	2	9.52%
Sales/Marketing	2	9.52%

Statistics

Choices Selected: 21

Total Responses: 21

3. What was your major field or study?
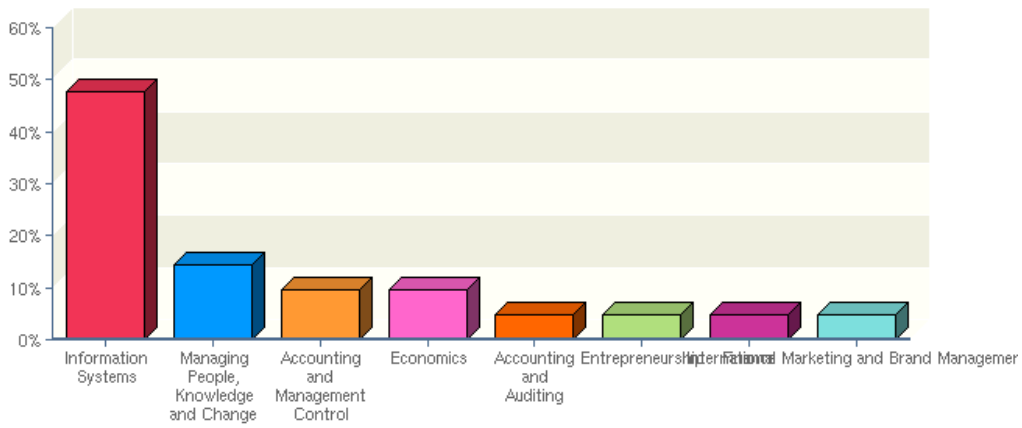
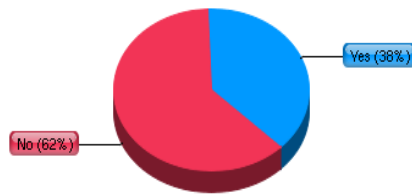### 4. In which year did you complete your study?
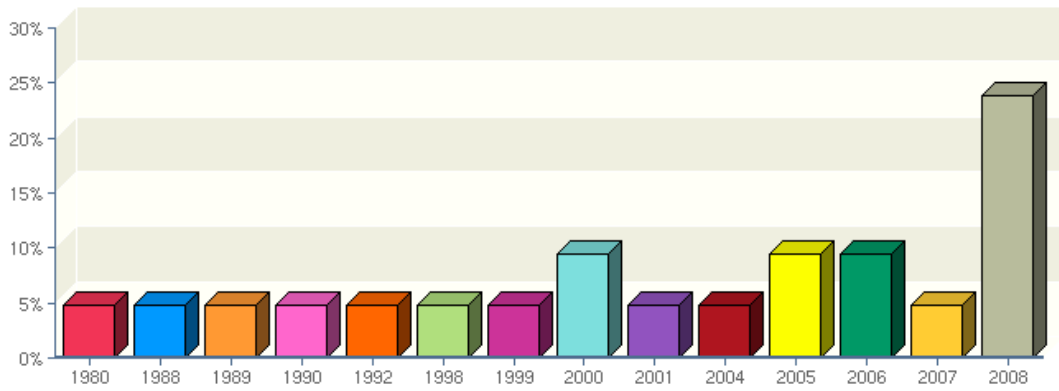
5. Are you interested to study more?

Summary

Value	Count	Percent %
Yes	14	66.67%
No	7	33.33%

Statistics

Choices Selected: 21

Total Responses: 21

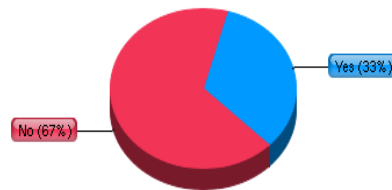**6.   Have you heard about Lifelong Learning (LLL) before?**

Summary

Value	Count	Percent %
No	13	61.90%
Yes	8	38.10%

Statistics

Choices Selected: 21
Total Responses: 21

7.   Are you currently involved (formally or informally) with any other universities, competences or social networks, or community-of-practice in terms of *Lifelong Learning***?**

