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**Information, Communication and Technology for Development: Gambia**

***Exploring how NICE International can use ICT for income generation in Gambia.***

**Dan Okocha Oruongo**

  

   Education Work

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#

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# EXECUTIVE SUMMARY

NICE International being among the first entrants in Gambia market, has enjoyed good business as a provider of internet and cinema services in Gambia. However, with the rise in internet penetration and cinema services in Africa and specifically Gambia, there has been increased competition in these services which is negatively impacting on the company’s revenues and customer base. To counter this problem, companies will improve their professionalism, improve quality of its offering, or diversify its product portfolio among other strategies. This is the problem facing NICE International and the research looks into finding products and services that NICE International can offer in addition to its current product and service portfolio in order to counter the rising competition through diversification of its offerings.

In finding a solution to the problem, desk research was conducted to identify possible products and services that would give NICE International a competitive advantage. This was followed by a three month field research in Gambia where NICE International has its operations. The field research was used to determine the feasibility of the identified products and services in the Gambian market. During the field research, interviews and observation were the main sources of primary data. Relevant data about Gambia, market needs of the people, NICE Gambia, NICE Gambia existing products and services, competitors among others were collected and analyzed in relation to the selected products and services in order to determine their feasibility.

From the data it was concluded that outsourcing, energy products and educational services are the three potential products and services that would steer people towards income generation in Gambia.

Outsourcing seems to have the best potential not only in changing the image of NICE International but also impact positively on the society through provision of employment. It will also boost NICE’s revenues through creation of demand for other products and services offered by NICE. However, for this to be successful, NICE has to invest in training those who will conduct the pilot test, because it is only through a successful pilot test that Samasource International – as partner for this service – will grant NICE an opportunity to offer this service in Gambia.

It was also concluded that energy products (solar panels, LED lamps, back up batteries) are among potential products that would fit NICE International’s mission. However, for energy products, a credible supplier has to be found to supply a variety of quality energy products at prices that meet the needs of the people of Gambia.

Educational services (Basic, Intermediate and Diploma in Information Technology) as a result of few training institution in Gambia, presents an opportunity for NICE International, This has not been the case with the current educational trainings offered. It was concluded that with improved quality, appropriate set up of educational rooms within a NICE Center and intensive marketing of these educational services, education presents an opportunity for NICE International as a new service.

IT products according to the findings do not provide viable opportunity as new products. However, second hand mobile phones are the only component of this product category that is likely to perform better in Gambia but not computers, printers and other computer accessories.

# INTRODUCTION

## Personal introduction & objectives

I am Dan Okocha Oruongo, a Kenyan citizen pursuing a course leading to a bachelor’s degree in International Business for Emerging Markets (IBEM) at Kofi Annan Business School in Hogeschool Utrecht University of Applied Sciences.

In partial fulfillment of the degree, it is required that each student undertakes a five month internship and writes a thesis to a real company problem. I got an Internship with NICE International and carried out my field research in Gambia where the company has its operations.

## Kofi Annan Business School

Kofi Annan Business School is a foundation that partners with various business schools and companies alike. The objective of the school is to provide opportunity for students from developing countries to study in one of partner business schools in Netherlands, Belgium and Germany. I happened to be selected as one of the beneficiaries from Kenya to study in the Netherlands for the academic year 2011/2012.

##  NICE International B.V.

NICE International is a social enterprise founded in 2006 and registered as a limited liability company in the Netherlands. The company has a mission to unleash the potential of people in the developing countries through powering ICT using renewable energy. The company does this through the NICE Concept: A business model to distribute development products and services in Base of Pyramid (BoP) markets, through a network of solar-powered ICT Centre operated by local entrepreneurs on a franchise-basis. These Centers are known as NICE Centers. Currently there are seven NICE Centers operational in Gambia overseen by the country organization- NICE Gambia.

In NICE Centers, the population at bottom of the pyramid (BoP) markets in Gambia get access to internet, cinema based programs and basic IT educational services. However, as a result growing IT infrastructure in Africa and therefore increased access to internet, there has been growing competition. This has led to decline in NICE Internal’s customer base and revenues. In order to become a sustainable business, NICE International needs to build a network of NICE Centers. This is contained in the NICE Roll-Out Project[[1]](#footnote-1), a four year project funded by a grant from the European Union and co-financed with private funding of Schneider Electric, Rabobank and FMO. The project seeks to set up 50 more NICE Centers in Gambia, Tanzania and Zambia, and develop 10 new value added ICT products and services in addition to what is currently being offered in the seven operational NICE Centers in Gambia.

##  NICE Gambia

NICE Gambia Ltd. is a joint venture between NICE International being majority shareholder and the Managing Director of NICE Gambia as the minority shareholder. NICE Gambia was established in 2006 and is dedicated to the management and support of NICE Centers in Gambia. Apart from selecting Centre franchisees for NICE Centers, NICE Gambia is responsible for all the management functions in Gambia including among others: business development, finance, human resources, marketing and technical support. It also acts as the single point of contact between NICE International and NICE Centers.

## NICE Centre

NICE Centers are the distribution outlets, or point of sales for value added products and services in BoP locations across Gambia, and other countries under the NICE Roll-out project. A NICE Centre is a proven business model, including a products and services portfolio that is owned by a local entrepreneur on a franchise basis. . The franchisees pay a franchise fee based on revenues generated from operations. In addition the franchisee pays an operational lease fee for the energy and IT infrastructure in the centre and the technical maintenance of the equipment.

Based on rapid changes in the ICT market in Gambia and Sub-Saharan Africa in general, NICE International is now developing the next-generation NICE Centre. In the next-generation NICE Centre, NICE International is seeking to move from mostly access services to more value added services. Under the motto ‘Technology for Education, Work and Business’, and in line with its mission, NICE International will focus on providing products and services that help people towards income generation. The products and services developed under the NICE Roll-out project will be based on this next-generations NICE Centre concept.

## Problem statement

NICE International has enjoyed good business in Gambia since its inception in 2006. However, with the rise in internet penetration and cinema services in Africa and specifically Gambia, there has been increased competition in these services. This has led to reduced prices and number of customers which is impacting negatively on revenues. As part of the NICE Roll-out project, and based on the next-generation NICE Centre, new products and services need to be developed that focus on ‘Technology for Education, Work and Business.

In addressing the research problem, the paper is guided by a research question: *How can a new ICT product or service be introduced in NICE Centers in developing countries (Gambia) to help people towards income generation?*

### Sub questions to be addressed include:

1. What are 3 potential ICT products and services that would help people in Gambia towards income generation?
2. Which ICT product or service is most suited for NICE Centers and the targeted base of the pyramid markets in Gambia?
3. How can the selected ICT product or service be implemented in NICE Centers in Gambia?
4. How will the selected product impact on the development of the target group

## **Relevance of study**

United Nations has Poverty alleviation as its number one goal among the eight Millennium Development Goals[[2]](#footnote-2). As International Labor Organization puts it, the only way out of poverty is decent work[[3]](#footnote-3). This paper seeks to find ways in which ICT can be used to provide people with avenues for income generation which in other words is employment. This makes the study very relevant towards the fight against poverty.

Problems such as unemployment can not only be left to the Government but also the private sector. This is the reason this research seeks to find a way in which NICE use Information, Communication and Technology for development; specifically income generation which in other words is employment to the people of Gambia.

NICE International in its four year expansion plan (NICE Roll-out project) intends to first set up 50 NICE Centers, and develop 10 new value added services to its current product portfolio. This study is therefore relevant to NICE International as its main objective is to identify and test a product or service that can be commercialized by NICE International in Gambia, Tanzania and in future Zambia. The study also provides recommendations for possible new products and services that can be explored in the future for implementation. Finally the study recommends possible positioning of products and services that would differentiate NICE Centers from similar businesses and ensure that NICE Centers remain viable economically.

##  Report structure

The report is divided into six chapters. The first chapter is the introduction of the student, University, Internship Company and the problem that was tackled. Chapter two gives background information to the problem by putting Information, Communication and Technology into context of the research problem. The chapter also gives background information about Gambia and products and services that were examined during the research to help find a solution to the research problem. Chapter three explains the methods used for data collection during field research in Gambia. The chapter also explains sampling methods used and challenges met during the field research. Chapter four explains the reality in Gambia in relation to potential products and services that are seen as fit for Gambia in enhancing income generation among the people of Gambia by giving the findings of the research. Chapter five summarizes the report by suggesting potential products and services that NICE International can implement in Gambia to help towards income generation. This last chapter gives advice on implementation of findings and identifies areas that NICE International needs to improve on in order to remain relevant in the rapidly changing and competitive ICT market.

#  BACKGROUND INFORMATION

##  Gambia

The republic of Gambia, commonly referred to as Gambia, is a country in West Africa. Gambia is the smallest country on mainland Africa, surrounded by Senegal except for a short coastline on the Atlantic Ocean in the West[[4]](#footnote-4). The country has a population of 1,797,860 (July 2011 est.) according to Economy Watch[[5]](#footnote-5)

Gambia is among the poorest countries in the world, ranking 155th out of 177 countries in the 2007/2008 UNDP rankings[[6]](#footnote-6) with poverty estimated at 40.9% according to UNDP’s Human Poverty Index of 2004[[7]](#footnote-7).

The economy is dependent on the service sector accounting for fifty percent of GDP. The sector is majorly comprised of re-export/transit trade and tourism. Agriculture, mostly subsistence farming, accounts for 35% of GDP. Manufacturing sector is very underdeveloped with only a mere 5% contribution to GDP[[8]](#footnote-8).

Gambia has one of the most unreliable energy sectors in the world. The country’s electricity relies on generators. This is very expensive considering the constant rise in oil price and makes the cost of electricity the highest in the world[[9]](#footnote-9). It is also very unreliable; on average a domestic energy user experiences a black out three days a week.

With underdeveloped manufacturing sector and service sector, Gambia has among the highest unemployment rates in Africa especially among the youth and women.

On the positive side, Gambia has a young population with the youth forming more than half of population (about 63.55% of the population is below 25 years)[[10]](#footnote-10). This combined with good mastery of English language among this group of the population makes Gambia and suitable place for absorption and use of ICT for income generation.

##  Information, Communication and Technology for Development (ICT4D)

The field of Information Communication and Technology for Development (ICT4D) has grown dramatically in size and importance as suggested by McNamara (2003)[[11]](#footnote-11). It is based on the premise that ICT is able to bridge the digital divide between the developed and developing countries and thereby contribute to equal distribution of wealth and improved lives. The importance of ICT for development especially poverty alleviation has been recognized at the highest international levels when the United Nations Development Programme (UNDP) dedicated their Annual Human Development Report to the role of information and communication technologies (UNDP, 2001)[[12]](#footnote-12).
Despite this massive recognition, the topic of whether ICT can help towards development especially in the developing countries has drawn conflicting views among scholars and researchers. According to Braga (2008)[[13]](#footnote-13) some believe that ICTs have and will contribute to even wider economic divergence between developing and developed countries and will not help towards development of developing countries. This is consistent with Brown’s (2001)[[14]](#footnote-14) argument that there is still a lot of skepticism with regard to whether ICTs can reduce poverty in the developing countries. Chowdhury (2000)[[15]](#footnote-15) also shares same views and in his own words says, “The poor can’t eat high-speed Internet access, of course”. Wade (2004)[[16]](#footnote-16) concurs with this view and says that the aim of removing the majority of poor people in the developing countries out of poverty, will not be achieved through provision of access to ICT gargets and cheap connection to internet. Rather this group, believe that Africa and developing countries at large must first deal with urgent and pressing problems such as lack of clean drinking water, food, shelter and basic health care that confront the inhabitants of this continents (Boafo 1991)[[17]](#footnote-17).
This group is known as technological pessimists. They cite several reasons to support their point of view:

Avgerou (2001), says that one of the causes of failure is that the new arrangements that accompany the technological transfer threaten entrenched interests and ingrained ways of doing things in these societies leading to cultural disruption and not development. Avgerou also argues that these technologies only benefit the very few educated in the urban areas leaving the majority of the poor people with no positive impact at all.

On the other hand technological optimists emphasize that the adoption and use of ICT in businesses and daily activities of the people may not feed or clothe them directly but it can empower them to grow their businesses, educate themselves and attain improved levels of welfare. In the long run, widespread and effective uses of ICT will contribute to the production of clean water, enough food and good hospitals as well as create an informed citizenry [UNDP, 2001[[18]](#footnote-18); World Bank 1999[[19]](#footnote-19)). This conclusion is shared by Hudson (2001)[[20]](#footnote-20) who says the potential for ‘leapfrogging’ lies in the use of wireless terrestrial and satellite technologies. The technological optimists also cite some success stories that highlight the need for optimism on what the poor could achieve by having access to information technologies. The following are various examples of how the poor are using ICTs to their advantage. One is Addo-Dankwa (2002)[[21]](#footnote-21) who says: many ask, "What has a farmer got to do with a computer?” He gives examples of a project that has been utilized in Ghana with a focus on how ICTs can support small and medium scale farmers to increase their revenues and improve their farming practices by making it possible for them to access information on regional market developments and international agricultural knowhow. Parghi (2001)[[22]](#footnote-22), talks of how dairy farmers in India have benefited from the use of ICT, Hazan (2002)[[23]](#footnote-23) discussessmall-scale artisans from the remote parts of Middle East and North Africa who have traditionally crafted high quality products using traditional techniques. The problem that had arisen was that their knowledge is disappearing and this is affecting their incomes. However, they have attempted to reverse the trend by using Virtual Souk, an e-commerce initiative that has created opportunities for these artisans. The Souk is a pioneering programme which shows how small producers in developing countries can access high-income markets, though the author warns that there are potential obstacles that others will have to deal with if they start similar initiatives, such as, the hidden costs of marketing and the need for quality control. Other recent examples of how ICT impacts positively in the developing countries are the infamous M-Pesa[[24]](#footnote-24) in Kenya. An idea to send and receive money by use of mobile phones.

 This paper concurs with the technological realists that ICTs can be designed to match needs of the poor population in the developing countries and will focus on developing at least one ICT product or service that can replicate the success stories listed above. I am a realist and I believe relevant ICT products and services are in a position to change lives in the developing countries.

To address the research problem and the research questions and achieve the stated objectives, the paper adopts Sociotechnical Systems (STS) theory[[25]](#footnote-25): The theory maintains that the viability of a technological adoption hinges on how well the technical and social systems of the project will be individually designed with respect to each other and collectively tuned with respect to demands of the external environment to support the goals of the project (Emery 1978)[[26]](#footnote-26)

This will help in avoiding identified past causes of failure such as disruptive technology that impacts negatively on the entrenched ways of doing things in these societies (Avgerou 2001)[[27]](#footnote-27) and eventually leading to resistance or rejection by the target group. The letter “D” in this paper’s topic of ICT4D stands for Human development[[28]](#footnote-28) and not as pure growth in national economies. This paper advocates for development as the real empowerment that citizens enjoy in their lives. It is through the micro perspective (individual empowerment) that the macro perspective (improvement of the entire economy) can be realized.