Summary

Value	Count	Percent %
No	14	66.67%
Yes	7	33.33%

Statistics

Choices Selected: 21
Total Responses: 21

8.   As an alumnus do you have any connection with your former university?
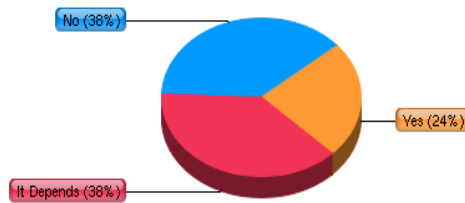

Summary

Value	Count	Percent %
Yes	15	71.43%
No	6	28.57%

Statistics

Choices Selected: 21
Total Responses: 21

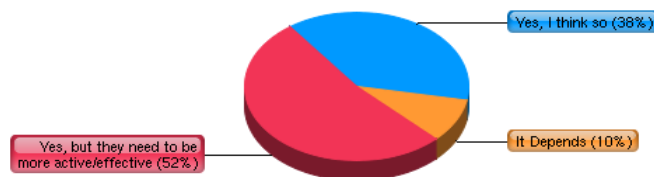**9. Do you visit to your university to attend different activities?**

Summary

Value	Count	Percent %
It Depends	8	38.10%
Yes	8	38.10%
No	5	23.81%

Statistics

Choices Selected: 21

Total Responses: 21

10. Do you think that the alumni associations help to establish a mutual beneficial relationship between the university and the alumni?
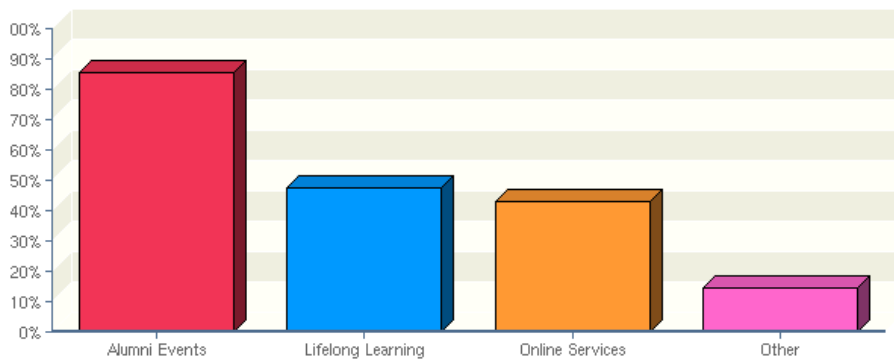

Summary

Value	Count	Percent %
Yes, but they need to be more active/effective	11	52.38%
Yes, I think so	8	38.10%
It Depends	2	9.52%

Statistics

Choices Selected: 21

Total Responses: 21

**11. Through which of the following activities alumni can connect again with their university?**

Summary

Value	Count	Percent %
Alumni Events	18	85.71%
Lifelong Learning	10	47.62%
Online Services	9	42.86%
Job offers	1	4.76%
seminars	1	4.76%
x	1	4.76%

Statistics

Choices Selected: 21

Total Responses: 21

12. Do you think that the alumni can help to establish a mutual beneficial relationship with the university? If yes, please specify the appropriate options
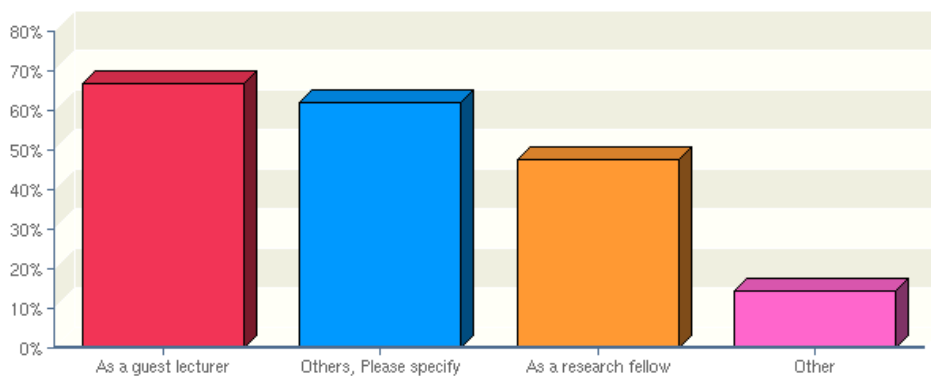
Summary