## NICE shop - Energy and IT products and Services

Any idea that is going to impact on the lives of people in the developing countries needs products and services that will facilitate its implementation. An example is the M-Pesa service mentioned above. Its success has been attributed to high penetration of mobile phones in Kenya due to availability of cheap handsets that are affordable to the target group. It is for this reason that NICE International is intending to establish a shop that will sell mostly (renewable/efficient) energy products and IT products. This study focuses on finding the feasibility of this idea and how it can help to improve the lives of the people through income generation. With the NICE Concept described above, NICE International will look for a local supplier to supply these products to the local entrepreneurs owning NICE Centers. The entrepreneurs will sell the products in their shops (NICE Centers). This will not only bring IT and solar products closer to the people but also will help generate income to the entrepreneurs.

###  Energy Products

Energy products as used in this paper refers to environmentally friendly and efficient small solar and non solar products such as solar panels, LED lamps, batteries, efficient cook stoves etc, that can be used for domestic purposes by low income people in developing countries with the view of improving their living standards. At the initial stages of the research, I had in mind Schneider Electric[[29]](#footnote-29) as a possible supplier to NICE International. However during the field research in Gambia other options were identified.

###  IT products

These are computer and computer related products including among others: computers, printers, network cables, computer audio devices, mobile phones etc. In helping the people of developing countries to embrace ICT for income generation, there is need to avail these kinds of products to the people. NICE International has realized this and is in the process of identifying particular IT products that can be introduced in Gambia. As part of the research, I identified Viafrica Foundation[[30]](#footnote-30) as a possible supplier of these products to NICE International and the study was focused on finding the feasibility of offering these products and service at NICE Centers in Gambia. To do this, a marketing research was conducted.

##  Education

As indicated by the technological pessimists, poor skills are one of the major barriers against success of Information, Communication and Technology in poor countries. It is therefore important to merge education especially technical education when trying to introduce IT products or services in these markets. NICE International already offers IT courses at NICE Centers in Gambia. This paper tries to find out the best ways of delivering this education and identifying additional relevant courses that can be offered in the future to enhance technical skills of Gambians that will eventually enable them to embrace and use new services and products being introduced for income generation.

## Outsourcing (for development/in Africa)

Wikipedia defines outsourcing as the process of [contracting](http://en.wikipedia.org/wiki/Contract) an existing [business process](http://en.wikipedia.org/wiki/Business_process) which an organization previously performed internally to an independent organization, where the process is purchased as a service[[31]](#footnote-31). This process is highly facilitated by the use of ICT tools that enable a service to be carried out far away from the company outsourcing some of its operations. It is based on this possibility that NICE International intends to use its ICT facilities to provide work to people living in the developing countries. An example of services that was looked at during the research is Samasource.

Samasource[[32]](#footnote-32) is a business outsourcing service. The Partner Company (Samasource International), sources for digital work from various companies mostly located in the USA. Digital work includes all the work that can be accomplished on a computer with internet connection. The company then breaks down this work into simple tasks (micro work) and sends it to its service partners who provide the infrastructure needed for the unemployed youth in the developing countries to carry out these tasks for a pay. This service fits well within NICE International’s product and service portfolio and is in a position to fulfill NICE International’s mission of unleashing the potential of people in the developing countries. The service is also designed to addresses the problem of poor skills. By breaking down the tasks into simple tasks, Samasource International is applying one of the twelve principles of Innovation for BoP markets suggested by C.K. Prahalad[[33]](#footnote-33). This principle, Deskilling of work, will enable even those with little skills to be part of this service and help change lives through income generation by providing employment opportunities to the high number of unemployed youth in Gambia.

#  METHODOLOGY

This chapter explains the research design adopted for this study, it also elaborates on data collection methods, sampling and sampling methods used, methods of data analysis, reliability and trustworthiness of collected data and information obtained as a result of analysis. Finally this chapter highlights limitations of these methods and challenges encountered during the research process.

##  Research Design

The study is qualitative in nature. The information sought during the research process included peoples’ experiences, opinions, attitudes and suggestions concerning the products and service explained above. To collect this information, qualitative techniques for data collection and analysis were used, mainly desk research, interviews and observations.

##  Methods of data collection

### Desk Research

Desk research has been used during the entire process of this research to obtain secondary data relevant to the study. At the initial stages I read several NICE International documents to familiarize with the operation of the company. I read NICE International’s product database. This is a collection of potential products and services that can be implemented by the company if their feasibility is tested and approved. It is from this database that I chose the four products and services that I researched on their potential in Gambia.

Desk research has also been used extensively in determining appropriate data collection and analysis methods in addition to finding data that puts the study into context. My desk research comprised of books, company documents, journals, newspapers, online materials such as company websites among others.

### Observation

Observation was also used to collect information regarding similar products to those of Schneider Electric and Viafrica. This was done by visiting competing shops to identify their products, pricing, and quality. This was also used to know about the existing competition. I approached these shops as a customer and apart from observation, I asked for relevant information such as prices**. (See appendix 4 & 5.)**

### Interviews

Interviews were conducted for all the four selected ideas. Structured interviews were used. This was to enhance consistency of feedback from different participants. Structured interviews were also preferred to facilitate easy comparison of data during analysis stage.

#### Energy Products Interviews

 A total of 20 small enterprises were interviewed. 15 were from non-grid areas whereas 5 were within Fajara town and had grid power. A structured interview was used for consistency. The questions were open ended **(see appendix 1.)** and one on one mode of delivery was used.This was to enable researcher collect more information as it allowed participants to answer questions from their own understanding and not restricted to what the researcher thought could be the answers. The interviews were conducted at the respective premises of the participants.

####  IT Products Interviews

Questionnaires were used to collect information about preferences and habits of Gambian people regarding IT products. 25 questionnaires with semi structured questions were distributed to 25 participants. The participants were requested to fill the questionnaires and later the questionnaires were collected for analysis. All the respondents filled the questionnaires. The participants included 5 post graduate university students. These were working individuals taking their masters’ classes part time, 15 undergraduate university students also responded to the questionnaire and 5 bankers drawn from three different banks.

A total of 5 customers at the NICE Centers and 5 small businesses (cybercafés) were interviewed. For this group face to face mode of delivery was used. Structured questions ***(See appendix 2.)*** were used but additional explanation was sought from the participants whenever a clarification was required. Notes were taken to record additional information that was not part of the questionnaires.

####  Education Services Interviews

A total of 13 participants were interviewed. 10 students from 2 NICE Centers were interviewed and 3 IT teachers. The interviews were conducted orally while the researcher took notes.

For the students, structured interview guide with both open and closed questions were used. Teachers’ interview was unstructured and open questions were used. This was to enable the researcher obtain actual information from the participants’ own view and not a predetermined view by the researcher.

####  Samasource Interviews

A total of 50 participants were interviewed. The objectives of the interviews were to identify potential participants for the pilot test and also to find out participants’ opinions towards the service. Interviews were conducted at 4 of the 7 NICE Centers in Gambia and also at the University of Gambia, School of Business and Public Administration. 10 Participants were interviewed at each Centre. The participants comprised of NICE Students, former NICE students, non students and University students. Semi structured questionnaires with both open and closed ended questions were used ***(see appendix3.).*** The open ended questions were used to allow for participants to give more information while the closed ended questions were used to enhance consistency. The interviews were divided into two sections. The first section was aimed at identifying the right candidates to take part in the pilot test. This was done for each candidate individually. After this, a six minute video was shown to all the interviewed candidates on a large screen in each interview venue, this was followed by verbal explanation of Samasource outsourcing service by the researcher and finally a focus group to find out the participants’ impression, attitudes, opinions and comments about the service was conducted. During both sessions notes were taken to record participants responses.

##  Sampling

To identify and select participants for the interviews, different sampling methods were used to fit different target groups for the four selected products and services mentioned. Each target group called for a specific sampling technique as shown below.

####  Energy Product interviews

I used convenience sampling to identify areas from which to draw participants. Three villages without electricity and one urban Centre with electricity were chosen. Participants from these areas were randomly identified and approached for consent to participate in the interview after which a date for the interviews were set and interviews conducted on the set dates at the premises of participants.

To identify areas from which to pick participants, I used convenience sampling because it is these areas that I had identified contact persons who could help introduce the researcher to target groups. This method was used because the researcher was new in Gambia and needed contact persons especially for language translation as some participants were not able to speak or understand English. The main disadvantage is that the sampling method restricted the study to areas where the researcher had identified contacts which may have not been representative enough.

After identifying areas to extract participants from, random sampling was used. This was to give each participant an equal chance to participate and thus enhance the credibility of outcome

####  IT Product Interviews

Random sampling was used to select participants from a university, and three banks. The participants were issued with semi structured questionnaires to fill. A total of 25 questionnaires were issued and were fully filled. Random sampling was also used to identify 5 customers at a NICE Centre and 5 cyber cafes within Serrekunda for one on one interview. Random sampling was preferred because a more representative sample than most of other sampling techniques.

####  Outsourcing

To select participants for Samasource interviews, purposive sampling[[34]](#footnote-34) technique was used. Information Technology teachers at NICE Centers were contacted to identify 10 of their best students and a few outsiders they knew of. This group was met by the researcher for interview at each of the selected four Centers. A lecturer at the University was also approached to identify 10 students who he thought were really good with computers and online research. The researcher then visited the university to interview the selected students.

I used this method of sampling because of the following advantages and also because the researcher targeted to have participants who were conversant with online research and basic computer operation.

Some of advantages of this method include:

* Those people who are unsuitable for the sampling study or who do not fit the bill have already been eliminated, so only the most suitable candidates remain.
* As the most appropriate people for the study have been selected, this process becomes a lot less time consuming.
* With fewer time constraints and a more accurate subject, the costs for carrying out the sampling project are greatly reduced
* The results of purposeful sampling are usually expected to be more accurate than those achieved with an alternative form of sampling.

The disadvantage of this method is that it relied on personal judgment of the teachers and the lecturer which may be biased.

## Personal reflection/ Research limitations

Field research in Gambia had its challenges that would have impacted on the outcome of the research. During my first month in the Gambia, it was difficult to convince some of my targeted participants to give consent of their participation. For example a number of small business owners targeted for the aforementioned energy products were not willing to give information concerning their energy consumption costs. Some felt that I was collecting information so as to set up a business that would be a competitor to theirs and therefore refused to give information. This made me only to interview target participants who were positive towards the interview. This might have impacted negatively on the trustworthiness of the findings.

It was also difficult to locate rural areas on my own; I had to use a resident who took me to some of the target villages. This led to interviews being done to only areas familiar to the assistant. This too lowered the representativeness of the outcome.

Lastly my inability to speak the local language, made it difficult to communicate to some of my target group who were not able to communicate in English. In addition to this, being a foreigner in myself, made some of my respondents not be open enough.

However, despite the challenges, I believe the large number of interviewees I met enhanced the representativeness of the research and the findings are an actual representation of the situation in Gambia.

#  FINDINGS

## Energy products

The state of the energy sector illustrated in the background information provides an opportunity to provide the population with alternative sources of energy such as solar energy.

Competitive analysis conducted to identify and compare existing solar products in the market against Schneider Electric solar products revealed that there are products that are almost similar to Schneider Electric solar products in Gambian market. These products are sourced from SCOWIN, a Chinese company with a distribution Centre in Banjul Gambia. These products have additional features that Schneider Electric products do not have such as ability to charge mobile phones, power small gadgets such as radios and other small media devices. These products come complete with the phone chargers. These products also come along with connection cables which Schneider Electric cables did not have and therefore needed to be bought separately. Despite these additional features, the local products were found to be much cheaper than the Schneider Electric products even before the cost of transportation from France and clearance costs at the port of Gambia were factored in. If these two costs were included, the Schneider Electric solar products were found to be more than double the local prices. (**See appendix 5)**

It is also evident that different customers need different sizes of these solar products with different capacities and different prices, preferably low capacity cheap products such as 2W, 5W solar panels. Schneider Electric on has only two types of these products which limits customer choice.

It was also found that the local solar products described above are supplied from China to their single distribution point in Banjul. This makes the solar products inaccessible to many who live outside capital city, Banjul, where the Chinese shop is located. NICE Centers are located in six other areas outside Banjul, and this may provide good access points for these products to the target market.

In terms of quality, Schneider products are of higher quality than the Chinese products. This is evident through the warranty offered by the two companies. While the Chinese products have a warranty of three months, Schneider products come with a one year warranty. During usability test, the first product acquired from the Chinese distributor could not function and subsequent products did not function to match their specification. However, because SCOWIN is the sole distributor of low capacity solar products for domestic use, it enjoys a wide market and their products are moving so fast. This could be as a result of low competition. Lack of a competitor who can provide high quality products to counter the influence of SCOWIN. This is a niche that NICE International can exploit to position itself as a quality product provider.

Apart from these Chinese products, it was also found that there are other solar product providers such as D-light, Waka Waka from East Africa. However there is no wholesaler both in Gambia and West Africa as a whole for these products that can supply NICE International so as to provide Gambia population with safe energy.

##  IT products

For people to embrace and use ICT there is need for these people to have access to these ICT products and services and specifically due to growth in home internet access, there is need for availability of IT products. This was evident from interviews conducted during the research.

Among products researched on (computers, printers, phones, computer accessories etc), second hand mobile phones present the most promising opportunity. Majority of people are looking for original phones with features such as:

1. Internet access (main feature being looked for in a phone)
2. MP3 player
3. Radio
4. Camera
5. Memory slot
6. Bluetooth

Most of new phones with the above features are too expensive and therefore most people prefer second hand phones.

For computers, computer accessories and printers, there are firms already offering these products in Gambia. There is already very stiff competition considering that the Gambian market is so small. This presents a challenge to NICE International as a new entrant. Most of existing firms are concentrated within Gambia’s major towns where most of the target groups for these products are found, making it further difficult to use the extensive distribution ability of NICE International as an advantage.

##  Education

NICE International’s education services consisting of IT training from basic level to diploma level has been good mostly because of partial scholarship offered to students by Net 4kids, a Non Governmental Organization. Graduates of these trainings interviewed are already applying the knowledge in different fields and are able to generate their own income. This is a testimony that educational service offered at NICE Centre is sure way of unleashing the potential of people in the developing countries through income generation. Apart from students benefiting by getting into formal or informal employment after completion of their courses, NICE franchisees also benefit by sharing in profits generated from educational service.

However, during the research process especially in the interviews, it was evident that majority of the current students are not receiving quality training at NICE Centers. Most of these students are currently undertaking basic IT training such as PC fundamentals which include keyboarding, creation and management of files and basic application software training, such as word and excel. Some are still not able to type and will spend minutes looking for a particular letter on the keyboard yet they are in their advanced stages of the training. Apart from poor typing skills, the majority of these students are not very conversant with the internet. One of the students said, “I use internet for Facebook but I have never used Google search”. This shows that most of the students use the internet for a specific reason such as chatting with friends on Facebook, or looking for football match fixtures and results, but have no idea that the internet can offer so much more than what they already know. This can suggest poor quality trainings at NICE Centers. Additionally, Centers without the partial scholarship, where students have to pay the full fee have very few students and sometimes none. During the research, it was found that students perceive or see NICE Centers as cyber cafes offering access to internet and not as educational or training institutions. This scares away potential students who would prefer to pay full fees for similar courses at other training institutions other than NICE Centre. It is for this reason that without a scholarship attached to the courses offered at NICE Centers, there is low turnout of students.