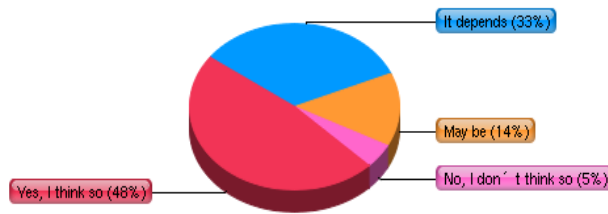| Value	Count	Percent %
As a guest lecturer	14	66.67%
Others, Please specify	13	61.90%
Online Services	10	47.62%
ex work	1	4.67%

university ambassador	1	4.76%
x	1	4.76%

Statistics

Choices Selected: 21

Total Responses: 21

13. Do you think that it is a good way to upgrade the key competences by keeping in touch with your former university?
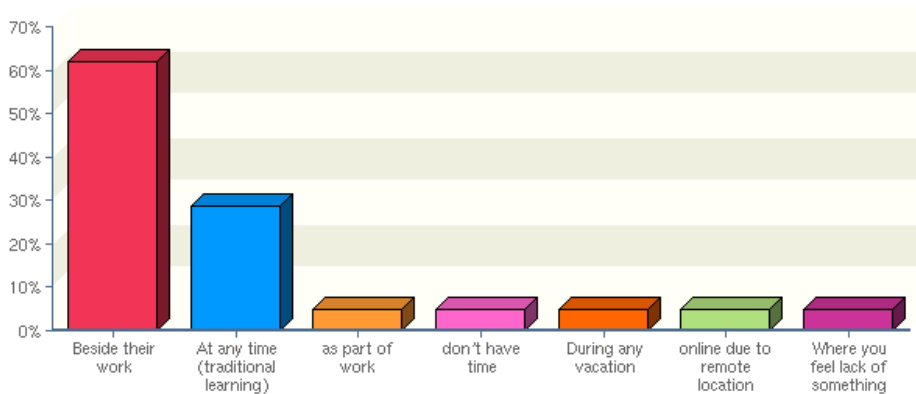

Summary

Value	Count	Percent %
Yes, I think so	10	47.62%
It Depends	7	33.33%
May be	3	14.29%
No, I don't think so	1	4.76%

Statistics

Choices Selected: 21

Total Responses: 21

**14. Please, specify, which time is suitable for you to pursue Lifelong Learning?**

Summary

Value	Count	Percent %
Beside their work	13	61.90%
At anytime (traditional learning)	6	28.57%
as part of work	1	4.67%
don't have time	1	4.67%
During any vacation	1	4.67%
online due to remote location	1	4.67%
where you feel lack of something	1	4.67%

Statistics

Choices Selected: 21

Total Responses: 21

15. Please Comment on which period (schedule) would be most convenient for Lifelong Learning?
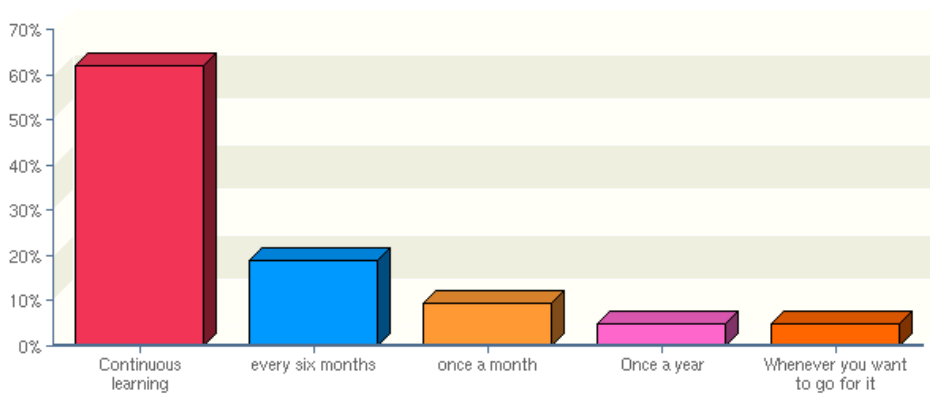
Summary

Value	Count	Percent %
Continuous learning	13	61.90%
every six months	4	28.57%
once a month	2	4.67%
once a year	1	4.67%
Whenever you want to go for it	1	4.67%