This means that NICE Centers have not positioned themselves as educational institutions. The image that is stuck in customers mind is that of a cyber cafe. Most students and teachers at NICE Centers interviewed suggest that education services in a NICE Centre should be separate from its other operations and designed in such a way that it can attract students whether they are to be offered partial scholarship or not. Students should be attracted by the quality of training and a serene environment in which the training is conducted rather than scholarships.

##  Outsourcing (Samasource)

Samasource tasks are highly dependent on the use of internet to look for information and the speed for typing this information and therefore from the findings on educational services above, majority of NICE students who were the primary target for this service, were not able to meet these requirements. Out of the 50 participants interviewed for this service only 3 were picked to take part in the usability test. University students were found to be much better for carrying out this service because majority of them interact with computers almost on a daily basis and use internet extensively for their college assignments. However the university students, despite having necessary skills and knowledge for implementation of this service, most of them may not be in a position to satisfy a minimum of 4 hours per day for implementation of this service as required by Samasource International because they have to attend classes at the same time.

Samasource International requires partner companies (NICE International) to employ a full time personnel who is to serve as a single point of contact for Samasource International on all training, scheduling, logistics and accounting issues. In addition to the team lead, Samasource International requires Partner Company to employ quality assurance personnel who are to ensure that the implementation of the service and the output meets set quality standards and provide full coverage on Samasource projects. Internet connection currently available in NICE Centers is also not enough as per Samasource requirements and therefore needs adjustment. All these conditions are yet to be met by NICE International.

# DISCUSSION AND CONCLUSION

From the field research findings, Outsourcing, Education and Energy products are seen as the potential products and services that NICE International can introduce in Gambia to help people towards a better life through income generation. Each of this products and services require specific actions for successful implementation as shown in the explanation under each below.

##  Energy Products:

The high cost and unreliability of electricity in Gambia together with the lack of adequate providers of quality energy products, NICE International has an opportunity to offer a variety of quality energy products (solar panels, LED lamps, back up batteries among others) as an additional product to its current product portfolio.

Schneider Electric meets the desired quality; however, it offers limited variety of these kinds of products. Its products still lack some of the desired functionalities and its prices are likely to be even much higher once these functionalities are incorporated. These anticipated high prices are unlikely to appeal to the Gambian market despite the quality.

In order to seize this market niche for energy products, NICE International has to find a wholesaler who can supply it with a variety of quality energy products with the desired functionalities and features from other manufacturers at affordable prices. Once a credible supplier is found, NICE International can further take advantage of its presence in different locations within Gambia to distribute these products thereby reaching more customers that are out of reach of its competitors.

With a credible supplier of a variety of quality energy products at affordable prices combined with NICE International’s vast distribution ability in Gambia, energy products is among potential ICT products and services that the company should offer in Gambia its quest to unleash the potential of people in the developing countries.

## IT Products

With the high competition in IT products in Gambia combined with the small market of less than two million people, I don’t see these products offering a potential opportunity for NICE International save for second hand mobile phones.

With these products, there is little that NICE International can offer to create an edge over the competitors. Most of the target groups for these products are located within the towns, where most competitors have their operations already. This makes vast distribution capacity of NICE International not an advantage because majority of the target group are within the reach of these products.

Second hand mobile phones are likely to do well since there is no company already doing that in Gambia. Such mobile phones currently are sold by individuals in small quantities and the conditions of the phones are not good. If NICE International will be able to bring to the market second hand mobile phones that are still in good condition at the prices proposed (see appendix 4), there is an opportunity to earn a substantial portion of the mobile phone market.

Other products such as computers, printers and computer accessories in my opinion, have very little potential in Gambia and should not be a priority for NICE International.

## Education

Education provides one of the best avenues for NICE International not only to generate revenues but also to unleash the potential of young people in Gambia. As discussed earlier, with only one university and very few middle level training institutions, majority of Gambian youth are not absorbed into the few available training institutions. NICE International is in a better position to bridge this gap by providing educational training not only in IT related courses but also in other relevant fields, such as business or entrepreneurial courses.

 However, its current educational services are not attractive to students due to its set up consisting of browsing room, cinema room and educational room all under one roof as explained above. NICE International has also not marketed itself as a provider of educational services.

To attract more students, NICE International has to position itself not only as energy/IT product provider but also as an educational institution. This it can do by creating a serene learning environment that is not affected by activities in its other business units. I addition NICE International has to emphasize quality and engage in aggressive marketing of its educational services is to help change the perception of being a cyber café or an energy/IT shop which undermines its educational services. In my opinion, with these taken into account, I see education as a promising service that in line with NICE International’s mission of unleashing the potential of people in the developing countries through powering ICT using sustainable energy.

##  Outsourcing

 Outsourcing and specifically Samasource, is the most suitable service for NICE international to offer in Gambia. However, for this to happen NICE International has to conduct a pilot test that has to meet the minimum requirement set by Samasource International. With the high rate of unemployment among the youth in Gambia, this service will attract majority of the youth who are looking for opportunities to generate income through employment. This will not only fulfill NICE International’s mission but also be an important part in its revenue generation. The service is likely to change the perception of NICE Centers as cyber cafes to a professional business that offers decent work opportunities. This kind of image will also be beneficial to other NICE International business activities such as solar and IT shop as many people will be enticed to associate with the company with a hope of securing employment as a Samasource worker and in the process gets to know of the other services and products of NICE International.

Outsourcing service is closely linked to education service. Those to be selected to work as Samasource workers will have to be trained. This will market NICE International educational services as most of its graduates are likely to be absorbed as Samasource workers. This will not only attract more students to NICE International programs but also differentiate it from other institutions providing similar educational training. However, NICE International must meet the minimum requirement stated above in order to get a green light from service partner- Samasource International- to offer this service.

# RECOMMENDATIONS

##  Energy/IT Products

I would recommend the following for successful implementation of NICE (Energy/IT) shop:

1. Find a credible supplier

NICE International need to find a credible single supplier of a variety of quality energy products at affordable prices. This is because ordering from different suppliers located in different countries will be costly and that will push the prices even higher.

1. Schneider Electric products can still be part of NICE International energy product offering but should not be the primary target as it lacks variety, additional functionalities sought by customers and are not affordable to majority of Gambians.
2. Distribution of both energy and IT products should be done at the NICE Center level. This will provide larger geographical coverage compared to competitors.
3. Mobile phones should form a larger part of IT offering at NICE Centers because it has a higher potential compared to other IT products. If to be introduced, other IT products such as computers, printers and computer accessories should be in very small quantities just to test the market.

##  Education

For education services to excel at NICE Centers, the following need to be done:

1. The set up of educational rooms should be changed.

Education rooms should be designed in such a way that students are not distracted by other activities at a NICE Center. If possible education service should be offered in a different location from other activities or if same location is used, different floors should be used.

1. Engage in aggressive marketing

NICE International has to engage in an aggressive marketing of its new services especially education and outsourcing in order to counter the perception of being a cyber café as known to majority of Gambians. It is only until this current image is changed, that these new services and products will receive positive response from the market.