Statistics

Choices Selected: 21

Total Responses: 21

**16. Which type of learning do you think would be most effective under LLL?**
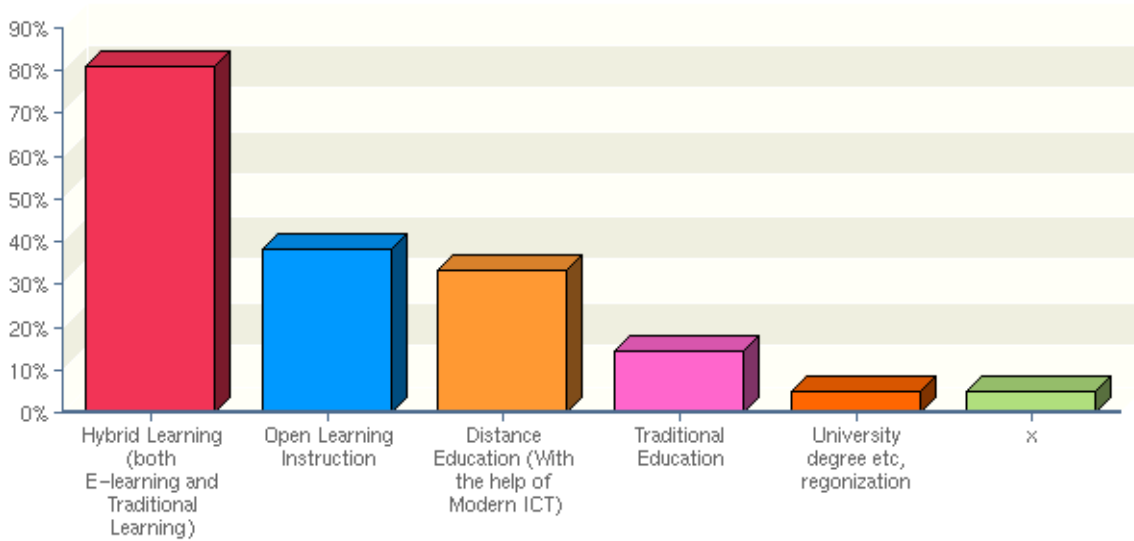
Summary

Value	Count	Percent %
Hybrid Learning (both E-Learning and Traditional Learning)	17	80.95%
Open Learning Instruction	8	38.10%
Distance Education (With the help of Modern ICT)	7	33.33%
Traditional Education	3	14.29%
University degree etc, recognition	1	4.76%
x	1	4.76%

Statistics

Choices Selected: 21

Total Responses: 21

17. Which of the following technologies might be appropriate for an effective learning environment under *Lifelong Learning* for you?
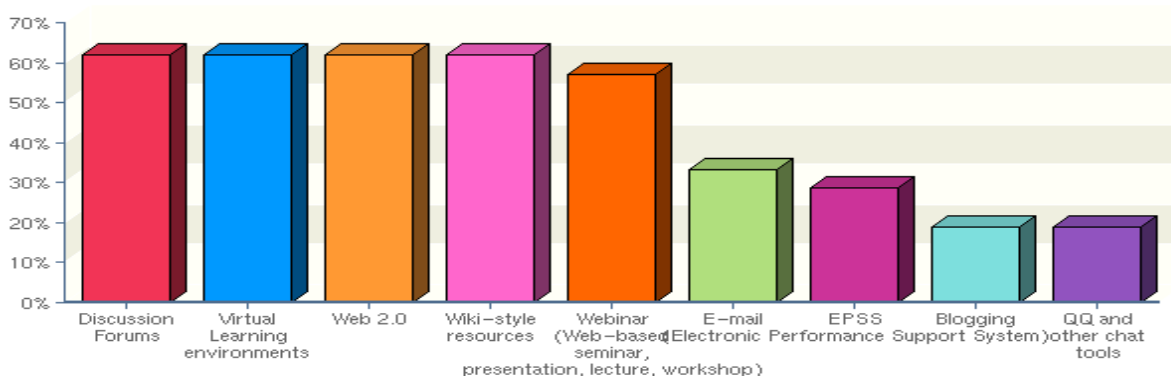
Summary

Value	Count	Percent %
Discussion Forums	13	61.90%
Virtual Learning environments	13	61.90%