1. Ensure quality.

A part from premise set up and marketing, NICE international has to look into quality of its educational services. From the fact that majority of its students were not fit to conduct Samasource pilot test, raises questions on the quality of training being offered at the Centers. I would recommend NICE International to develop a mechanism of monitoring progress of its students and quality of training at its Centers against set standards so as to identify areas that need improvement for the benefit of the students and its image as an educational institution.

##  Outsourcing (Samasource)

In order to conduct a successful pilot test and eventual implementation of this service, I recommend NICE International to:

1. Recruit a full time qualified team lead to oversee the pilot test and eventual implementation.
2. Increase its current internet bandwidth to a minimum requirement of 1megabyte per second.
3. Find out minimum qualification of a Samasource worker and recruit suitable candidates who meet these qualifications for the pilot test and implementation thereafter. University students selected during the research may not meet the minimum 4 hour per day requirement set by Samasource International.
4. Conduct an intensive training of workers before the pilot test. This is very important because if the pilot test fails, the whole process fails and NICE International will miss this golden chance of being a service partner to Samasource International and subsequently missing the chance to offer Samasource service in Gambia.

# APPENDICES

## 1. Questionnaire - Solar Products

1. What are the working hours of your business?
2. What are the reasons why your shop closes at that time?
3. What source of energy do you use for lighting in the evening hours?
4. *(If electricity)* How much do you pay per month?
5. *(If Kerosene)* How many liters do you use per week or per month?
6. *(if candles)* How many pieces do you use per day?
7. How reliable and convenient is this source of energy?
8. How much do you pay for this source of energy on daily, weekly or monthly basis?
9. What are the benefits of using this source of energy?
10. Are there disadvantages?
11. Have you heard of solar lighting?
12. Would you prefer using solar energy to your current source of energy? If yes..
13. Which model of solar system would you prefer to buy?
14. How much are you willing to spend on such a kind of a solar system?
15. Which shops do you know that sell this kind of solar system?
16. How did you learn about the shops?
17. Do these shops have branches close to your premise?

## 2. Questionnaire - IT Products

We, NICE International and NICE Gambia are undertaking a research project to determine peoples’ habits and preferences for IT products, reasons for which people buy IT products and generally IT needs of the people of Gambia. To this end, we kindly request that you to complete the following questionnaire. It should take no longer than 10 minutes of your time. Your answers will be treated as entirely anonymous.

If you have any questions about this questionnaire, please contact (Okocha Dan. Email okochadanc@yahoo.com ).

Q1. Which of the following IT products would you be most interested to buy? *(Please tick all that apply)*

* Computers
* Mobile phones
* Printers
* Operating and Application software
* Storage devices ( hard disks, USB sticks)
* Accessories such as (cables, mouse, speakers)

Q2. For the selected product (s) in (Q1), would you prefer a new product or a second hand?

* New
* Second Hand

Q3. For computers, which of the following is your favorite brand? *(Please tick one)*

* Apple
* HP
* Dell
* Toshiba
* Asus
* Sony
* IBM
* Lenovo
* Compaq
* Samsung

Q4. If you preferred brand is missing in the above list, indicate in the box below

Q5. Would you prefer a laptop or a desktop?

* Desktop
* Laptop

Q6. How much would you be willing to pay for the chosen brand and type of computer?

…………………………………………………………………………………..

Q7. For what reason would you want to buy a computer?

……………………………………………………………………………………

Q8. For mobile phones, which of the following is your favorite brand? (*Please tick one)*

* Nokia
* Apple
* HTC
* Samsung
* Motorola
* BlackBerry
* Siemens
* Alcatel
* Sony Ericsson

Q9. If your preferred brand is missing in the above list, please indicate it in the box below.

Q10. Which of the following features would you be looking for in a phone you buy? *(Please tick all that apply)*

* MP3 player
* Radio
* Internet access
* Camera
* Bluetooth
* Touch screen
* Memory slot
* Qwerty Keys
* None of the above

Q11. How much would you be willing to pay for such a product described in (Q10.) above?

………………………………………………………………………………………………………………………

Q12. Have you ever bought any of the products mentioned in (Q1.)?

* Yes
* No

Q13. Which product was it?

………………………………………………………………………………………………………………………….

Q14. What was the cost of the product?

……………………………………………………………………………………………………………………………

Q15. Which shops do you know that sell IT products? *(Please list any three)*

1.
2.
3.

Q16. Are there IT products you wanted to buy but couldn’t find in these shops*? (If yes please indicate the product(s) below)*

………………………………………………………………………………………….

…………………………………………………………………………………………..

Q17. Do the shops mentioned in (Q15.) above provide repair and maintenance services as part of sale of a given product?

* Yes
* No

Q18. If no, would you want to have such a service?

* Yes
* No

Q19. Would you be willing to pay an extra fee for such a service on top of the cost of a product?

* Yes
* No.

## 3. Questionnaire - Samasource.

My name is…………………………I am an intern with NICE International in The Netherlands. Together with NICE Gambia, we are carrying out a market survey for an outsourcing service (Samasource) that will be pilot tested in a few weeks time and if the results are positive will be implemented.

Name of participant ……………………………………….

Male/Female

Age: ………………………………………………………………

Mobile no: ……………………………………………………..

Email ID: ……………………………………………………….

1. What is your level of education?
* College graduate/undergraduate
* High School graduate
* Junior School graduate
1. Which language are you most proficient in?
2. Have you undertaken any computer training?
3. *(If yes*) To what level?
4. How often do you use a computer?
5. For what purposes do you use a computer?
6. Can you type?
7. Do you know your typing speed?
8. (*If yes*) How many words per minute?
9. Have you used Word application?
10. For what purpose?
11. Have you used Excel application?
12. *( If yes)* For what purpose?
13. Do you use internet?
14. For what reason do you mostly use internet?
15. How conversant are you with online research?
16. What kind of online research have you carried out?
17. Have you worked before? If yes, what was your work about?
18. At the moment what do you do for a living?
19. How many hours in a day do you spend on your job?

## 4. IT product comparison

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Shop assortment NICE The Gambia** |  |  | ***Sea*** |  |  |  |  |
|  |  |  |   |  |  |  |  |
| ***product details*** |  | ***category*** | ***minimum sales price*** |  | ***Comparable prices in Gambia*** |
|  |  |  |   |  | ***shop 1*** | ***shop 2*** | ***shop 3*** |
| 15'' tft | Used | screen | GMD 1,798 |  | GMD 1,500 | GMD 2,300 | GMD 2,500 |
| 17'' tft | Used | screen | GMD 2,953 |  | GMD 1,700 | GMD 2,800 | GMD 3,000 |
| BELKIN USB 2.0 CABLE PRO SERIES USB A/B 1.8M | New | cable | GMD 163 |  | GMD 165 |   |   |
| BLACKBERRY 8310 CURVE  | Used | phone | GMD 1,878 |  | GMD 2,000 |   |   |
| BlackBerry 8520 Curve  | Used | phone | GMD 4,880 |  | GMD 2,000 | GMD 2,500 | GMD 5,700 |
| BlackBerry 8800 | Used | phone | GMD 1,262 |  |   |   |   |
| BlackBerry 8820 | Used | phone | GMD 1,416 |  | GMD 2,000 |   |   |
| BlackBerry 9000 Bold  | Used | phone | GMD 4,649 |  | GMD 2,500 |   |   |
| Chargers | Used | phone | GMD 88 |  | GMD 50 |   |   |
| Compaq EV) D510|P4|2,4Ghz|800MB|40GB|CD-ROM | Used | desktop | GMD 2,510 |  | GMD 3,500 | GMD 5,000 | GMD 6,500 |
| DELL optiplex GX260|P4|2,0Ghz|512MB|40GB|DVD-ROM | Used | desktop | GMD 1,817 |  |   |   |   |
| DELL optiplex GX270|P4|2,6Ghz|512MB|40GB|DVD-ROM | Used | desktop | GMD 3,030 |  | GMD 3,500 |   |   |
| HP Deskjet 2050A AIO 20PPM PRNT CPY SCN | New | printer | GMD 3,895 |  |   |   |   |
| HP HP 635 E-450 15.6 4GB 320GB W7HP | New | laptop | GMD 28,373 |  | GMD 27,000 | GMD 29,000 |   |
| HP LASERJET PRO P1102 A4 18PPM USB 2MB 1200 | New | printer | GMD 6,972 |  | GMD 4,800 | GMD 4,500 | GMD 6,000 |
| HTC T3333 Touch2  | Used | phone | GMD 1,955 |  | GMD 3,000 | GMD 3,500 | GMD 4,000 |
| HTC Touch  | Used | phone | GMD 954 |  | GMD 1,000 | GMD 1,300 | GMD 1,000 |
| KINGSTON 16GB DT100 G2 USB Drive | New | flash | GMD 669 |  |   |   |   |
| KINGSTON 4GB DTIG3 White Grey USB Flash DRV | New | flash | GMD 243 |  | GMD 200 |   |   |
| KINGSTON 8GB DT100 G2 USB Drive | New | flash | GMD 351 |  | GMD 400 |   |   |
| LENOVO IDEAPAD S10-3 ATOM/N455-1.66G 250GB 1G | New | Laptop | GMD 18,340 |  | GMD 13,000 | GMD 15,000 |   |
| LG BL40 Chocolate  | Used | phone | GMD 5,034 |  |   |   |   |
| Nokia/samsung divers | Used | phone | GMD 569 |  |   |   |   |
| Nokia1600 | Used | phone | GMD 569 |  | GMD 400 |   |   |
| Nokia2630 classic | Used | phone | GMD 569 |  | GMD 500 | GMD 550 |   |
| Nokia6021 | Used | phone | GMD 492 |  | GMD 500 | GMD 600 |   |
| Samsung B3410  | Used | phone | GMD 2,186 |  | GMD 3,500 | GMD 2,000 |   |
| Samsung B7610 OmniaPro  | Used | phone | GMD 3,495 |  | GMD 2,000 |   |   |
| Samsung F480  | Used | phone | GMD 2,032 |  | GMD 1,500 | GMD 1,200 |   |
| SAMSUNG G2 PORTABLE 500GB EXT HDD 2.5IN USB 2.0 | New | hdd | GMD 3,266 |  |   |   |   |
| Samsung G600  | Used | phone | GMD 569 |  | GMD 600 | GMD 700 |   |
| Samsung i900 Omnia  | Used | phone | GMD 2,956 |  |   |   |   |
| Samsung S5230 Star  | Used | phone | GMD 2,032 |  | GMD 1,500 |   |   |
| Sony Ericsson k800i  | Used | phone | GMD 1,416 |  | GMD 1,200 |   |   |
| Sony Ericsson w810i  | Used | phone | GMD 877 |  | GMD 900 |   |   |
| SWEEX 2.0 Speaker Set USB | New | audio | GMD 488 |  | GMD 350 | GMD 500 |   |
| SWEEX Lightweight Headset Black/Red | New | audio | GMD 196 |  | GMD 350 |   |   |
| SWEEX Notebook Bag Andes 16IN | New | bag | GMD 664 |  | GMD 350 | GMD 500 |   |
| SWEEX NOTEBOOK MOUSE SILVER USB | New | mouse | GMD 327 |  | GMD 300 | GMD 200 |   |
| SWEEX VENI MP3 PLAYER BLUE 2 GB | New | audio | GMD 1,065 |  | GMD 900 | GMD 1,200 |   |
| SWEEX Yarvik 7" Tablet | New | tablet | GMD 6,169 |  |   |   |   |
| TP-LINK 150M WLAN Lite-N-Router Switch | New | network | GMD 958 |  | GMD 850 | GMD 950 | GMD 950 |
| TRUST 10IN Netbook Carry Bag - Black | New | bag | GMD 631 |  | GMD 650 |   |   |
| TRUST Oxxtron 800VA UPS | New | ups | GMD 3,880 |  | GMD 4,000 | GMD 3,500 |   |
| V7 V7 CARD READER USB 2.0 SILVER | New | cardreader | GMD 315 |  | GMD 350 |   |   |
| V7 V7 CAT5E UTP 2M BLUE | New | network | GMD 92 |  | GMD 200 |   |   |
| V7 V7 Vantage Webcam 300 | New | video | GMD 446 |  | GMD 500 |   |   |
|  |  |  |   |  |  |  |  |
|  |  |  |   |  |  |  |  |
|  |  |  |   |  |  |  |  |

## 5. Energy product comparison

|  |  |
| --- | --- |
| **Solar product comparison** |  |
|  |  | **Power**  | **Solar**  | **Solar** |  | **Battery** |  |  | **Charging** | **Lighting**  |  | **Phone**  |  | **Selling price** |
| Company | Product |  input |  panel |  life | Battery | life | Lamp | Lamp life | Time | Time | Cables | **Chraging** | Warranty | in Gambia |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  | **Euro**  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Schneider Electric  | GN11J-1 |  Solar& Grid | 12V, 10W | 20years | 12V,5Ah | 2-3 years | 5.5/4.5W | 8-10 years | 8hours | 8 Hours | No | No | 1 year | 127.7208 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Schneider Electric |  | Solar | 12V, 10W | 20years | 12V,5Ah | 2-3 years | 4.5W | 8-10 years | 8hours | 8 Hours | No | No | 1 year | 120.5928 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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|  | GN11J-5 |  |  |  |  |  |  |  |  |  |  |  |  |  |
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|  |
| --- |
| Schneider Electric |

 |  | Solar | 12V, 10W | 20years | 12V,5Ah | 2-3 years | 2.5w | 8-10 years | 8hours | 15 hours | No | No | 1 year | 113.8752 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| SZCOWIN |  | Solar | 10W | n/a | 12V,7Ah | n/a | 3W\*4pcs | n/a | 7-8hours | 10-12hours | Yes | Yes | 3months | 65 |
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| SZCOWIN |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | Solar | 20W | n/a | 12V,12Ah | n/a | 3W\*4pcs | n/a | 7-8hours | 9-10 hours | Yes | Yes | 3months | 65 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

## 6. Financial forecasts of the proposed products and services.

#### 6.1 Approximate cost of conducting samasource training and pilot test

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| No. workers | Allowance/worker | Days  | hrs/day | Internet cost/hr | Exchange rate |
| 10 | 60 | 20 | 4 | 20 | 38 |
| Allowance | GMD | 12000 |
| Internet | GMD | 16000 |
| Contingency | GMD | 1500 |
| **Total** | **GMD** | **29500** |
|  | **Euro** | **776** |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  | JUL | AUG | SEP | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
| Total turnover Education | Euro |  | 415  | 436  | 458  | 481  | 505  | 531  | 558  | 586  | 616  | 647  | 679  | 714  | 750  | 788  | 828  | 870  | 914  | 960  |
| Total turnover Outsourcing | Euro |  | 1,674  | 1,691  | 1,708  | 1,725  | 1,742  | 1,760  | 1,777  | 1,795  | 1,813  | 1,831  | 1,850  | 1,868  | 1,887  | 1,906  | 1,925  | 1,944  | 1,963  | 1,983  |
| Total turnover energy products | Euro |  | 506  | 514  | 522  | 531  | 539  | 547  | 555  | 564  | 572  | 580  | 589  | 597  | 605  | 613  | 622  | 630  | 638  | 647  |
| Total turnover | Euro |  | 2,595  | 2,641  | 2,688  | 2,737  | 2,787  | 2,838  | 2,891  | 2,945  | 3,001  | 3,058  | 3,118  | 3,179  | 3,242  | 3,307  | 3,374  | 3,444  | 3,515  | 3,589  |
| % cost of sales | % | 60% |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Total Cost of product sales | Euro |  | 1,557  | 1,585  | 1,613  | 1,642  | 1,672  | 1,703  | 1,734  | 1,767  | 1,800  | 1,835  | 1,871  | 1,907  | 1,945  | 1,984  | 2,024  | 2,066  | 2,109  | 2,154  |
| Gross turnover | Euro |  | 1,038  | 1,056  | 1,075  | 1,095  | 1,115  | 1,135  | 1,156  | 1,178  | 1,200  | 1,223  | 1,247  | 1,272  | 1,297  | 1,323  | 1,350  | 1,377  | 1,406  | 1,436  |