Web 2.0	13	61.90%
Wiki-style resources	13	61.90%
Webinar (web-based seminar, presentation, lecture, workshop)	12	57.14%
E-mail	7	33.33%
EPSS (Electronic Performance Support Systems)	6	28.57%
Blogging	4	19.05%
QQ and other chat tools	4	19.05%

Statistics

Choices Selected: 21

Total Responses: 21

18. Do you currently plan to pursue any specific academic course in order to update and upgrade your skills?
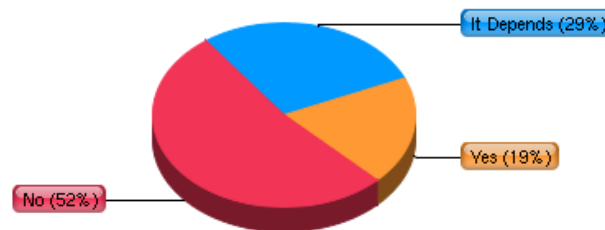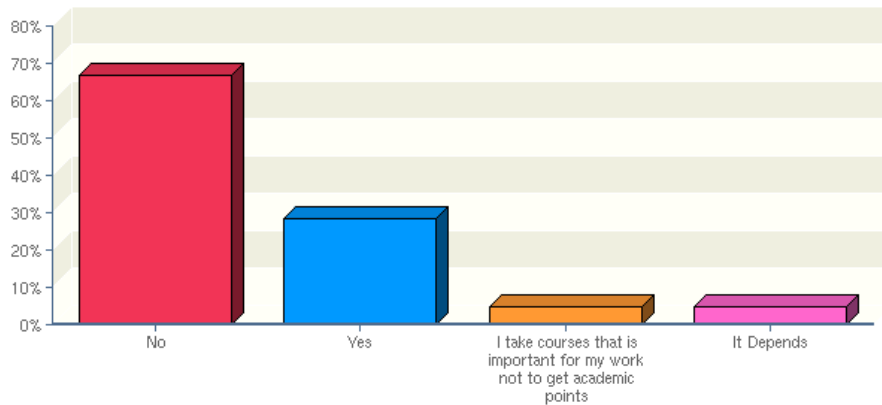

Summary

Value	Count	Percent %
No	11	52.38%
It Depends	6	28.57%
Yes, I think so	4	19.05%

Statistics

Choices Selected: 21

Total Responses: 21

19. In your current position which option is most appropriate for you to pursue any academic course?

Summary

Value	Count	Percent %
No	14	66.67%
Yes	6	28.57%
I takes courses that is important for my work not to get academic points	1	4.76%
It Depends	1	4.76%

Statistics

Choices Selected: 21

Total Responses: 21

20. Do you think that your present skills and competences are enough to meet your current Job requirements?
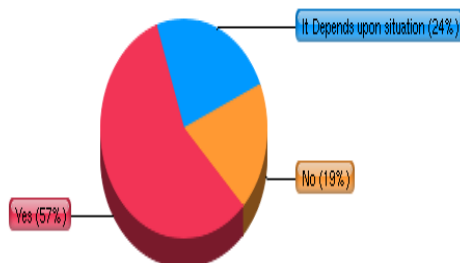
Summary

Value	Count	Percent %
Yes,	12	57.14%
It Depends upon situation	5	23.81%
No	4	19.05%

Statistics

Choices Selected: 21

Total Responses: 21

21. What do you see as the benefits of engaging in continuous and further education?

Summary

Value	Count	Percent %
Personal development	20	95.24%
Career opportunity	10	47.62%
Socio-professional status	10	47.62%
Salary	7	33.33%

Statistics

Choices Selected: 21

Total Responses: 21

22. What sources of learning do you use for your own professional development?
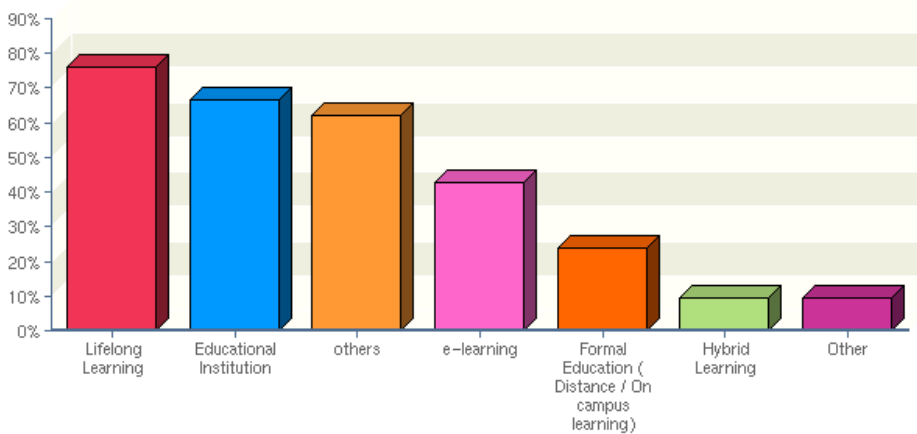
Summary