#### 6.2 Estimated cost and revenues for the three preferred products and services for the next one and half years for a single NICE Center.

1. NICE Roll-Out-Project is a detailed NICE International business plan to be implemented in the next 4 years including 2012. [↑](#footnote-ref-1)
2. We can end poverty, United Nations ( See. <http://www.un.org/millenniumgoals/> ) [↑](#footnote-ref-2)
3. Policy Guidance note: Employment – 17 ( see: <http://www.oecd.org/dataoecd/46/40/43573231.pdf> ) [↑](#footnote-ref-3)
4. Wikipedia (see: <http://en.wikipedia.org/wiki/The_Gambia>) [↑](#footnote-ref-4)
5. Economy Watch ( See: <http://www.economywatch.com/economic-statistics/country/Gambia/>) [↑](#footnote-ref-5)
6. UNDP Human Development Index (2008/2008) (See: <http://hdr.undp.org/en/statistics/>) [↑](#footnote-ref-6)
7. See: (<http://hdrstats.undp.org/countries/country_fact_sheets/cty_fs_GMB.html>) [↑](#footnote-ref-7)
8. See: <http://www.accessgambia.com/information/economic-profile.html> [↑](#footnote-ref-8)
9. See: (<http://mediarevolution-amat.blogspot.nl/2012/03/gambians-pay-highest-price-for.html>) [↑](#footnote-ref-9)
10. See: (<http://www.accessgambia.com/information/population.html>) [↑](#footnote-ref-10)
11. McNamara, K. (2003) *Information and Communication Technologies, Poverty and Development: Learning from Experience*. Worldbank/InfoDev. http://www.infodev.org/en/Publication.17.html [↑](#footnote-ref-11)
12. United Nation Development Program – UNDP (2001) *Human Development Report 2001: Making New Technologies Work for Human Development*, United Nations. <http://hdr.undp.org/reports/global/2001/en/> [↑](#footnote-ref-12)
13. Braga, C. (1998) ‘Inclusion or exclusion?’ **UNESCO Courier** <http://www.unesco.org/courier/1998_12/uk/dossier/txt21.htm> [↑](#footnote-ref-13)
14. Brown, M.M. (2001) ‘Can ICTs Address the Needs of the Poor?’ A Commentary from UNDP, June 2001. <http://www.undp.org/dpa/choices/2001/june/j4e.pdf> [↑](#footnote-ref-14)
15. Chowdhury, N. (2000) ‘Information and Communications Technologies and IFPRI’s Mandate: A Conceptual Framework.’ Sept. 18, 2000. <http://www.ifpri.org/divs/cd/dp/ictdp01.pdf> [↑](#footnote-ref-15)
16. WADE, R. (2004) Bridging the Digital Divide: New route to development or new form of dependency?, in C. AVGEROU, C. CIBORRA and F. LAND (EDS). The Social Study of Information and Communication Technology: Innovation, actions, and contexts, Oxford: Oxford University Press, pp. 185–206. [↑](#footnote-ref-16)
17. BOAFO, K.S.T.( 1991) “Communication Technology and Dependent Development in Sub-Saharan Africa.” In Gerald Sussman & John A. Lent [eds] *Transnational Communications: Wiring the Third World.* Newbury Park, London and Delhi: Sage, 103-124. [↑](#footnote-ref-17)
18. UNITED NATIONS DEVELOPMENT PROGRAM. (2001) *Making new technologies work for human development*, New York: UNDP. [↑](#footnote-ref-18)
19. WORLD BANK. (1999) *World Bank Development Report: Knowledge for Development*, New York: Oxford University Press. [↑](#footnote-ref-19)
20. Hudson, H.E. (2001) “The Acacia Programme: Developing Evaluation and Learning Systems for African TeleCenters.” In Latchem. C. & D. Walker (eds.) (2001) **TeleCenters: Case Studies and Key Issues**. Vancouver: The Commonwealth of Learning, pp. 159-168 URL [↑](#footnote-ref-20)
21. Addo-Dankwa, E. (2002) ‘E-commerce in Ejura: What has a farmer got to do with a computer?’ ICT Stories. Mar. 2002. <http://www.iicd.org/stories/> [↑](#footnote-ref-21)
22. Parghi, U. (2001) AKASHGANGA Using simple but appropriate information technology to generate higher profits for rural milk producers. <http://www.iicd.org/base.story> [↑](#footnote-ref-22)
23. Hazan, M. (2002) ‘Virtual Souk: E-Commerce for unprivileged artisans. ICT stories. Mar. 2002. <http://www.iicd.org/stories/> [↑](#footnote-ref-23)
24. See: (<http://en.wikipedia.org/wiki/M-Pesa>) [↑](#footnote-ref-24)
25. SOCIOTECHNICAL SYSTEMS (STS) in [organizational development](http://en.wikipedia.org/wiki/Organizational_development) is an approach to complex organizational [work design](http://en.wikipedia.org/wiki/Work_design) that recognizes the interaction between [people](http://en.wikipedia.org/wiki/People) and [technology](http://en.wikipedia.org/wiki/Technology) in [workplaces](http://en.wiktionary.org/wiki/Workplace) (see: <http://en.wikipedia.org/wiki/Sociotechnical_system> ) [↑](#footnote-ref-25)
26. EMERY, F. (1978) *The Emergence of a New Paradigm of Work*. Canberra: Centre for Continuing Education, Australian National University [↑](#footnote-ref-26)
27. AVGEROU, C. (2001) The significance of context in information systems and organizational change. *Information Systems Journal*, 11[1], 43-63. [↑](#footnote-ref-27)
28. This is the process of expanding human capabilities and access to opportunities in social, economic and political arenas and therefore the overall improvement in the quality of life. (UNDP 2002: Kenya Human Development Report: 2001:2) [↑](#footnote-ref-28)
29. See: (<http://www.schneider-electric.com/site/home/index.cfm/ww/?selectCountry=true>) [↑](#footnote-ref-29)
30. See: (<http://www.viafrica.org/>) [↑](#footnote-ref-30)
31. See: (<http://en.wikipedia.org/wiki/Outsourcing> ) [↑](#footnote-ref-31)
32. See: (<http://samasource.org/>) [↑](#footnote-ref-32)
33. Prahalad C.K. (2007) *The Fortune at the Bottom of the Pyramid*.Upper Saddle River,NJ: Wharton School Publishing. [↑](#footnote-ref-33)
34. See: (<http://dissertation.laerd.com/articles/purposive-sampling-an-overview.php>) [↑](#footnote-ref-34)