Value	Count	Percent %
Lifelong Learning	16	76.19%
Education Institution	14	66.67%
others	13	61.90%
E-Learning	9	42.86%

Formal Education (Distance / On campus learning)5   23.81%
Hybrid Learning   2   9.52%
 Read management literature   1   4.76%
web   1   4.76%
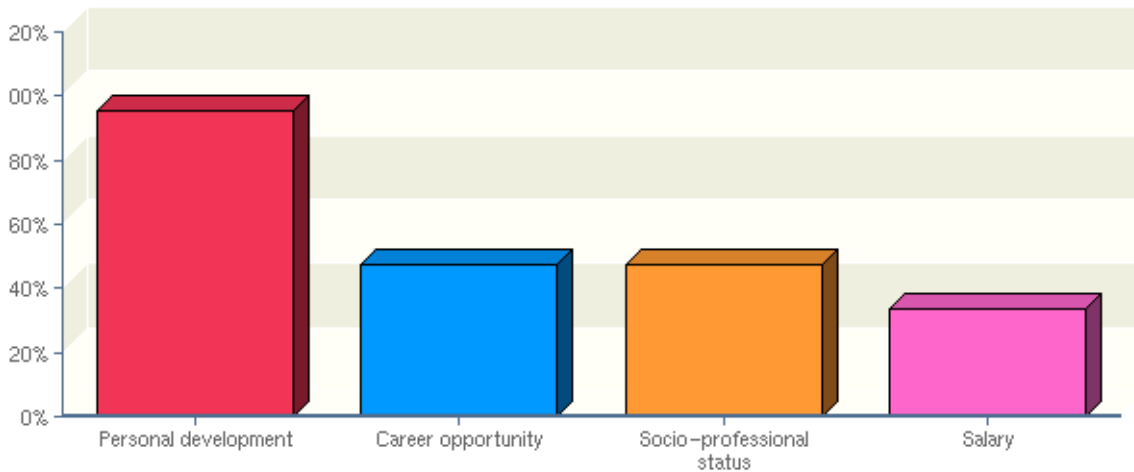
Statistics

Choices Selected: 21

Total Responses: 21

23. Please explain in short how important is it for you to continue your education through Lifelong Learning?

Appendix: 23.
Please explain in short how important is it for you to continue your education through *Lifelong Learning*?

Code	Data Value
28640964	very much so
28876416	If time at hand, high...
28876560	-
28876860	No opinion
28877142	Without continuous learning it is very hard to further develop yourself within your field of profession.
28887724	Very important. You have to change with the world; otherwise you are out of the competition.
28900576	Very important.
28905144	My job requires that I continuously develop my knowledge within the change management and consulting field. This in order for me to be able to deliver value for my clients but also for my own development.
28961349	I think it is essential today in order to progress in one's career as well as creating a window of opportunity for advancing to different (work) areas.
29110844	no comment
29111005	x
29340559	x
29110935	For personal development
29111026	In case of time - very important!
29244538	overloaded with work and still young (29 yrs) it is not that important right now.
29330734	To me academic courses isn't the focus. I take courses and educate myself through forums, social networks etc. When you have worked a couple of years the academic points are of very little value and experience and work related education/training is of more relevance. It is more important to get certificates within the right area.
29403418	I interested in some fields which are not my major in university, such as psychology, so I need further education but not in my previous major. *Lifelong Learning* may fills my interests on one hand, and extend my career opportunity on the other.
29406701	Because the world is changing, technology is underdevelopment, civilization is progressing...You need to absorb any new info or stuff...
29506927	World is changing and if you stop you may lag behind it!
29581275	Not that important
29581284	As auditor and consultant, I have to be one step ahead of my clients.

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